

Cincinnati Public Schools Mercantile Self  
Direct Prescriptive Applications – Part 3 of 3

**Roselawn School**  
**Supporting Documentation**

# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account  
 multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
7870-0683-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart Saver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart Saver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart Saver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
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\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input checked="" type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.

# MERCANTILE SELF DIRECT Ohio Lighting Incentive Application

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.

Is this application:  **NEW** (original) or  **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input checked="" type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Other:		
How did you hear about the program? (check one)		
<input type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input checked="" type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of application	<input type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input type="checkbox"/> Tax ID number for payee	<input type="checkbox"/> Customer/vendor agree to Terms and Conditions
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Customer Information			
Customer/Business	Cincinnati Public Schools	Contact	Don Elbe
Phone	614-580-3352	Account Number	7870-0683-01
Street Address (Where incentive should be mailed)		2651 Burnett Ave	
City	Cincinnati	State	OH
		Zip Code	45219
Installation Street Address		1594 Summit Rd	
City	Cincinnati	State	OH
		Zip Code	45237
E-mail Address			

*\*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.*

Vendor Information			
Vendor	Plug Smart	Contact	Lucas Dixon
Phone	614-580-3352	Fax	1-800-518-5576
Street Address		1275 Kinnear Road Suit 229	
City	Columbus	State	OH
		Zip Code	43212
E-mail Address			

If Duke Energy has questions about this application, who should we contact?  Customer  Vendor

Payment Information	
Who should receive incentive payment?	<input checked="" type="checkbox"/> Customer <input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of incentive directly to the vendor:	Customer Signature (written signature)
	Date
Provide Tax ID Number for Payee	Customer Tax ID #
	Vendor Tax ID #

Terms and Conditions	
I have read and hereby agree to the Terms & Conditions and Program Requirements.	
Customer Signature	Vendor Signature
Date	Date
Title	Title

*Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.*

**NOTE: All Fixtures must be installed indoors, with the exception of Traffic and Pedestrian Signals and where otherwise noted.**

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800 )	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8 (T8 U tube lamps are eligible for incentives based on the total measured length of the lamp.)</b>							
T8 8ft 2 lamp replacing T12 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$3.50		Hrs.			
T8 8ft 1 lamp replacing T12 8ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 4ft 4 lamp replacing T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$5.50		Hrs.			
T8 4ft 3 lamp replacing T12 4ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 3ft 4 lamp replacing T12 3ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$3.25		Hrs.			
T8 3ft 2 lamp replacing T12 3ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 1 lamp replacing T12 3ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 4 lamp replacing T12 2ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$3.00		Hrs.			
T8 2ft 3 lamp replacing T12 2ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$2.10		Hrs.			
T8 2ft 2 lamp replacing T12 2ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors (heated and cooled enclosed space).
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Eligible T8 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%.
- *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

**NOTE: All Fixtures must be installed indoors, with the exception of Traffic and Pedestrian Signals and where otherwise noted.**

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800 )	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8</b> (T8 U tube lamps are eligible for incentives based on the total measured length of the lamp.)							
T8 HO 8ft 1 lamp replacing T12 HO 8ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 HO 8ft 2 lamp replacing T12 HO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$7.00		Hrs.			
T8 HB 4ft 3L replacing 150-249W HID(retrofit only )	Ballast model# Lamp model #	\$15.00		Hrs.			
T8 HB 4ft 4L a replacing 250-399W HID(retrofit only )	Ballast model# Lamp model #	\$20.00		Hrs.			
T8 HB 4ft 6L replacing 400-999W HID (retrofit only)	Ballast model# Lamp model #	\$25.00		Hrs.			
T8 HB 4ft 8L replacing a 400-999W HID(retrofit only )	Ballast model# Lamp model #	\$20.00		Hrs.			
2 fixtures – T8 HB 4ft 8 Lamp (32W) replacing 1,000 W HID (2 for 1 replacement (retrofit only)	Ballast model# Lamp model #	\$60.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors (heated and cooled enclosed space).
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Eligible T8 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%.
- *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

<b>Fixtures = Lamps + Ballast</b> <i>Fixtures must be permanently retrofitted to the lamp count specified. Reflectors may be utilized to maintain necessary lighting levels.</i>	<b>Ballast and Model Numbers</b>	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8 with delamping</b>							
T8 8ft 1 lamp replacing T12 8 ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 4 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 2 lamp replacing T12 3 ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 1 lamp replacing T12 3 ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 2ft 3 lamp replacing T12 2 ft 4 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 2 lamp replacing T12 2 ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps .
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.



Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T12 8ft and 4ft fixture replaced by T8 High Performance</b> Replace T12 and T12 HO 8' fixtures with High Performance T8 4ft lamps and ballast. Approved lamps and ballasts must be listed on the CEE High performance T8 qualified product list found on the web at <a href="http://www.cee1.org">www.cee1.org</a> .							
High Performance T8 4ft 2 lamp fixture replacing T12 8ft 1 lamp fixture	Ballast model#  Lamp model #	\$5.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 8ft 2 lamp fixture	Ballast model#  Lamp model #	\$5.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 High Output 8ft 1 lamp fixture	Ballast model#  Lamp model #	\$10.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 High Output 8ft 2 lamp fixture	Ballast model#  Lamp model #	\$12.50		Hrs.			
High Performance T8 4ft 1 lamp fixture replacing T12 4ft 1 lamp	Ballast model#  Lamp model #	\$3.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 4ft 2 lamp	Ballast model#  Lamp model #	\$4.00		Hrs.			
High Performance T8 4ft 3 lamp fixture replacing T12 4 ft 3 lamp	Ballast model#  Lamp model #	\$6.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 4 ft 4 lamp	Ballast model#  Lamp model #	\$8.00		Hrs.			
<b>T-12 4ft fixture replaced by Reduced Wattage T8 Lighting</b> Replace standard T12 systems with 4' 25W lamps, 28W lamps, and approved CEE ballast. In order to qualify for incentives, bulbs and ballasts must be from CEE reduced-wattage approved list. To view the CEE Reduced Wattage T8 qualified product list, go to <a href="http://www.cee1.org">www.cee1.org</a> . <b>Note:</b> Reduced Watt T8 compatibility varies; consult manufacturer's literature before specifying products.							
Reduced Wattage T8 4ft 1 lamp of 28W or less & ballast replacing standard T12 4ft 1 lamp – 34 W	Ballast model#  Lamp model #	\$4.00		Hrs.			
Reduced Wattage T8 4ft 2 lamp of 28 W or less & ballast replacing standard T12 4 ft 2 lamp – 34 W	Ballast model#  Lamp model #	\$5.00		Hrs.			
Reduced Wattage T8 4ft 3 lamp of 28 W or less & ballast replacing standard T12 4 ft 3 lamp – 34 W	Ballast model#  Lamp model #	\$7.00		Hrs.			
Reduced Wattage T8 4ft 4 lamp of 28 W or less & ballast replacing standard T12 4 ft 4 lamp – 34 W	Ballast model#  Lamp model #	\$9.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Normal or low ballast factor ballasts must be utilized to be eligible.
- Reduced watt T8 lamps should not be used in dimming applications unless the lamp and ballast manufacturers have approved a specific application for dimming or frequent switching. May demonstrate dim light, spiraling, pulsing and other undesirable behavior in cooler temperature rooms and while warming up. System performance varies based on lamp or ballast components.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced with T5 Electronic Ballasts</b>							
T5 4ft (28 watt) 1 lamp replacing T12 4ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$2.50		Hrs.			
T5 4ft (28 watt) 2 lamp replacing T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$4.00		Hrs.			
T5 4ft (28 watt) 3 lamp replacing T12 4ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T5 4ft (28 watt) 4 lamp replacing T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$6.00		Hrs.			
T5 HO 4ft 1 (54 watt) lamp replacing 34W T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$3.00		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 34W T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 60W T12 8 ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T5 HO 4ft 3 (54 watt) lamp replacing 95W T12 HO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$5.50		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 60W T12 8ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$6.50		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 95W T12 VHO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$6.50		Hrs.			
T5 HO HB 2L replacing 150-249W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$15.00		Hrs.			
T5 HO HB 3L replacing 250-399W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$20.00		Hrs.			
T5 HO HB 4L replacing 400-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$25.00		Hrs.			
T5 HO HB 6L replacing 400-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$20.00		Hrs.			
T5 HO HB 8L replacing 750-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$37.50		Hrs.			
2 fixtures – T5 HO HB 6 Lamp replacing 1,000 W HID (2 for 1 retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$60.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-5 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- Eligible T5 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%. *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.

- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-8 Fixtures replaced by High Performance T8 Lighting</b>							
Replace standard T8 systems with High Performance T8 4ft lamps and ballast. Approved lamps and ballasts must be listed on the CEE High performance T8 qualified product list found on the web at <a href="http://www.cee1.org">www.cee1.org</a> .							
T8 4ft High Performance 1 lamp & ballast replacing standard T8 4ft 1 lamp fixture	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 4ft High Performance 2 lamp & ballast replacing standard T8 4ft 2 lamp fixture	Ballast model# Lamp model #	\$3.00		Hrs.			
T8 4ft High Performance 3 lamp & ballast replacing standard T8 4ft 3 lamp fixture	Ballast model# Lamp model #	\$3.10		Hrs.			
T8 4ft High Performance 4 lamp & ballast replacing standard T8 4ft 4 lamp fixture	Ballast model# Lamp model #	\$6.00		Hrs.			
<b>T-8 Fixtures replaced by Reduced Wattage High Performance T8 Lighting</b>							
Replace standard T8 systems with 4' 25W lamps, 28W lamps approved CEE ballast OR relamp existing T8 fixtures with reduced wattage T8 lamps 28W or less. In order to qualify for incentives bulbs and ballasts must be from CEE reduced-wattage approved list. To view the CEE Reduced Wattage T8 qualified product list, go to <a href="http://www.cee1.org">www.cee1.org</a> . <b>Note:</b> reduced wattage T8 compatibility varies; consult manufacturer's literature before specifying products.							
Reduced Wattage T8 4ft 1 lamp of 28W or less & ballast replacing standard T8 4ft 1 lamp – 32W	Ballast model# Lamp model #	\$2.00		Hrs.			
Reduced Wattage T8 4ft 2 lamp of 28W or less & ballast replacing standard T8 4ft 2 lamp – 32W	Ballast model# Lamp model #	\$3.00		Hrs.			
Reduced Wattage T8 4ft 3 lamp of 28W or less & ballast replacing standard T8 4ft 3 lamp – 32W	Ballast model# Lamp model #	\$5.00		Hrs.			
Reduced Wattage T8 4ft 4 lamp of 28W or less & ballast replacing standard T8 4ft 4 lamp – 32W	Ballast model# Lamp model #	\$6.00		Hrs.			
Relamp T8 4ft 32W fixtures with Reduced Wattage T8 lamps 28 watts or less	Ballast model# Lamp model #	\$2.50 / lamp		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps .
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Reduced watt T8 lamps should not be used in dimming applications unless the lamp and ballast manufacturers have approved a specific application for dimming or frequent switching. May demonstrate dim light, spiraling, pulsing and other undesirable behavior in cooler temperature rooms and while warming up. System performance varies based on lamp or ballast components.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

CFL Lamps and Fixtures	Incentive	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
42W 8 lamp HB CFL replacing 400W HID (retrofit only) Model Number	\$25.00		Hrs.			
CFL – Screw In (lamp only) replacing an incandescent (retrofit only) Model Number	\$0.75 / lamp		Hrs.			
CFL – Screw-In dimmable or 3-way bulb replacing an incandescent dimmable or 3-way bulb (retrofit only) Model Number	\$1.00 / lamp		Hrs.			
CFL – Hardwired Fixture replacing incandescent fixture (only pin based CFL's qualify) Model Number	\$5.00 / fixture		Hrs.			
Up to 30W CFL Flood Lamp with Reflector replacing 100W or less incandescent (retrofit only) Model Number	\$1.50 / lamp		Hrs.			
33W – 115W CFL lamp replacing 100 W or more incandescent Model Number	\$2.50 / lamp		Hrs.			
<b>Energy Star LED Lamps</b>						
Replace incandescent bulbs with Energy Star LED (retrofit only) <i>LED lamps must be listed on the Energy Star Qualified Light Bulbs list to qualify.</i> <a href="http://www.energystar.gov/index.cfm?fuseaction=iledl.display_products_pdf">http://www.energystar.gov/index.cfm?fuseaction=iledl.display_products_pdf</a> Model Number	\$5.00 / lamp		Hrs.			
Replace 60-100W incandescent with ENERGY STAR qualified LED downlight 18 Watts or less. (retrofit only) <i>Product must appear on ENERGY STAR Qualified LED Lighting qualified products list, and must contain the word "downlight".</i> <a href="http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pd">http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pd</a> Model Number	\$7.50 / fixture		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.

Metal Halide						
320W Pulse Start Halide replacing 400W HID (retrofit only) **check one <input type="checkbox"/> R <input type="checkbox"/> FE Model Number	\$12.50			Hrs.		
Ceramic Metal Halide						
20W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen of at least 100 W Model Number	\$15.00			Hrs.		
39W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen of at least 150 W Model Number	\$15.00			Hrs.		
50W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescents or <input type="checkbox"/> Halogen for a total of 195W Model Number	\$15.00			Hrs.		
70W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescents or <input type="checkbox"/> Halogen for a total of 225W Model Number	\$15.00			Hrs.		
100W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescents or <input type="checkbox"/> Halogens for a total of 270W Model Number	\$15.00			Hrs.		
150W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescents or <input type="checkbox"/> Halogens for a total of 360W Model Number	\$15.00			Hrs.		
25 W or less Ceramic Metal Halide with integral ballast replacing 70 W or greater incandescent flood light Model Number	\$5.00/lamp			Hrs.		

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- Incentives for pulse start metal halide fixtures are for 320w pulse start metal halide lamp/ballast combinations. In a retrofit application, the fixture must be hard-wired ballast retrofit or new fixture. Screw in retrofit lamps do not qualify. Pulse start lamp wattage must be lower than existing probe start lamp wattage.
- Ceramic Metal Halide Incentive is for complete hardwired fixtures containing ceramic metal halide lamp and electronic ceramic metal halide ballast.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Measure	Incentive	Qty	Annual Operating Hrs (minimum of 1800)	Equipment cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
21" Tubular Skylight/Light Tube (at least one light fixture per light tube must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies) Check One ** <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number	\$37.50 / fixture					
LED Exit Signs (replacing or retrofitting existing incandescent or compact fluorescent exit sign) Check one <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number	\$5.00 / fixture					
LED Lighting In Reach-in Freezer or Cooler Case (replacing fluorescent fixtures) Model Number	\$25.00 / door					
LED Case Lighting Sensor Controls Check one <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number      Model Number	5.00 / sensor					
Under 500 W connected to sensor check one <input type="checkbox"/> R <input checked="" type="checkbox"/> NC <input type="checkbox"/> FE Model Number DT-2000, DT-1000, DT-500	\$10.00 / sensor	83	2800	\$9,784.87	8/19/2008	\$830.00
Over 500 W connected to sensor check one <input type="checkbox"/> R <input checked="" type="checkbox"/> NC <input type="checkbox"/> FE Model Number DT-2000, DT-1000, DT-500	\$20.00 / sensor	78	2800	\$9,195.42	8/19/2008	\$1,560.00

- Replacement must result in energy savings to qualify
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- Tubular Skylight requires at least one light fixture per light tube that must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies)
- LED exit signs shall use 5 watts or less including the battery charger when active. They must meet State Fire Marshal codes and be UL rated.
- Occupancy Sensors (under and over 500) must be either wall, ceiling, or fixture mounted. Rapid or programmed start ballasts are recommended for fluorescent fixtures.
- Occupancy Sensors (under 500W) installed on or built into High Bay fixtures are eligible for incentives.
- LED Lighting in Reach-in Freezer or Cooler Case: Must install a LED lighting system and replace (or in lieu of) a fluorescent lighting system for reach-in refrigerated display case.
- Fluorescent magnetic ballasts cannot be used to power the LED case lighting system. Existing fluorescent fixture end connectors and ballasts must be removed.
- LED case lighting system must be a permanently installed luminaire. LED lamps that install into fluorescent lamp sockets are not eligible for incentives.
- LED Case Lighting Sensor Controls may only be installed with LED lighting systems. End of aisle and individual case sensors qualify.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Outdoor Lighting	Incentive	Qty	Annual Operating Hrs (minimum of 1800)	Equipment cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
Exterior LED or Induction fixture replacing up to 175W HID Model Number	\$20 / fixture					
Exterior LED or Induction fixture replacing 176W – 250W HID Model Number	\$25 / fixture					
Exterior LED or Induction fixture replacing 251W – 400W HID Model Number	\$40 / fixture					
Exterior LED or Induction fixture replacing > 400 W HID Model Number	\$75/ fixture					
Garage LED or Induction fixture replacing up to 175 W HID Model Number	\$50/ fixture					
Garage LED or Induction fixture replacing 176W – 250W HID Model Number	\$75/ fixture					
Garage LED or Induction fixture replacing 251W – 400 W HID Model Number	\$125/ fixture					
Garage LED or Induction fixture replacing > 400 W HID Model Number	\$200/ fixture					
LED Auto Traffic Signals (replacing incandescent) Model Number	\$6.25 / lamp					
LED Pedestrian Signals (replacing incandescent) Model Number	\$12.50/ signal					

- Replacement must result in energy savings to qualify
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- or and garage LED and induction lighting must result in a total power **reduction** of 40% or more.
- or and garage LEDs should be listed on either the Energy Star or Design Lights consortium qualifying products lists:
  1. [http://www.energystar.gov/index.cfm?fuseaction=ssl.display\\_products\\_com\\_pdf](http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pdf)
  2. <http://www.designlights.org/documents/NEEPDLCQPL.xls>
- and pedestrian signals using LED lights must replace conventional incandescent signals.
- ve capped at 50% of the equipment cost.
- construction or replacement of failed equipment must apply for Self Direct Custom program.

All  
Outdo  
Outdo  
Traffic  
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New

## Program Requirements

### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.



## **Terms and Conditions**

*I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. I understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and it's affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties) and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.*

## Incentive Application Instructions

### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at [www.duke-energy.com](http://www.duke-energy.com).
2. Review program and equipment requirements on the incentive application. (Page7)
3. Purchase and install eligible energy-efficient equipment.
4. Complete and submit application for equipment that was installed after 1/1/2008.
5. **The following items must be included to verify projects. If they are not included, it will delay payment of incentive.**
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. **Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.**
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to **assign payment of the incentive directly to the vendor**, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
6. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
8. Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.
8. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.

## Mercantile Self Direct Rebate Program Requirements for Vendor Participation

### Program Overview

- Duke Energy offers its eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
  - Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
    - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
    - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
  - All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
  - Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by emailing the Vendor Participation Agreement (VPA) to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or faxing to **513-419-5572**.

### Guidelines for Vendor Activities

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.
- Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.
- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in its sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit [www.duke-energy.com](http://www.duke-energy.com).



## Mercantile Self Direct Incentive Program

Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*	Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	Thermal Storage	<input type="checkbox"/>	<input type="checkbox"/>
Heating Ventilation & Cooling	<input type="checkbox"/>	<input type="checkbox"/>	Pumps/Motors/VFD's	<input type="checkbox"/>	<input type="checkbox"/>
Food Service	<input type="checkbox"/>	<input type="checkbox"/>	Chillers	<input type="checkbox"/>	<input type="checkbox"/>
Water Heating	<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>
Process Equipment (air compressors, injection molding, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Window Film	<input type="checkbox"/>	<input type="checkbox"/>

\* Check all that apply

Vendors who wish to be listed as a Mercantile Self Direct Incentive Program participating Vendor shall complete this form. A signed copy of this form must be on file at Duke Energy in order for the Vendor to receive incentive payments. Fax form to **513-419-5572** or email to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com).

I have read and understand the Mercantile Self Direct Incentive Program Requirements for Vendor Participation, and I agree to comply with all requirements set forth therein. By signing this agreement, I agree to provide my customers with information and documentation that is true and accurate to the best of my knowledge. I hereby represent and warrant that the Tax ID and Vendor Tax Status provided below are true and accurate. I agree that any confidential information concerning my customer, including but not limited to Duke Energy service account information, will be used for the sole purpose of facilitating the customer's participation in the Mercantile Self Direct Incentive Program. Further, I understand that I am responsible for making sure everyone working for me understands the requirements prior to soliciting customer participation.

Vendor Federal Tax ID Number	
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To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a third-party vendor. The third-party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the third-party vendor have signed confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

Vendor Tax Status	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Partnership	<input type="checkbox"/> Other
-------------------	--------------------------------------	---	--------------------------------------	--------------------------------

Contact me via	<input type="checkbox"/> Phone	<input type="checkbox"/> E-Mail	<input type="checkbox"/> Mail
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Company Name	
Mailing Address	
City, State, Zip	
Phone/Fax	
Primary E-mail Address	
Secondary E-mail Address	
Vendor Signature	
Title	
Print Name	
Date	

For more information, call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
1A/AR4/400MH277/PS-P/  
SQUARE POLE ARM  
Notes:

Type:

**LSA4**

LEE07-6119

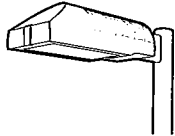
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The Archetype®  
revision 3/17/03 • ar.pdf

Type:

Job:

Page: 5 of 5



## Optional Features

### Vertical Slipfitter Mounts

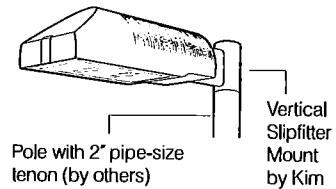
Cat. No. includes Mounting

Cat. No. (See right)

 No Option

Allows fixture with standard support arm to be mounted to poles having a 2" pipe-size tenon (2 3/8" O.D. x 4 1/2" min. length). All mounting configurations can be used (1A, 2B, 2L, 3T, 3Y, 4C). 4" square or round die-cast aluminum with flush cap, secured by four 3/8" stainless steel set point allen screws, finished to match fixture and arm.

**NOTE:** 3Y only available on round slipfitter.



Cat. No.  
 VSF-1A  
 VSF-2B  
 VSF-2L  
 VSF-3T  
 VSF-3Y  
 VSF-4C



Round

Stainless  
steel set  
screws

Square

Cat. No.  
 SVSF-1A  
 SVSF-2B  
 SVSF-2L  
 SVSF-3T  
 SVSF-4C

Mounting Configuration

1A - single arm mount

2B - 2 at 180°

2L - 2 at 90°

3T - 3 at 90°

3Y - 3 at 120°

4C - 4 at 90°

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
HT2-CM-P15--HL-DA-Q-WH-F4

Notes:

Type:

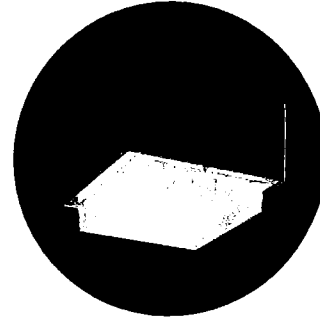
**PS1**

LEE07-6119

# HUNTINGTON

## Features

- Square, formed and welded aluminum housing.
- Extruded aluminum door fully gasketed to housing. Concealed hinge door secured with captive screw. Drop prismatic acrylic, drop prismatic polycarbonate, or flat CT73 patterned glass lens provide symmetric light pattern.
- Semi-specular, anodized aluminum reflector for horizontal lamp. HP, high performance optics, consists of specular, anodized aluminum reflector panels.
- Ceiling mount provided with bolt and wiring holes in housing top.
- Mogul porcelain socket, pulse rated, with spring loaded, nickel plated center contact and reinforced lamp grip screw shell. Medium base for ED-17 lamp.
- CWA type ballast, HPF, starting rated at -20°F (-40°F for HPS).
- UL and CSA listed for wet locations.



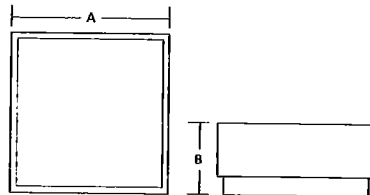
## Ordering Information

Example: HT2 - CM - H25 - HP - DA - Q - DB - F1

Series	Mount	Lamp/Watts	Optics	Lens	Volts	Color	Options
Series							
HT1	70-175W						
HT2	200-400W						
Mounting							
CM	Ceiling Mount						
Lamp Type/Wattage							
Metal Halide							
H17	175W (ED-28)						
H25	250W (ED-28)						
H40	400W (ED-37)						
Super Metal Halide							
MS17	175W (ED-28)						
MS25	250W (ED-28)						
MS40	400W (ED-37)						
Pulse Start Metal Halide							
P70	70W (ED-17)						
P10	100W (ED-17)						
P12	125W (ED-17)						
P15	150W (ED-28)						
P20	200W (ED-28)						
P25	250W (ED-28)						
P32	320W (ED-37)						
P35	350W (ED-37)						
P40	400W (ED-37)						
High Pressure Sodium							
S70	70W (ED-23 1/2)						
S10	100W (ED-23 1/2)						
S15	150W (ED-23 1/2)						
S25	250W (ED-18)						
S40	400W (ED-18)						
Optics							
HL	Standard						
HP	High Performance Optics (HT2 only)						
Lens							
DA	Drop Acrylic						
DP	Drop Polycarbonate						
FGP	Flat CT73 Glass Lens (Prismatic)						
Voltage							
Q	Quad Tap <sup>1</sup>						
	(120, 208, 240, 277V) <sup>1</sup>						
5	480V <sup>2</sup>						
T	120/277/347V CSA <sup>1</sup>						
Color							
DB	Dark Bronze						
BL	Black						
WH	White						
GR	Gray						
PS	Platinum Silver						
RD	Red (Premium Color)						
FG	Forest Green (Premium Color)						
CC	Custom Color (Consult Factory)						
Options							
F1	Fusing - 120V						
F2	Fusing - 208V						
F3	Fusing - 240V						
F4	Fusing - 277V						
F5	Fusing - 480V						
F6	Fusing - 347V						
QZ	Quartz RS with lamp						
L	Lamp						

- 1 Factory wired for highest voltage unless specified.
- 2 Not available with 70 or 100W Pulse Start Metal Halide lamps.

## Dimensions



	A	B	Weight
HT1	14" sq. 356 mm	8" 203 mm	20 lbs. 9.1 kg
HT2	21 1/8" sq. 537 mm	10" 254 mm	40 lbs. 18.1 kg

SURFACE AND RECESSED LUMINAIRES

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
HT2-CM-P15-HL-DA-Q-WH-F4-QZ

Notes:

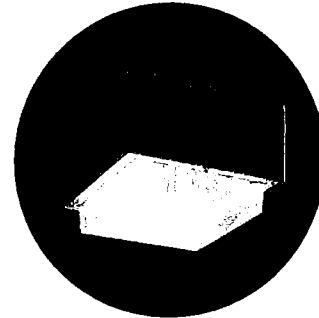
**Type:**  
**PS1E**

LEE07-6119

# HUNTINGTON

## Features

- Square, formed and welded aluminum housing.
- Extruded aluminum door fully gasketed to housing. Concealed hinge door secured with captive screw. Drop prismatic acrylic, drop prismatic polycarbonate, or flat CT73 patterned glass lens provide symmetric light pattern.
- Semi-specular, anodized aluminum reflector for horizontal lamp. HP, high performance optics, consists of specular, anodized aluminum reflector panels.
- Ceiling mount provided with bolt and wiring holes in housing top.
- Mogul porcelain socket, pulse rated, with spring loaded, nickel plated center contact and reinforced lamp grip screw shell. Medium base for ED-17 lamp.
- CWA type ballast, HPF, starting rated at -20°F (-40°F for HPS).
- UL and CSA listed for wet locations.

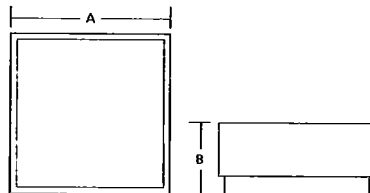


## Ordering Information Example: HT2 - CM - H25 - HP - DA - Q - DB - F1

Series	Mount	Lamp/Watts	Optics	Lens	Volts	Color	Options
Series							
HT1	70-175W						
HT2	200-400W						
Mounting							
CM	Ceiling Mount						
Lamp Type/Wattage							
Metal Halide							
H17	175W (ED-28)						
H25	250W (ED-28)						
H40	400W (ED-37)						
Super Metal Halide							
MS17	175W (ED-28)						
MS25	250W (ED-28)						
MS40	400W (ED-37)						
Pulse Start Metal Halide							
P70	70W (ED-17)						
P10	100W (ED-17)						
P12	125W (ED-17)						
P15	150W (ED-28)						
P20	200W (ED-28)						
P25	250W (ED-28)						
P32	320W (ED-37)						
P35	350W (ED-37)						
P40	400W (ED-37)						
High Pressure Sodium							
S70	70W (ED-23 1/2)						
S10	100W (ED-23 1/2)						
S15	150W (ED-23 1/2)						
S25	250W (ED-18)						
S40	400W (ED-18)						
Optics							
HL	Standard						
HP	High Performance Optics (HT2 only)						
Lens							
DA	Drop Acrylic						
DP	Drop Polycarbonate						
FGP	Flat CT73 Glass Lens (Prismatic)						
Voltage							
Q	Quad Tap <sup>1</sup>						
	(120, 208, 240, 277V) <sup>1</sup>						
5	480V <sup>2</sup>						
T	120/277/347V CSA <sup>1</sup>						
Color							
DB	Dark Bronze						
BL	Black						
WH	White						
GR	Gray						
PS	Platinum Silver						
RD	Red (Premium Color)						
FG	Forest Green (Premium Color)						
CC	Custom Color (Consult Factory)						
Options							
F1	Fusing - 120V						
F2	Fusing - 208V						
F3	Fusing - 240V						
F4	Fusing - 277V						
F5	Fusing - 480V						
F6	Fusing - 347V						
QZ	Quartz RS with lamp						
L	Lamp						

1 Factory wired for highest voltage unless specified.  
2 Not available with 70 or 100W Pulse Start Metal Halide lamps.

## Dimensions



	A	B	Weight
HT1	14" sq. 356 mm	8" 203 mm	20 lbs. 9.1 kg
HT2	21 1/8" sq. 537 mm	10" 254 mm	40 lbs. 18.1 kg

SURFACE AND RECESSED LUMINAIRES

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
YOVH-13-1PLC26-277-OPAL-  
WHT-LAMP INCLUDED  
Notes:

**Type:**  
**PS2E**

LEE07-6119

**Luminaire**  
Lighting Corporation

FIXTURE TYPE: \_\_\_\_\_

WALL MOUNT  
1 or 2 PLC 13/18/26  
1 PLT 32/42

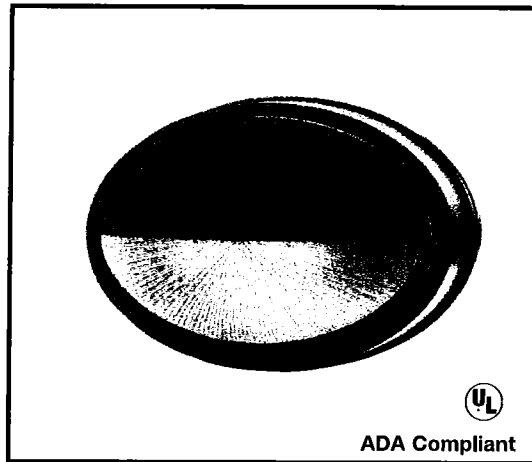
**VANDAL RESISTANT  
FLUORESCENT  
YOVH 13**

### SPECIFICATIONS

- Housing** One piece injection molded UV stabilized polycarbonate secured to baseplate with (2) stainless steel TORX® head screws and sealed against moisture and contaminants with two high temperature silicone O-rings. Color is molded through entire part for scratch resistant finish.
- Lens** One piece injection molded UV stabilized prismatic polycarbonate with minimum .130" wall thickness. Available in clear or opal and secured to baseplate by housing and silicone O-rings.
- Reflector** Die formed heavy gauge specular aluminum, shaped for maximum efficiency.
- Baseplate** Pressure die cast marine grade aluminum. Chemically primed and finished with electrostatically applied polyester powder coat.
- Socket** High temperature thermo plastic, precision snap locked to specular reflector bracket for easy interchangeability.
- Ballast** Electronic microprocessor controlled high-frequency class P high power factor ballast. Ballast shall have less than 10% total harmonic distortion.
- Gasket** Closed cell die cut neoprene gasket provided between fixture baseplate and mounting surface. High temperature silicone O-ring between lens and baseplate.
- UL Listing** Wet location, 595, C,UL.

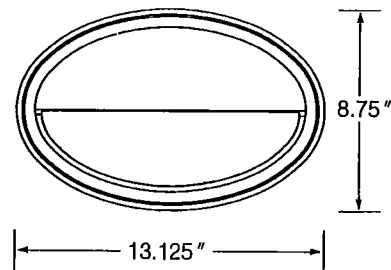
### OPTIONS

- EMB** Emergency battery pack. Will operate one or two lamps for a minimum of 90 minutes. Self contained within fixture. CAB is required and included.
- CAB** Cast aluminum backbox. Provided with (5) 1/2" i.p.t. holes for conduit entry and 4 threaded plugs. Chemically primed and finished with electrostatically applied polyester powder coat.
- WMC** Cast aluminum 700 series wiremold adapter.
- PC** Button type photoelectric switch. Requires CAB option.
- GLR** Fuse and fuse holder.

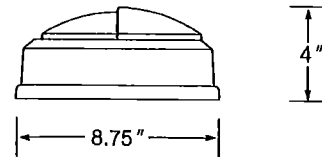


### OVERALL DIMENSIONS:

Front View



Side View



Patent Pending

**Luminaire**  
Lighting Corporation

[www.luminairelighting.com](http://www.luminairelighting.com)

7 Olsen Avenue ■ P.O. Box 2104 ■ Edison, New Jersey 08818 ■ Telephone (732) 549-0056 ■ FAX (732) 549-9737



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
YOVH-13-1PLC26-277-OPAL-  
WHT-LAMP INCLUDED

Notes:

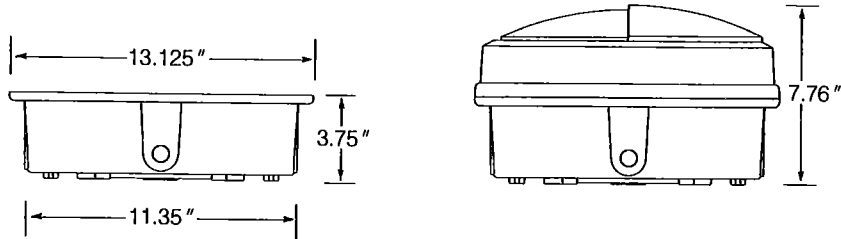
Type:

**PS2E**

LEE07-6119

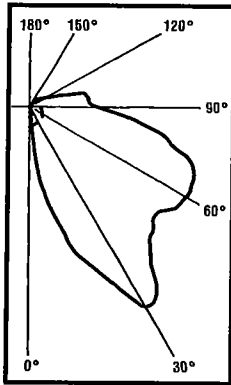
**CAB - BACKBOX OVERALL DIMENSIONS:**

Side View



**PHOTOMETRIC DATA**

**CANDLEPOWER DISTRIBUTION CURVE**



--- 0° Plane  
--- 90° Plane

**MODEL YOYH13 - 1PLC26**

LTL #04418  
Cast aluminum housing, formed specular aluminum reflector, clear polycarbonate prismatic lens.

**Lamp:** One Sylvania CF26DD/E/835 rated at 1800 lumens.

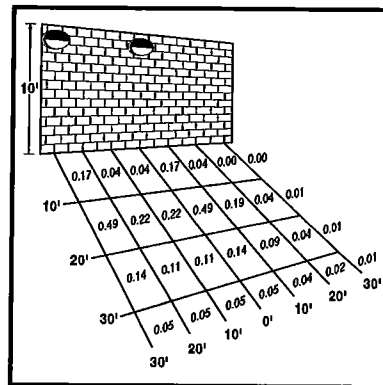
**Mounting:** Wall

**ZONAL LUMEN SUMMARY**

Zone	Lumens	% Lamp	% Fixt
0-30	38	2.1	13.4
0-40	77	4.3	27.0
0-60	160	8.9	56.1
0-90	261	14.5	91.3
90-120	24	1.3	8.3
90-130	25	1.4	8.7
90-150	25	1.4	8.7
90-180	25	1.4	8.7
0-180	285	15.9	100.0

**Total efficiency:** 15.9%  
**CIE type:** Direct

**FOOTCANDLE DISTRIBUTION PATTERN**



Mounting Height	Multiplying Factor
5'	4.00
6'	2.78
7'	2.04
8'	1.56
9'	1.23
10'	1.00

**ORDERING INFORMATION**

EXAMPLE: YOYH 13 - 1PLC13 - 120V - CP - BLK - GLR

**YOYH 13** - **1 PLC26** - **277** - **OP** - **WHT** - **Lamp incl.**

**Series**

**Lamps (Included)**

- 1 PLC13
- 2 PLC13
- 1 PLC18
- 2 PLC18
- 1 PLC26**
- 2 PLC26
- 1 PLT32
- 1 PLT42

**Volts**

- 120
- 277**

**Lens**

- CP-Clear
- Prismatic
- OP-Opal**

**Colors**

- WHT-White**
- BLK-Black
- BRZ- Bronze
- GRY- Grey

**Options**

- EMB**-Emergency battery pack (CAB included)
- CAB**-Cast aluminum backbox
- WMC**-Cast aluminum 700 series wiremold adapter
- PC**-Photoelectric switch (requires CAB)
- GLR**-Fuse and fuse holder

**LAMP INCLUDED**

Catalog No.:	
Fixture Type:	Voltage:
Job Name:	
Approved By:	

**NOTES:**

For complete photometric test reports and custom colors or finishes, please contact your local representative. Availability and specifications subject to change without notice.



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FL YOYH13 12/04

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

**Type:**  
**PS4**

LEE07-6119

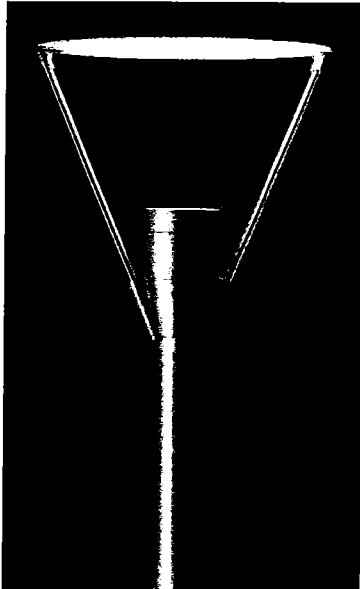
## Indirect

page 1 of 4

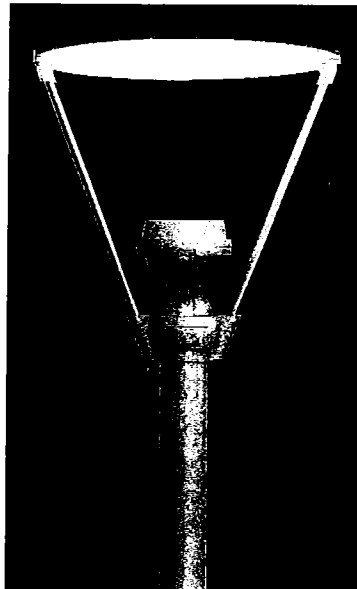
DATE

TYPE

INDF



INDA



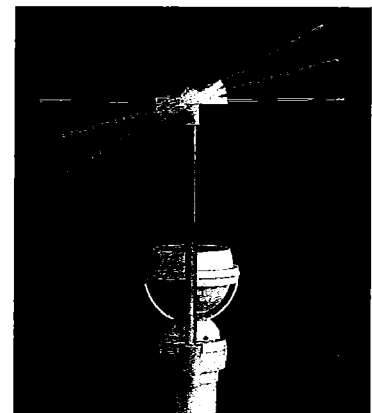
### Construction

- Integral ballast assembly in fixture for easy installation.
- Lightweight aluminum composite upper reflector minimizes pole stress.
- Stainless steel vertical struts.
- Round or square upper reflectors available for both models.
- Reflector tilts and locks at 0, 15 or 30 degrees.
- Both models use the AAL Indirect Reflector System. The optics reduce uplight to less than one percent, improving efficiency while complying with dark sky ordinances.

### Reflector Adjustment

The Indirect upper reflector can be tilted 15 or 30 degrees for an asymmetrical light distribution. The locking clamp design insures a consistent tilt angle on all fixtures.

The Indirect model INDA has an adjustable lamp head to focus the light beam onto the center of the shade, when the shade is tilted. This improves efficiency and minimizes any stray light beyond the reflector.



### Architectural Area Lighting

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Ref: Indirect.pdf copyright 2005, design patented



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

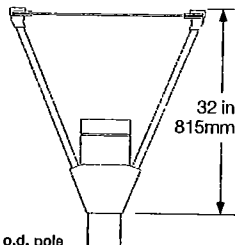
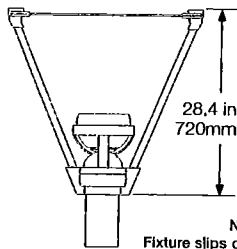
**Type:**  
**PS4**

LEE07-6119

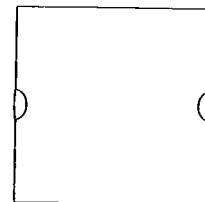
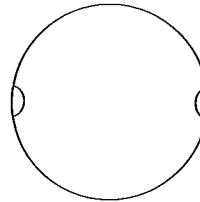
**Indirect**

page 2 of 4      DATE      TYPE

FIXTURE	REFLECTOR	BALLAST	OPTIONS	COLOR	ARM	BASE-POLE
1	2	3	4	5	6	7
1 FIXTURE				2 REFLECTOR - UPPER		
<input checked="" type="checkbox"/> INDA Adjustable head	<input type="checkbox"/> INDF Straight, fixed head			<input type="checkbox"/> RD 30" Round	<input type="checkbox"/> SQ 30" Square	



NOTE:  
Fixture slips over a 5" o.d. pole



→ SELECT REFLECTOR

**5 BALLAST**

- INC For use with mini cand base, incandescent lamps up to 250 watts, 120 volts.
- CF Compact Fluorescent, electronic ballast 120 thru 277 volt, 18° C starting temperature. Use 4-pin 26, 32 or 42 watt lamp. for INDA - 26 watts only.
- 70MH 70 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 70MHEB 70 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, clear ED-17 lamp. For INDF models only.
- 70MHT6 70 watt metal halide magnetic, multitap ballast 120/277 volt. Use a G12 base, clear T-6 ceramic MH lamp.
- 70MHT6EB 70 watt electronic metal halide ballast 120 thru 277 volt. G12 base, use a clear T-6 ceramic metal halide lamp.
- 100MH 100 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 150MH 150 watt metal halide 120/208/240/277 volt ball ast. Use a medium base, clear ED-17 lamps. For INDF models only.
- 150MHEB 150 watt electronic metal halide ballast 120 thru 277 volt. Use a medium base, clear ED-17 lamp. For INDF models only.
- 150MHT6 150 watt metal halide magnetic multitap ballast 120/208/240/277 volt. G12 base, use a clear T-6 ceramic metal halide lamp.
- IL-55 55 watt, Phillips Induction Lamp system with transformer. Specify 120, 208, 240 or 277 volt. For INDF models only.
- IL-85 85 watt, Phillips Induction Lamp system with transformer. Specify 120, 208, 240 or 277 volt.

**5 COLORS**

- WHT White
- LGY Light Grey
- MAL Matte Aluminum
- MDG Medium Grey
- ATG Antique Green
- VGR Verde Green
- WRZ Weathered Bronze
- DGN Dark Green
- CRT Corten
- BRM Metallic Bronze
- DBZ Dark Bronze
- BLK Black
- MTB Matte Black
- RAL # Provide a RAL 4 digit color number
- CUSTOM Please provide a color chip for matching

All ballasts are factory wired for 277 volts. Lamps not included.

SOLD TO \_\_\_\_\_ PO # \_\_\_\_\_ JOB NAME \_\_\_\_\_

Approvals

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277V

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

**Type:**  
**PS4**

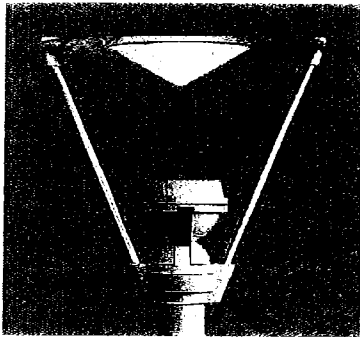
LEE07-6119

## Indirect

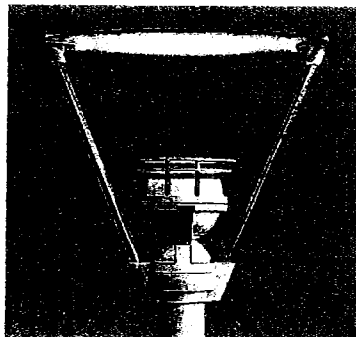
page 3 of 4      DATE      TYPE

### 4 OPTIONS

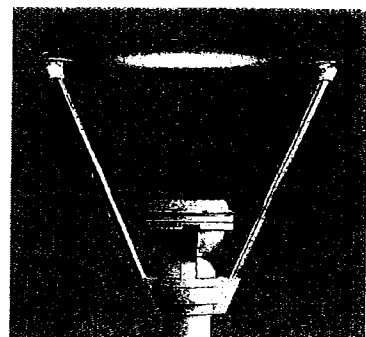
**CDC** Center deflector cone for round reflector (RD). Provides a wider light distribution.



**SR** Two aluminum rings attached to the fixture, for INDA (adjustable mode) only. Factory installed.



**CFH** Color filter holder attached to the fixture, for INDA (adjustable model) only. Factory installed.



**LAMP70** Philips® 70 watt clear T-6 ceramic metal halide lamp, CDM70/T6/830

**LAMP150** Philips® 150 watt clear T-6 ceramic metal halide lamp, CDM70/T6/830

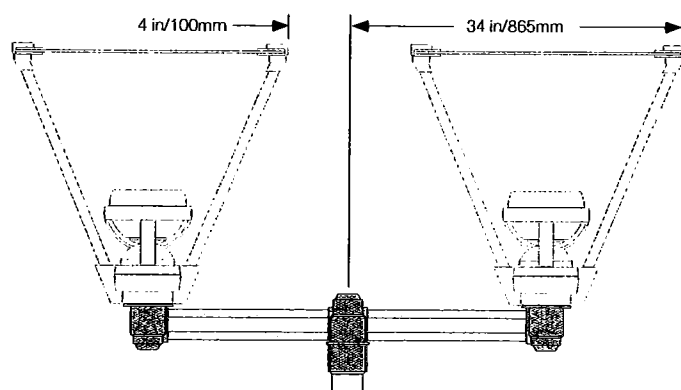
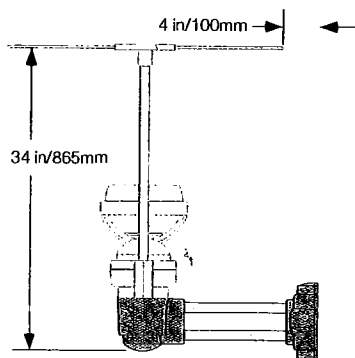
**347** 120/277/347 magnetic ballast for the 150 watt metal halide lamp.

**AD5** Cast aluminum adapter for the PMAT arm to slip over a 5"/127mm pole

### 6 ARMS FOR WALL OR POLE MOUNTING

**WMA** Wall mounted arm, 10 lbs.

**PMAT** Twin pole mount arm, slips over a 4"/100mm pole or tenon. 14 lbs, EPA: .83



## Architectural Area Lighting

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
INDA-XX-150MHT6-277-MAL-  
LAMP 150  
Notes:

Type:

**PS4**

LEE07-6119

## Indirect

page 4 of 4      DATE      TYPE

### Specifications

#### UPPER REFLECTOR

The upper reflector shall be a light weight aluminum composite. The reflector shall be finished in a white, fluoropolymer finish. The reflector shall be attached to the cast aluminum pivot joints and secured with four stainless steel bolts. Two cast aluminum, adjustable knuckles shall connect the reflector assembly to the vertical, stainless steel struts. The struts are #316 stainless steel with a minimum .250" wall thickness. The struts shall have threaded connections for attachment to the upper reflector and the lamp module.

#### LAMP MODULE

The reflector shall be enclosed in die cast aluminum housing. The front cover is secured with four cap screws for relamping and internal access. The front glass element is clear, tempered glass. The front cover and electrical module are sealed with a memory retentive, molded silicone gaskets.

The parabolic reflector shall be prefocused to illuminate the upper reflector with no stray light beyond the reflector. The fixture shall be IES rated as a cutoff luminaire with less than 1% uplight with the upper reflector in the horizontal position. The INDA model lamp module swivels, to center the beam on a tilted reflector, by loosening two stainless steel cap screws. All internal and external hardware is stainless steel.

#### HOUSING

The INDA and INDF post top models shall slip over a 5" o.d. pole.

#### ELECTRICAL MODULE

The ballast is mounted on a prewired plate with a quick disconnect plug. Magnetic metal halide ballasts are high power factor, rated for -30°F starting. Electronic metal halide ballasts are rated for -30°F starting, sound rating A, 120 thru 277 volt. Sockets are pulse rated porcelain, bi-pin, G12 for T-6 lamps. A porcelain screw base for the mini-cand T-4 halogen lamp. The compact fluorescent shall have an electronic transformer, 120 thru 277 volt.

#### FINISH

Fixture finish consists of a five stage pretreatment regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

The reflector shall be painted white. The vertical struts are #4 brushed stainless steel. All other fixture parts shall be finished in the same specified color.

#### CERTIFICATION

The fixture shall be listed with ETL and U.L. for outdoor, wet location use, UL1598 and Canadian CSA Std. C22.2 NO.250. IP=66

#### EPA: INDA or INDF

with round upper reflector: 3.65

with square upper reflector: 4.40

#### WARRANTY

Fixture shall be warranted for three years. Ballast components carry the ballast manufacturer's limited warranty.

### Architectural Area Lighting

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

Notes:

Type:

**PS4**

LEE07-6119

KW Industries

Page 1 of 3

## RSP Round Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196") or 7 gauge (0.1793"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly cylindrical in cross-section with round sides and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 2" x 4" or 3" x 5" inside opening, located 1'-6" above base, is standard on all poles. A grounding provision is located inside the handhole ring.

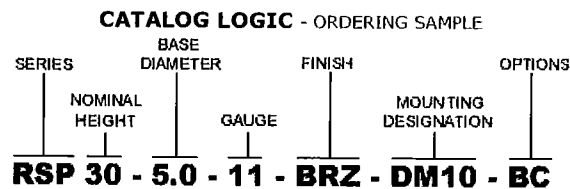
### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
RSP10-4.0-11	10	4.00 x 10.0	11	2 x 4	0.75 x 17 x 3	6	31	24	19.5	78
RSP10-4.5-11	10	4.50 x 10.0	11	3 x 5	0.75 x 17 x 3	8	40	31.5	25	84
RSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	51	40.5	32.5	139
RSP12-4.0-11	12	4.00 x 12.0	11	2 x 4	0.75 x 17 x 3	8	28.9	23.4	19.2	73
RSP12-4.5-11	12	4.50 x 12.0	11	3 x 5	0.75 x 17 x 3	8	34	27	21.5	96

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

Notes:

Type:

**PS4**

LEE07-6119

KW Industries

Page 2 of 3

RSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	43	33.5	27	153
RSP14-4.0-11	14	4.00 x 14.0	11	2 x 4	0.75 x 17 x 3	8	23.6	19.1	15.6	99
RSP14-4.5-11	14	4.50 x 14.0	11	3 x 5	0.75 x 17 x 3	8	28	22	17	108
RSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	36	28	22.5	166
RSP15-4.0-11	15	4.00 x 15.0	11	2 x 4	0.75 x 17 x 3	8	18.1	14.5	11.8	98
RSP15-4.5-11	15	4.50 x 15.0	11	3 x 5	0.75 x 17 x 3	8	26.5	20.5	16.3	98
RSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	33	26	20.5	173
RSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	50	39	31.5	222
RSP16-4.0-11	16	4.00 x 16.0	11	2 x 4	0.75 x 17 x 3	8	16.5	13.2	10.6	93
RSP16-4.5-11	16	4.50 x 16.0	11	3 x 5	0.75 x 17 x 3	8	24.4	18.8	14.8	120
RSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	31	24.2	19.4	179
RSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	47	37	29	232
RSP18-4.0-11	18	4.00 x 18.0	11	2 x 4	0.75 x 17 x 3	8	13.7	10.8	8.6	103
RSP18-4.5-11	18	4.50 x 18.0	11	3 x 5	0.75 x 17 x 3	8	21	16	12.5	132
RSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	21	16.5	192
RSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	40	31	25.2	252
RSP20-4.0-11	20	4.00 x 20.0	11	2 x 4	0.75 x 17 x 3	8	11.4	8.9	6.9	123
RSP20-4.5-11	20	4.50 x 20.0	11	3 x 5	0.75 x 30 x 3	8	15.5	12.2	9.6	135
RSP20-5.0-11	20	5.00 x 20.0	11	3 x 5	1.00 x 36 x 4	11	20.3	16	12.7	189
RSP20-5.0-7	20	5.00 x 20.0	7	3 x 5	1.00 x 36 x 4	11	28.2	22.4	18	253
RSP22-4.0-11	22	4.00 x 22.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP22-4.5-11	22	4.50 x 22.0	11	3 x 5	0.75 x 30 x 3	8	13	10.1	7.8	147
RSP22-5.0-11	22	5.00 x 22.0	11	3 x 5	1.00 x 36 x 4	11	17.3	13.5	10.5	202
RSP22-5.0-7	22	5.00 x 22.0	7	3 x 5	1.00 x 36 x 4	11	24.2	19.2	15.3	272
RSP24-4.0-11	24	4.00 x 24.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP24-4.5-11	24	4.50 x 24.0	11	3 x 5	0.75 x 30 x 3	8	10.9	8.3	6.3	158
RSP24-5.0-11	24	5.00 x 24.0	11	3 x 5	1.00 x 36 x 4	11	14.6	11.3	8.6	215
RSP24-5.0-7	24	5.00 x 24.0	7	3 x 5	1.00 x 36 x 4	11	20.9	16.4	12.9	292
RSP25-4.0-11	25	4.00 x 25.0	11	2 x 4	0.75 x 17 x 3	8	7	5.1	3.7	148
RSP25-4.5-11	25	4.50 x 25.0	11	3 x 5	0.75 x 30 x 3	8	10	7.5	5.5	164
RSP25-5.0-11	25	5.00 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.5	10.3	7.8	221
RSP25-5.0-7	25	5.00 x 25.0	7	3 x 5	1.00 x 36 x 4	11	19.4	15.1	11.8	301
RSP26-4.5-11	26	4.50 x 26.0	11	3 x 5	0.75 x 30 x 3	8	9.1	6.7	4.9	170
RSP26-5.0-11	26	5.00 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	9.3	7	228
RSP26-5.0-7	26	5.00 x 26.0	7	3 x 5	1.00 x 36 x 4	11	18	13.9	10.8	311
RSP28-4.5-11	28	4.50 x 28.0	11	3 x 5	0.75 x 30 x 3	8	7.4	5.3	3.6	182
RSP28-5.0-11	28	5.00 x 28.0	11	3 x 5	1.00 x 36 x 4	11	10.4	7.6	5.5	240
RSP28-5.0-7	28	5.00 x 28.0	7	3 x 5	1.00 x 36 x 4	11	15.4	11.7	8.9	330
RSP30-4.5-11	30	4.50 x 30.0	11	3 x 5	0.75 x 30 x 3	8	5.3	3.5	2.2	193
RSP30-5.0-11	30	5.00 x 30.0	11	3 x 5	1.00 x 36 x 4	11	7.6	5.3	3.6	253
RSP30-5.0-7	30	5.00 x 30.0	7	3 x 5	1.00 x 36 x 4	11	11.5	8.5	6.2	349
RSP35-5.0-7	35	5.00 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7	4.6	2.8	397

**FINISHES**

Standard	Galvanized	K-KLAD	K-KLAD Over Galvanizing
BRZ Bronze	G Galvanized	K813 Bronze	KZ13 Bronze
BLK Black		K821 Black	KZ21 Black
GRY Gray		K841 Gray	KZ41 Gray
GRN Green		K891 Green	KZ91 Green
WHT White		K881 White	KZ81 White
P Primed		K845 Natural Aluminum	KZ45 Natural Aluminum
NA Natural Aluminum			

BAL - AAL MAL COLOR

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RSP12-4.0-11-BAL-BC

**Type:**  
**PS4**

**Notes:**

LEE07-6119

KW Industries

Page 3 of 3

**Tenon Mount**

- 2 2 3/8 " x 4 " TENON
- 3 2 7/8 " x 4 " TENON
- 3.5 3 1/2 " x 6 " TENON
- 4 4 " x 6 " TENON

**Drill Mount**

- DM10** Drilled for 1 Luminaire
- DM2090** Drilled for 2 Luminaires @ 90°
- DM2180** Drilled for 2 Luminaires @ 180°
- DM3090** Drilled for 3 Luminaires @ 90°
- DM3120** Drilled for 3 Luminaires @ 120°
- DM4090** Drilled for 4 Luminaires @ 90°

**Gain Mount**

- GMT4** attachment for CXA
- GMT9** attachment for CXASQ

**Open Mount**

- OT** Open Top
- OTC** Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number, Example: CPL-WPR2-BC.

**Accessories**

- **BC** Base Cover
- CPL** Threaded Coupling<sup>†</sup>
- NPL** Threaded Nipple<sup>†</sup>
- WPR2** Weatherproof Duplex Receptacle<sup>†</sup>
- WPRP** Festoon Opening<sup>†</sup>

**Extra Handholes**

- XHH** Extra Handhole<sup>†</sup>

**Embedment Pole Options**

- E** Embedded Pole
- GS** Ground Sleeve
- CTE** Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

- 1S** 1 @ 0°<sup>†</sup>
- 2S** 2 @ 180°<sup>†</sup>
- 3S** 3 @ 90°<sup>†</sup>
- 4S** 4 @ 90°<sup>†</sup>

Greater embedment depths are available upon request.

<sup>†</sup> Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)  
<sup>\*\*</sup> Located 24" above baseplate and same side as handhole. (No electrical included)

**PACKAGING**

Immediately after coating, the lighting standard including the baseplate shall be wrapped in heavy corrugation specially designed and sized to achieve maximum protection in transit.

KW Industries, Inc. coating process system and stringent quality control procedures provide our customer the finest quality lighting standards in the industry.



Submitted by Leesman Sales



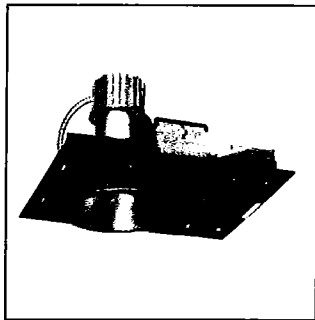
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-SS-B24

Notes:

**Type:**  
**S1**

LEE07-6119



Featuring VirtualSource Reflectors

## 6" Vertical Triple Open & Wall Wash Downlight CFT632EB

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
FRM NAME \_\_\_\_\_  
PROJECT \_\_\_\_\_



Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632EB offers a vertical lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-watt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signos6 family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self trim. Optical system provides excellent glare and brightness control for visual comfort.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

### SOCKET:

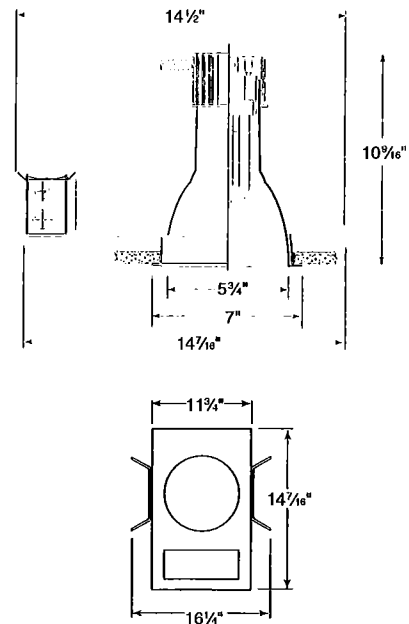
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602-B6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6", (1) 26W/32W/42W Triple Tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage) <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on <a href="http://www.prescolite.com">www.prescolite.com</a> for details. (Prefix housing catalog number) <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory <input type="checkbox"/> <b>RIFI</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602</b> ☼ 6" Specular clear Alzak <input type="checkbox"/> <b>STF603</b> ☼ 6" Champagne gold Alzak <input type="checkbox"/> <b>STF604</b> ☼ 6" Pewter Alzak <input type="checkbox"/> <b>STF602MFC</b> ☼ 6" American Motte™ clear <input type="checkbox"/> <b>STF602DSC</b> ☼ 6" EuroSpec™ <input type="checkbox"/> <b>WTF607</b> 6" Black cone <input type="checkbox"/> <b>WTF605</b> 6" Black baffle <input type="checkbox"/> <b>WTF606</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed) <input type="checkbox"/> <b>WT</b> Painted white self-flange (substitute WT for ST) <input type="checkbox"/> <b>WW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signos8</b> Architectural glass elements Refer to specification sheets ARCH-SIG-005 through -008



In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.  
Web: [www.prescolite.com](http://www.prescolite.com) • Tech Support: (888) 777-4832

ARCH-CFL-007

Submitted by Leasman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-SS-B24

**Type:**  
**S1**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Open & Wall Wash Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.13	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	1800	2400	3200
Rated Lumens	69	75	76
Efficacy (LPW)	10,000 hours	10,000 hours	10,000 hours
Rated Life	82	82	82
CRI	0° F	0° F	0° F
Minimum Starting Temp.			

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	2980
45°	29
55°	0
65°	0
75°	0
85°	0

### CFT632EB-STF602 with Clear Alzak® Reflector

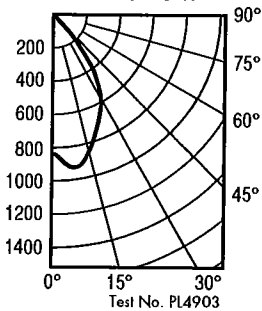
Lamp: One 32W Triple  
Spacing Criteria: 1.0  
Efficiency: 40.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	17	15	11
8.0	13	12	9
9.0	10	9	7
10.0	8	7	5
11.0	7	6	5

### CANDLEPOWER DISTRIBUTION



### CANDLEPOWER SUMMARY

Angle	Mean CP	Lumens
0	828	
5	906	85
15	839	238
25	675	310
35	437	267
45	35	63
55	0	0
65	0	0
75	0	0
85	0	0

### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																						
	80%			70%			50%			30%			10%										
	20% Effective Floor Cavity Reflectance																						
													% Wall Reflectance										
													70	50	30	10	70	50	30	10	50	30	10
1	48	47	46	45	47	46	45	44	44	43	43	42	42	41	41	41	40	41	41	41	40		
2	46	44	42	41	45	43	41	40	41	40	39	40	39	38	39	38	38	39	38	38			
3	41	41	39	37	42	40	38	37	39	37	36	38	37	35	37	36	35	37	36	35			
4	41	38	36	34	40	38	35	34	37	35	33	36	34	33	35	34	33	35	34	33			
5	39	35	33	31	38	35	33	31	34	32	31	33	32	30	33	31	30	33	31	30			
6	37	33	30	29	36	33	30	29	32	30	28	31	30	28	31	29	28	31	29	28			
7	35	31	28	26	34	30	28	26	30	28	26	29	27	26	29	27	26	29	27	26			
8	33	28	26	24	32	28	26	24	28	25	24	27	25	24	27	25	24	27	25	24			
9	31	27	26	22	30	26	24	22	26	23	22	25	23	22	25	23	22	25	23	22			
10	29	25	22	20	28	24	22	20	24	22	20	24	22	20	23	21	20	23	21	20			

CFT632EB-STF602

Test No. PL4903

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Hubbell Lighting, Inc.

Submitted by Leesman Sales



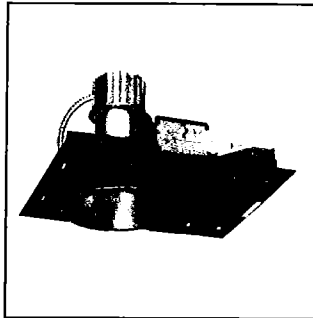
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-VW-SS-B24

**Type:**  
**S2**

Notes:

LEE07-6119



Featuring VirtualSource® Reflectors

## 6" Vertical Triple Open & Wall Wash Downlight **CFT632EB**

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
HRM NAME \_\_\_\_\_  
PROJECT \_\_\_\_\_

**Architektur**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632EB offers a vertical lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-watt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signosé family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self-trim. Optical system provides excellent glare and brightness control for visual comfort.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

### SOCKET:

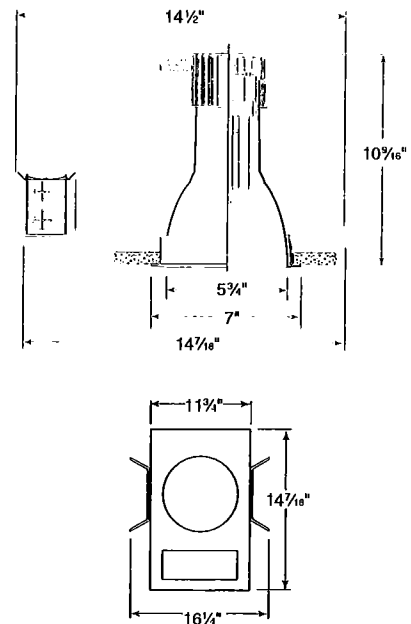
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602-B6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6", (1) 26W/32W/42W Triple tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage) <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on <a href="http://www.prescolite.com">www.prescolite.com</a> for details. (Prefix housing catalog number) <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory <input type="checkbox"/> <b>RIFI</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602</b> ☉ 6" Specular clear Alzak <input type="checkbox"/> <b>STF603</b> ☉ 6" Champagne gold Alzak <input type="checkbox"/> <b>STF604</b> ☉ 6" Pewter Alzak <input type="checkbox"/> <b>STF602MFC</b> ☉ 6" American Motte™ clear <input type="checkbox"/> <b>STF602DSC</b> ☉ 6" EuroSpec™ <input type="checkbox"/> <b>WTF607</b> 6" Black cone <input type="checkbox"/> <b>WTF605</b> 6" Black baffle <input type="checkbox"/> <b>WTF606</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed) <input type="checkbox"/> <b>WT</b> Painted white self-flange substitute WT (ST) <input checked="" type="checkbox"/> <b>VW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signos8</b> Architectural glass elements Refer to specification sheets ARCH-SIG-005 through -008

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**ARCH-CFL-007**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-VVV-SS-B24

**Type:**  
**S2**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Open & Wall Wash Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	26W Triple	32W Triple	42W Triple
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Minimum Starting Temp.	0° F	0° F	0° F

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	0
45°	2980
55°	29
65°	0
75°	0
85°	0

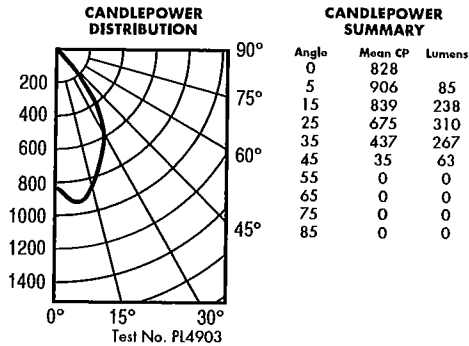
### CFT632EB-STF602 with Clear Alzak® Reflector

Lamp: One 32W Triple  
Spacing Criteria: 1.0  
Efficiency: 40.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	17	15	11
8.0	13	12	9
9.0	10	9	7
10.0	8	7	5
11.0	7	6	5



### COEFFICIENTS OF UTILIZATION

Zonal Cavity Method

Beam Cavity Ratio	% Effective Floor Cavity Reflectance													
	80%		70%		50%		30%		10%					
	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%				
	70	50	30	10	70	50	30	10	50	30	10	50	30	10
1	48	47	46	45	47	46	45	44	44	43	43	42	42	41
2	46	44	42	41	45	43	41	40	41	40	39	40	39	38
3	41	41	39	37	42	40	38	37	39	37	36	38	37	35
4	41	38	36	34	40	38	35	34	37	35	33	36	34	33
5	39	35	33	31	38	35	33	31	34	32	31	33	32	30
6	37	33	30	29	36	33	30	29	32	30	28	31	30	28
7	35	31	28	26	34	30	28	26	30	28	26	29	27	26
8	33	28	26	24	32	28	26	24	28	25	24	27	25	24
9	31	27	26	22	30	26	24	22	26	23	22	25	23	22
10	29	25	22	20	28	24	22	20	24	22	20	23	21	20

CFT632EB-STF602

Test No. PL4903

### NOTES

☉ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Submitted by Leesman Sales



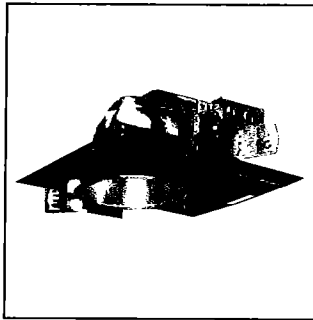
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632HEB-STF602H-SS-B24

**Type:**  
**S3**

Notes:

LEE07-6119



Featuring VirtualSource® Reflectors

## 6" Horizontal Triple Open & Wall Wash Downlight **CFT632HEB**

One 26W, 32W, or 42W Triple Tube 4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_

HRM NAME \_\_\_\_\_

PROJECT \_\_\_\_\_

**Architektür**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

### APPLICATIONS:

The CFT632HEB offers a horizontally lamped compact fluorescent downlight and wall wash fixture that provides superior brightness and glare control. The multi-watt multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632HEB is compatible with the Signosó family of architectural elements.

### HOUSING:

One-piece painted 18-gauge cold rolled steel platform. Prewired J-box with snap-on cover for easy access. Vented at lamp tip and socket for maximum light output. Same housing accommodates downlight and wall wash downlight reflectors.

### REFLECTOR:

High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-trim (ST) standard. Painted white self-trim (WT) available. Baffled units standard with painted white self trim.

### BALLAST:

One (1) compact fluorescent Class 'P' electronic multi-volt (120V through 277V) ballast suitable for operating 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

### LAMP:

One (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamps furnished by others.

### SOCKET:

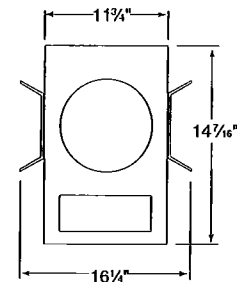
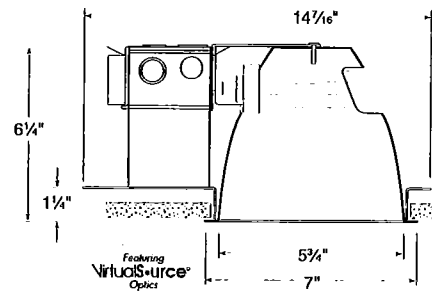
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented).

### INSTALLATION:

Universal adjustable mounting brackets accommodate 1 1/2" or 3/4" lathing channel (by others) or Prescolite 24" bar hangers (B24 or B6).

### LABELS:

UL, CSA listed for damp locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632HEBDMEM-STF603H-B24

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTORS	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632HEB</b> 6", (1) 26W/32W/ 42W triple tube, multi-volt electronic ballast	<input type="checkbox"/> <b>347V</b> (Specify wattage) <input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on www.prescolite.com for details. (Prefix housing catalog number) <input type="checkbox"/> <b>3DM</b> 3D AddressPro™ digital dimming ballast for programmable dimming capability. Refer to dimming specification packet #PR3117	<input type="checkbox"/> <b>DM</b> Electronic analog dimming ballast (Contact factory for wall control system compatibility) <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory <input type="checkbox"/> <b>RIF1</b> Radio interference filter (single circuit)	<input checked="" type="checkbox"/> <b>STF602H</b> ® 6" Specular clear Alzak <input type="checkbox"/> <b>STF603H</b> ® 6" Champagne gold Alzak <input type="checkbox"/> <b>STF604H</b> ® 6" Powder Alzak <input type="checkbox"/> <b>STF602HMFC</b> ® 6" American Malle™ clear <input type="checkbox"/> <b>STF602HDSC</b> ® 6" EuroSpec™ <input type="checkbox"/> <b>WTF607H</b> 6" Black cone <input type="checkbox"/> <b>WTF605H</b> 6" Black baffle <input type="checkbox"/> <b>WTF606H</b> 6" White baffle	<input type="checkbox"/> <b>L</b> Regressed clear lens <input type="checkbox"/> <b>SL</b> Regressed prismatic spread lens <input checked="" type="checkbox"/> <b>SS</b> Semi-specular finish <input type="checkbox"/> <b>TRG</b> Trim ring gasket (factory installed) <input type="checkbox"/> <b>WT</b> Painted white self- flange (substitute WT for ST) <input type="checkbox"/> <b>WW</b> Wall wash reflector (not available with baffle or lensed trims)	<input checked="" type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joists up to 24" centers <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signosó</b> Architectural glass elements Refer to specification sheets ARCH-SIG- 001 through -004

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**ARCH-CFL-001**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632HEB-STF602H-SS-B24

**Type:**  
**S3**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Horizontal Triple Open & Wall Wash Downlights - CFT632HEB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA (One per fixture)

	26W Triple	32W Triple	42W Triple
Rated Watts	26W	32W	42W
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Min. Starting Temp.	0° F	0° F	0° F

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average 0°	Average 45°	Average 90°
45°	21019	21096	14312
55°	0	0	0
65°	0	0	0
75°	0	0	0
85°	0	0	0

### CFT632HEB-STF602H with Specular Clear Alzak Reflector

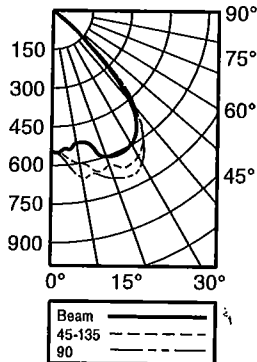
Lamp: One 32W Triple  
Spacing Criteria:  
0° = 1.5  
90° = 1.6  
Efficiency: 45.1%

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)  
Ceiling 80% Wall 50% Floor 20%

SPACING	RCR1	RCR3	RCR7
7.0	20	17	12
8.0	15	13	9
9.0	12	10	7
10.0	10	8	6
11.0	8	7	5

### CANDLEPOWER DISTRIBUTION



### CANDLEPOWER SUMMARY

Angle	0	45	90
0	540	540	540
5	598	572	535
15	649	638	528
25	700	663	601
35	605	601	557
45	249	249	227
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

Test No. PL5221

### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance																											
	80%				70%				50%				30%				10%											
	20% Effective Floor Cavity Reflectance																											
													% Wall Reflectance															
													70	50	30	10	70	50	30	10	50	30	10	50	30	10	30	10
1	51	50	49	48	50	49	48	47	47	46	46	45	45	44	44	43	43	43	42	41	42	41	40	42	41	40		
2	49	47	45	43	48	46	44	43	44	43	42	43	42	41	42	41	40	41	40	39	39	38	37	39	38	37		
3	46	43	41	39	45	42	40	39	41	40	38	40	39	38	38	37	36	37	36	35	35	34	33	35	34	33		
4	44	40	38	36	43	40	37	36	39	37	35	38	36	35	36	35	34	35	34	33	33	32	31	33	32	31		
5	41	37	35	33	40	37	34	32	36	34	32	35	33	32	33	32	31	32	31	30	30	29	28	30	29	28		
6	39	35	32	30	38	34	32	30	34	31	30	33	31	29	32	30	29	30	28	27	28	27	26	28	27	26		
7	36	32	29	27	36	32	29	27	31	29	27	30	28	27	28	26	24	28	26	24	26	24	23	25	23	22		
8	34	29	27	25	34	29	26	24	29	26	24	28	26	24	26	24	23	26	24	23	24	22	21	24	22	21		
9	32	27	24	22	31	27	24	22	26	24	22	26	23	22	25	23	22	25	23	22	23	21	20	23	21	20		
10	30	25	22	20	29	25	22	20	24	22	20	24	21	20	23	21	20	23	21	20	21	20	19	21	20	19		

CFT632HEB-STF602H

Test No. PL5221

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.



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Submitted by Leesman Sales



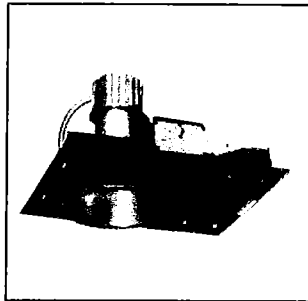
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-DL-B24

**Type:**  
**S4**

Notes:

LEE07-6119



**6" Vertical Regressed  
High Impact Lens Downlight**

**CFT632EB**

One 26W, 32W, or 42W Triple Tube  
4-Pin Lamp  
Non-IC Rated  
120V, 208V, 240V, 277V, or 347V

DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
FIRM NAME \_\_\_\_\_  
PROJECT \_\_\_\_\_

**Architektür**

Ceiling Cutout: 6 1/4"  
Maximum Ceiling Thickness: 1 1/4"  
For conversion to millimeters,  
multiply inches by 25.4  
Not to Scale

Featuring **VirtualSource** Reflectors

**APPLICATIONS:**  
The CFT632EB offers a vertical lamped compact fluorescent downlight that provides superior brightness and glare control. The multi-volt, multi-volt ballast provides the ability to change wattages by simply replacing the lamp. This luminaire is ideal for a wide variety of low to medium height ceiling applications including commercial, retail, and hospitality. The CFT632EB is compatible with the Signos6 family of architectural elements.

**HOUSING:**  
One-piece 18-gauge galvanized steel platform. Prewired J-box with snap-on cover for easy access. Vented of lamp tip and socket for maximum light output. Some housing accommodates downlight and wall wash downlight reflectors. Diecast aluminum heat sink.

**REFLECTOR:**  
High purity aluminum Alzak® Virtual Source® iridescence suppressed reflector. Self-Frim (ST) standard. Painted white self-Frim (WT) available.

**LENS:**  
High impact CA-81 equivalent acrylic lens. Lenses are FDA approved for use in food service areas and UL94 approved with a flammability rating of 94HB.

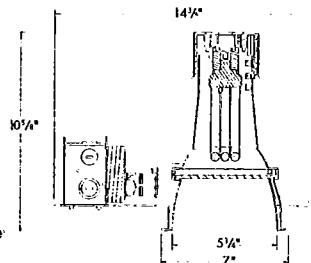
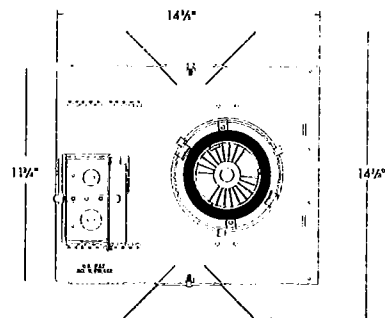
**BALLAST:**  
One (1) compact fluorescent Class 'P' electronic multivolt (120V through 277V) ballast suitable for operating all 26W, 32W, and 42W triple tube lamps. HPF and EOL protection standard. Accessible from below ceiling. 347V available (specify wattage when ordering).

**LAMP:**  
Use one (1) 26W (GX24q-3 base), 32W (GX24q-3 base), or 42W (GX24q-4 base) 4-pin triple tube compact fluorescent lamp. Lamp furnished by others.

**SOCKET:**  
One (1) injection molded socket suitable for 26W, 32W, and 42W triple tube lamps (vented). Adjusts to three positions, accommodating various lamp sizes and ensuring proper lamp position.

**INSTALLATION:**  
Universal adjustable mounting brackets accommodate 1 1/2" or 7/4" latching channel or 1/2" EMT (by others), or Prescolite 24" bar hangers (B24 or B6).

**LABELS:**  
UL, CSA listed for wet locations  
Approved for through wiring  
Non-type I.C.



CATALOG NUMBER:

EXAMPLE: CFT632EBCP-STF602CLB6

HOUSING	HOUSING OPTIONS	HOUSING OPTIONS	REFLECTOR FINISH	REFLECTOR COLOR	REFLECTOR OPTIONS	ACCESSORIES
<input checked="" type="checkbox"/> <b>CFT632EB</b> 6" (1) 26W/32W/ 42W Triple tube, multi- volt electronic ballast <input type="checkbox"/> <b>347V</b> (Specify wattage)	<input type="checkbox"/> <b>CP</b> Chicago Plenum. Fixture construction and/or specifications may vary. Refer to Chicago Plenum specification sheets on www.prescolite.com for details. (Prefix housing catalog number) <input type="checkbox"/> <b>DM</b> Electronic Analog Dimming Ballast to 3%, 4-wire (120V through 277V) <input type="checkbox"/> <b>SDM</b> Lutron Compact SE Dimming Ballast to 5%, 3-wire (specify voltage) <input type="checkbox"/> <b>HDM</b> Lutron Hi-Lume Dimming Ballast to 1%, 3-wire (specify voltage) <input type="checkbox"/> <b>2DM</b> Lutron Tu-Wire Dimming Ballast to 5%, 2-wire (120 volt only)	<input type="checkbox"/> <b>7DM</b> Advance Mark 7 Dimming Ballast to 3%, 4-wire (120V through 277V) <input type="checkbox"/> <b>XDM</b> Advance Mark 10 Dimming Ballast to 5%, 2-wire (specify voltage) <input type="checkbox"/> <b>EM</b> Emergency battery pack with remote test switch and indicator light <input type="checkbox"/> <b>FSDFA</b> Fuse kit installed at factory <input type="checkbox"/> <b>RIF1</b> Radio interference filter (single circuit) <input type="checkbox"/> <b>MW26</b> Max Wattage label, 26W <input type="checkbox"/> <b>MW32</b> Max Wattage label, 32W	<input checked="" type="checkbox"/> <b>STF602</b> Specular Alzak or Painted Option <input type="checkbox"/> <b>STF602MFC</b> American Matte™ <input type="checkbox"/> <b>STF602SS</b> Semi-Specular <input type="checkbox"/> <b>STF602HZ</b> Haze (Diffused & Buffed)	<input type="checkbox"/> <b>CG</b> 6" Champagne Gold Alzak <input type="checkbox"/> <b>PW</b> 6" Pewter Alzak <input type="checkbox"/> <b>BL</b> 6" Black Alzak <input type="checkbox"/> <b>WE</b> 6" Wheat Alzak <input type="checkbox"/> <b>LW</b> 6" Light Wheat Alzak <b>Painted Options*</b> <input type="checkbox"/> <b>WC</b> White Cone <input type="checkbox"/> <b>BC</b> Black Cone  *All painted options come standard with an upper specular clear Alzak reflector.	<input type="checkbox"/> <b>DL</b> Diffused Lens <input type="checkbox"/> <b>CLC</b> Clear Lens <input type="checkbox"/> <b>PL</b> Prismatic Lens <input type="checkbox"/> <b>TRG</b> Trim Ring Gasket (Factory Installed) <input type="checkbox"/> <b>WT</b> Painted White Self Flange (Sustitute WT for ST)	<input type="checkbox"/> <b>B24</b> Set of two (2) 24" bar hangers for T-bar ceilings <input type="checkbox"/> <b>B6</b> Set of two (2) bar hangers for ceiling joints up to 24" centers <input type="checkbox"/> <b>FSDFI</b> Fuse kit for field installation <input type="checkbox"/> <b>SCA6D</b> Sloped ceiling adapter (see note on back page) <input type="checkbox"/> <b>Signos6</b> Architectural elements Refer to specification sheets ARCH.SIG-001 through -004

**prescolite**  
A Division of Hubbell Lighting, Inc.

In a continuing effort to offer the best product possible we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product.  
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**ARCH-CFL-058**

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CFT632EB-STF602-DL-B24

**Type:**  
**S4**

Notes:

LEE07-6119

# PHOTOMETRIC DATA

## Architektür - 6" Vertical Triple Tube Regressed High Impact Lens Downlight - CFT632EB

BALLAST DATA	26W Triple			32W Triple			42W Triple		
	120V	277V	347V	120V	277V	347V	120V	277V	347V
Total System Watts	28W	28W	38W	35W	35W	42W	44W	47W	48W
Input Current (Amps)	0.23	0.1	0.11	0.29	0.13	0.12	0.36	0.17	0.14
Input Frequency in Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power Factor	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%	>97%
Ballast Factor	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%	>98%
Total Harmonic Distortion	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%	<10%
Total Harmonic Distortion	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)	-18°C (0°F)

### LAMP DATA

	26W Triple	32W Triple	42W Triple
Rated Watts	26W Triple	32W Triple	42W Triple
Rated Lumens	1800	2400	3200
Efficacy (LPW)	69	75	76
Rated Life	10,000 hours	10,000 hours	10,000 hours
CRI	82	82	82
Minimum Starting Temp.	0° F	0° F	0° F

### AVERAGE INITIAL FOOTCANDLES

- Assumptions:
- Multiple units (square array)
  - Ceiling 80%; Wall 50%; Floor 20%
  - Four fixtures evenly spaced in the center of the room
  - The room is square and has a width and length equal to twice the lamp spacing
  - The lumen depreciation factor is 0.8
  - The dirt depreciation factor is 0.98

#### 42W Triple

SPACING	RCR1	RCR3	RCR7
7.0	12	11	8
8.0	9	8	6
9.0	7	6	5
10.0	6	5	4
11.0	5	4	3
12.0	4	4	3
13.0	4	3	2
14.0	3	3	2
15.0	3	2	2

### LUMINANCE DATA IN CANDELA/SQ. METER

Angle in Vertical	Average
0°	0°
45°	4402
55°	4863
65°	376
75°	169
85°	126

### CFT632EB-STF602CL Clear Alzak® Reflector w/clear lens

Lamp: One 42W Triple  
Rated lumens: 3200  
Spacing Criteria: 1.0  
Efficiency: 22.0%

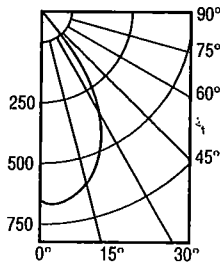
### COEFFICIENTS OF UTILIZATION Zonal Cavity Method

Room Cavity Ratio	% Effective Floor Cavity Reflectance												0		
	80%			70%			50%			30%				10%	0%
	70	50	30	70	50	30	70	50	30	70	50	30			
0	26	26	26	26	26	26	24	24	24	23	23	23	22	22	22
1	25	24	23	24	24	23	23	22	22	22	21	21	21	21	20
2	24	22	21	23	22	21	20	21	20	20	20	20	20	19	19
3	22	21	20	22	20	19	18	20	19	18	19	18	18	18	17
4	21	19	18	21	19	18	17	18	17	17	18	17	16	17	16
5	20	18	16	19	18	16	15	17	16	15	17	16	15	16	15
6	19	17	15	18	16	15	14	16	15	14	16	15	14	15	14
7	18	16	14	17	15	14	13	15	14	13	15	14	13	14	13
8	17	15	13	16	14	13	12	14	13	12	14	13	12	13	12
9	16	14	12	15	14	12	11	13	12	11	13	12	11	12	11
10	15	13	12	14	13	11	11	13	11	11	12	11	11	11	10

CFT632EB-STF602CL

Test No. 2003102

### CANDLEPOWER DISTRIBUTION



Test No. 2003102

### CANDLEPOWER SUMMARY

Angle	Mean CP
0	663
5	678
10	644
15	588
20	526
25	466
30	393
35	277
40	136
45	57
50	35
55	51
60	22
65	3
70	1
75	1
80	0
85	0
90	0

### NOTES

Ⓢ Denotes a Virtual Source reflector.

Refer to [www.prescolite.com](http://www.prescolite.com) for additional photometric tests (IES Files).

When ordering a sloped ceiling adapter, specify the degree of slope in 5° increments, max. of 35°. For a more precise degree or wet ceiling applications, please contact factory. Sloped ceiling adapter and housing must be installed at the same time.

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101 Corporate Drive • Spartanburg, SC 29303 U.S.A. • Phone (864) 599-6000  
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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
RL20 / CTR2002-CLR-P

**Type:**  
**S5**

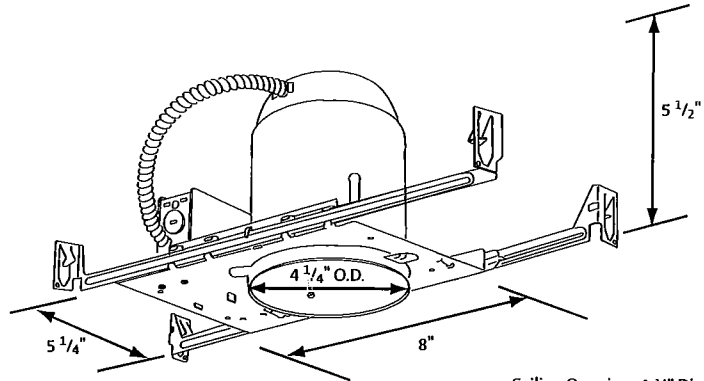
Notes:

LEE07-6119

**RL20**

**4" Line Voltage  
Mini-Recessed Housing**

Catalog # \_\_\_\_\_ Type \_\_\_\_\_ Project \_\_\_\_\_



Ceiling Opening: 4-3/8" Diameter

**Specifications/Features**

**Fixture**

Compact 4" incandescent downlight housing for new construction applications.  
Many different trims available to complement any design style.  
May be used with drywall, plaster or suspended ceilings from 1/2" to 1-1/2" thick.  
The housing may be used in insulated ceilings if a minimum 3" distance is maintained all around fixture from insulation material.

**Electrical**

See trim sheet details for maximum lamp size and wattage.  
Prewired junction box with spring-latch access plates.  
Approved for through-circuit wiring (max (8) #12 AWG 4 in/4 out). Push-in wire connectors included.

Adjustable lamp socket (vertical position).  
Thermally protected.  
Junction box has (4) 1/2" pryouts, (1) 3/4" concentric pryout and (4) Romex pryouts.

**Mounting**

Includes dual extension hanger bars that are adjustable from 14-1/2" to 24-1/2".  
Just-A-Nail mounting system included on hanger bars.  
Hanger bars may be extended to rest on T-bar ceilings.

**Labels/Usage**

cULus listed for damp locations.  
New York City approved, calendar number 38645.

**Ordering Information**

Example Order:  -

Housing:  - Trims:  - Options:

- Max Lamp: 50W R20, 50W PAR20 and 45W PAR16**
- CTR2001-(P, PB) - Black Baffled Downlight:  
-P (White Trim), -PB (Polished Brass Trim)
- CTR2001W-P - White Baffled Downlight, White Trim
- CTR2003-P - Mini-Recessed Scoop Wall Wash, White Trim
- CTR2005-P - Mini-Recessed Pin Spot, White Trim
- CTR2007-(B, NK, P, PB, S) - 4" Surface Adjustable: -B (Black Trim), -NK (Nickel Trim),  
-P (White Trim), -PB (Polished Brass Trim), -S (Silver Trim)
- Max Lamp: 40W A15, 50W R20, 50W PAR20 and 45W PAR16**
- CTR2002-BLK-(B, P) - Black Specular Aluminum Reflector:  
-B (Black Trim), -P (White Trim)
- CTR2002-CLR-P - Clear Specular Aluminum Reflector, White Trim (40W A15 lamp)
- CTR2002-GLD-P - Gold Specular Aluminum Reflector, White Trim
- CTR2002-WHT-P - White Specular Aluminum Reflector, White Trim
- Max Lamp: 35W PAR20, 40W A19**
- CTR2006-P - Drop Opal Glass, Gasketed, Shower Light, White Trim
- CTR2012-P - Flat Albalite Glass Lens, Shower Light, White Trim
- Non-IC: 50W R20, 50W PAR20 and 45W PAR16**
- IC: 50W R20, 45W PAR16 and 50W PAR20**
- CTR2008-(P, PB, U) - Mini-Recessed Eyeball, 30° Vertical Adjustment:  
-P (White Trim), -PB (Polished Brass Trim), -U (UNlook Trim)



1-800-728-0312

www.con-techlighting.com

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CTL838P

Notes:

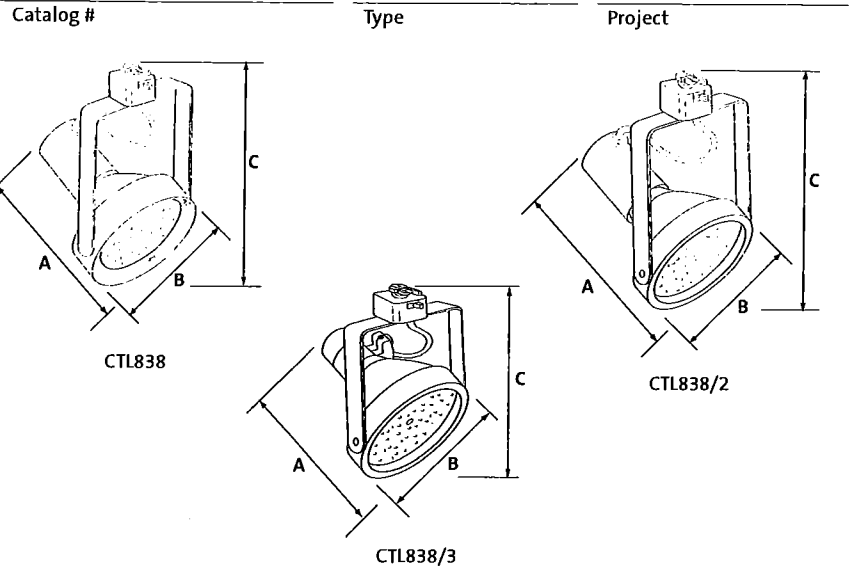
**Type:**

**V1**

LEE07-6119

**CTL838**  
**CTL838/2**  
**CTL838/3**

Gimbal  
120V Series  
Track Fixtures



DIMENSIONS			
Model	A	B	C
CTL838	6 1/2"	5 1/2"	11"
CTL838/2	5 3/4"	5"	10 1/8"
CTL838/3	4 3/4"	5 1/2"	9 3/4"

**Specifications/Features**

**Fixture**  
The free, unconfined look of these gimbal lamp holders make them popular for commercial, retail and residential applications. The 2-plane gimbal design permits maximum horizontal and vertical swivel for excellent aiming, and our "Sure-Set" yoke holds the fixture firmly in place. Models are offered for all the popular halogen PAR lamps. The CTL838 (only) is supplied with spring clips for the use with accessories.

**Lamp/Electrical**  
CTL838 Lamp: 250W PAR38 (max)

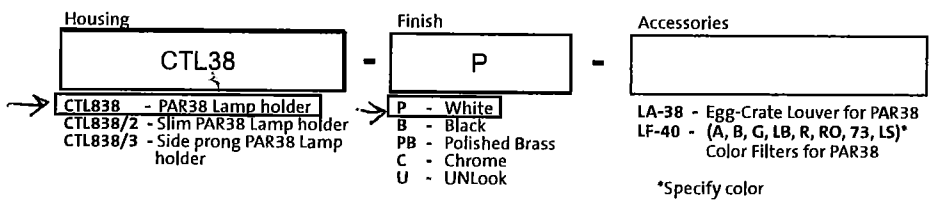
CTL838/2 Lamp: 250W PAR38 (max)  
CTL838/3 Lamp: 150W PAR38 (max)  
All styles are equipped with a convenient on/off switch and polarity indicator.

**Warranty**  
This fixture is covered by Con-Tech's full replacement guarantee which is effective for one year.

**Listing**  
cUL<sub>US</sub> listed. Suitable for dry locations.

**Ordering Information**

Example Order: **CTL838** - **P** - **LA-38**



1-800-728-0312

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AD04TRSS44

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**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

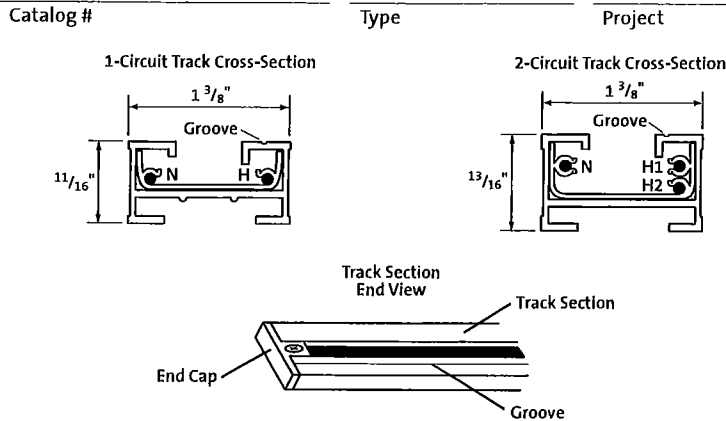
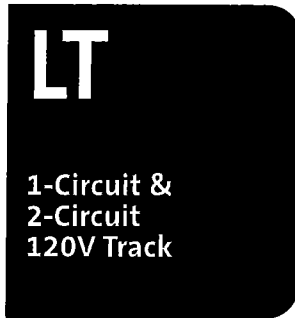
**Catalog Number:**  
LT24-P

Notes:

**Type:**

**V1**

LEE07-6119



**Specifications/Features**

**Track Systems**

Commercial grade track systems offer true versatility with a wide variety of power feed and connection accessories.

Mounting accessories available for T-Bar clips, stems, threaded rods, and aircraft cable.

All conductors are solid copper with thermoplastic insulators for electrical isolation.

All track sections are supplied with two insulated end caps.

Channels are constructed of heavy 14 ga. extruded aluminum.

Mechanical polarity with visual indicator (groove) simplifies installation of fixtures and assures proper electrical connections.

Nominal length track sections can be cut in the field for exact fit.

Toggle bolts are supplied for simple surface installation.

Track sections may be mounted within Con-Tech's Recessed Track Housing System to minimize appearance.

**1-Circuit And 2-Circuit Application**

Single and 2-circuit track options available for 120V applications.

All Con-Tech track fixtures have two position contacts to access 1-circuit or 2-circuit track conductors.

All 2-circuit track sections are supplied with a set of shims (1 per foot of track) to lock the fixture contacts into 2nd circuit position.

**1-Circuit Track**

The economic solution for most applications.

Single hot and neutral conductors are rated for 20 Amps.

Low profile track cross-section.

**2-Circuit Track**

Enhanced versatility with two hot conductors and a common neutral.

Allows higher wattage output by splitting loads over one run of track for maximum capacity of 40 Amps (20A per circuit on single phase, 3-wire power feed).

Create lighting effects by simply applying fixtures to the desired circuits and utilizing separate switching.

**Labels/Usage**

cULus listed. For dry locations.

**Ordering Information**

Example Order: **LT - 8 - P**

1-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
2 - 2' Length	B - Black/Black
4 - 4' Length	P - White/White
6 - 6' Length	PB - Polished Brass/Black*
8 - 8' Length	U - Unfinished Aluminum/Grey*
12 - 12' Length	
	*Not Available on 12' sections.

2-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
24 - 4' Length	B - Black/Black
26 - 6' Length	P - White/White
28 - 8' Length	U - Unfinished Aluminum/Grey*
212 - 12' Length	
	*Not Available on 12' sections.

Actual track extrusion lengths are 3/8" shorter than nominal lengths indicated above.  
LA11 or LA211 end caps are supplied with all track sections and may be ordered separately as needed.  
See other sheets for Recessed Track Systems and 120V Track Accessories.  
2', 4', and 6' sections supplied with (2) toggle bolts, 8' and 12' sections supplied with (3) toggle bolts.



1-800-728-0312

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All specifications subject to change without notice.

AD04TR5507



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LA210-P

Notes:

**Type:**

**V1**

LEE07-6119

# 2-Circuit Track

Power Feeds

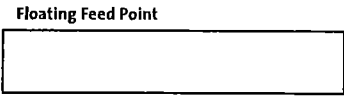
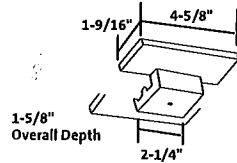
Catalog # \_\_\_\_\_ Type \_\_\_\_\_ Project \_\_\_\_\_

## General Track Information

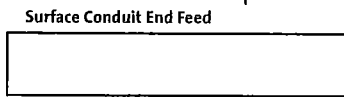
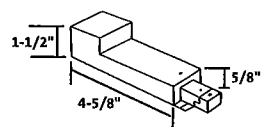
Power feeds are constructed of sturdy polycarbonate with galvanized steel back plates. Every electrical component is polarized and has a grounding capability to ensure safe usage. Visual polarity indicators simplify proper electrical installation. Twelve gauge insulated wire is used for internal connections. Solid copper track contacts provide good electrical conductivity for years of trouble free operation.

All track components are cULus listed. Installations are suitable for dry locations only. Maximum power rating is 2400 Watts per circuit (4800W total): 20A per circuit (40A total capacity) at 120V, 60Hz. NEC allows 80% of full capacity or 1920 Watts per circuit (3840W total).

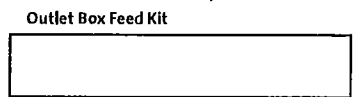
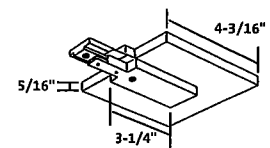
## 1-Circuit Track Power Feeds



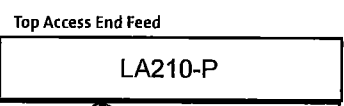
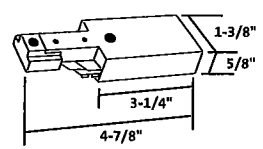
**LA-207-(B, P, U)**  
 • Can be installed anywhere along track. Kit includes square J-Box Canopy Cover, J-Box Mounting Bracket, Track Adaptor, and one LA-211 Series End Cap.



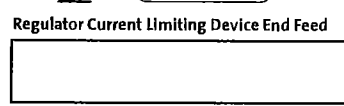
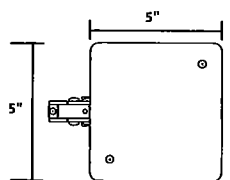
**LA-208-(B, P, U)**  
 • End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.  
**LA-208A-(B, P, U)**  
 • Reverse Polarity End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.



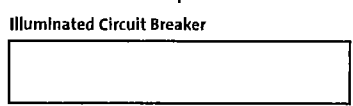
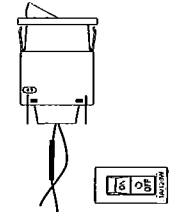
**LA-209-(B, P, U)**  
 • Square Cover Plate With End Feed. (1) 1/2" K.O. Kit includes J-Box Mounting Bracket, Threaded Nipple And Nut.



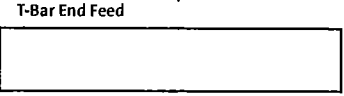
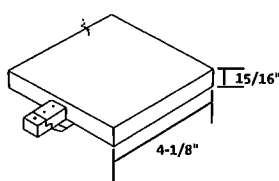
**LA-210-(B, P, U)**  
 • Power Feed. (1) 1/2" top K.O. for standard electrical conduit.  
**LA-210A-(B, P, U)**  
 • Reverse Polarity Power Feed. (1) 1/2" top K.O. for standard electrical conduit.



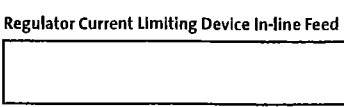
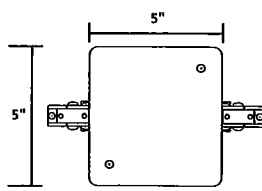
**LA-223-R -(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.



**REG1 - 120W, 1A**  
**REG3 - 300W, 2.5A**  
**REG6 - 600W, 5A**  
**REG9 - 900W, 7.5A**  
**REG10 - 1200W, 10A**  
**REG12 - 1440W, 12A**  
**REG14 - 1680W, 14A**  
 Finish: -B, P, U



**LA-220-(B, P)**  
 • Ceiling End Feed has 4 1/8" square canopy cover. (3) 1/2" top K.O.'s can be used with T-grid installations.



**LA-233-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.

**Polarity-Configuration Legend**

Forward Polarity Configuration

Reverse Polarity Configuration



1-800-728-0312

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
CTL838-P

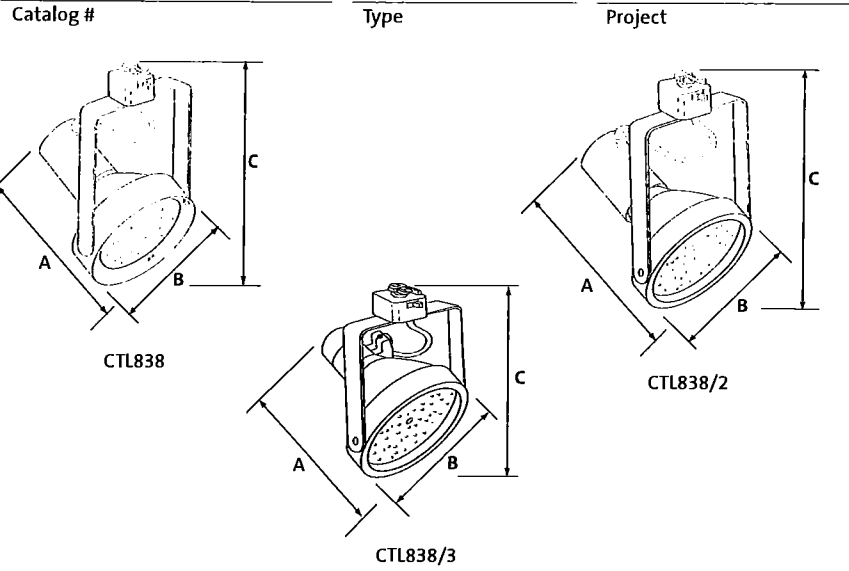
Notes:

**Type:**  
**V2**

LEE07-8119

**CTL838**  
**CTL838/2**  
**CTL838/3**

Gimbal  
120V Series  
Track Fixtures



DIMENSIONS			
Model	A	B	C
CTL838	6 1/2"	5 1/2"	11"
CTL838/2	5 3/4"	5"	10 1/8"
CTL838/3	4 3/4"	5 1/2"	9 3/4"

**Specifications/Features**

**Fixture**  
The free, unconfined look of these gimbal lamp holders make them popular for commercial, retail and residential applications. The 2-plane gimbal design permits maximum horizontal and vertical swivel for excellent aiming, and our "Sure-Set" yoke holds the fixture firmly in place. Models are offered for all the popular halogen PAR lamps. The CTL838 (only) is supplied with spring clips for the use with accessories.

**Lamp/Electrical**  
CTL838 Lamp: 250W PAR38 (max)

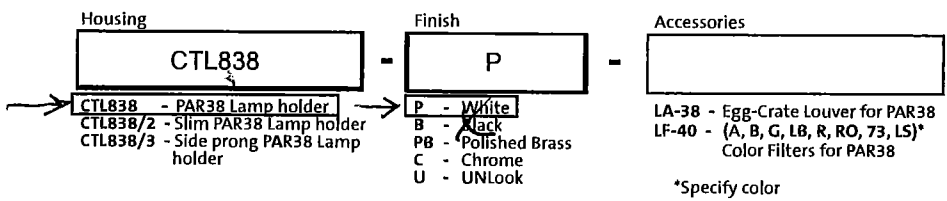
CTL838/2 Lamp: 250W PAR38 (max)  
CTL838/3 Lamp: 150W PAR38 (max)  
All styles are equipped with a convenient on/off switch and polarity indicator.

**Warranty**  
This fixture is covered by Con-Tech's full replacement guarantee which is effective for one year.

**Listing**  
cULus listed. Suitable for dry locations.

**Ordering Information**

Example Order: **CTL838** - **P** - **LA-38**



*Handwritten note:* A Black



1-800-728-0312

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AD04TRSS44

Submitted by Leesman Sales



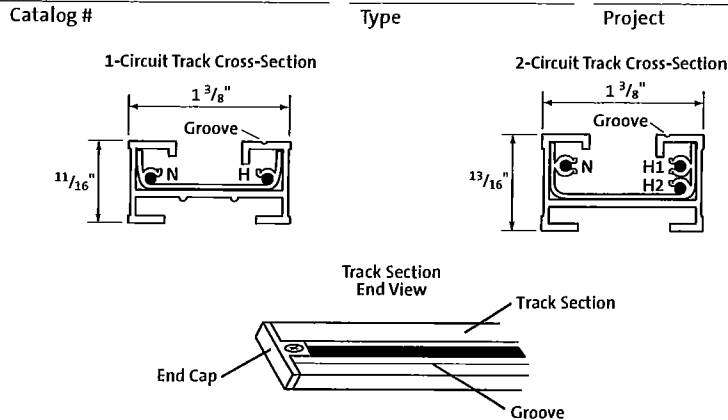
**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LT28-P

Notes:

**Type:**  
**V2**

LEE07-8119



**Specifications/Features**

**Track Systems**

Commercial grade track systems offer true versatility with a wide variety of power feed and connection accessories.

Mounting accessories available for T-Bar clips, stems, threaded rods, and aircraft cable.

All conductors are solid copper with thermoplastic insulators for electrical isolation.

All track sections are supplied with two insulated end caps.

Channels are constructed of heavy 14 ga. extruded aluminum.

Mechanical polarity with visual indicator (groove) simplifies installation of fixtures and assures proper electrical connections.

Nominal length track sections can be cut in the field for exact fit. Toggle bolts are supplied for simple surface installation.

Track sections may be mounted within Con-Tech's Recessed Track Housing System to minimize appearance.

**1-Circuit And 2-Circuit Application**

Single and 2-circuit track options available for 120V applications.

All Con-Tech track fixtures have two position contacts to access 1-circuit or 2-circuit track conductors.

All 2-circuit track sections are supplied with a set of shims (1 per foot of track) to lock the fixture contacts into 2nd circuit position.

**1-Circuit Track**

The economic solution for most applications.

Single hot and neutral conductors are rated for 20 Amps.

Low profile track cross-section.

**2-Circuit Track**

Enhanced versatility with two hot conductors and a common neutral.

Allows higher wattage output by splitting loads over one run of track for maximum capacity of 40 Amps (20A per circuit on single phase, 3-wire power feed).

Create lighting effects by simply applying fixtures to the desired circuits and utilizing separate switching.

**Labels/Usage**

cULus listed. For dry locations.

**Ordering Information**

Example Order: **LT - 8 - P**

1-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
2 - 2' Length	B - Black/Black
4 - 4' Length	P - White/White
6 - 6' Length	PB - Polished Brass/Black*
8 - 8' Length	U - Unfinished Aluminum/Grey*
12 - 12' Length	
	*Not Available on 12' sections.

2-Circuit Sections	Track Finish/End Cap
LT - <input type="text"/>	<input type="text"/>
24 - 4' Length	B - Black/Black
26 - 6' Length	P - White/White
28 - 8' Length	U - Unfinished Aluminum/Grey*
212 - 12' Length	
	*Not Available on 12' sections.

Actual track extrusion lengths are 3 7/8" shorter than nominal lengths indicated above. LA11 or LA211 end caps are supplied with all track sections and may be ordered separately as needed. See other sheets for Recessed Track Systems and 120V Track Accessories. 2', 4', and 6' sections supplied with (2) toggle bolts, 8' and 12' sections supplied with (3) toggle bolts.

**BLACK**



1-800-728-0312

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AD04TRSS07

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
LA210-P

Notes:

**Type:**  
**V2**

LEE07-8119

# 2-Circuit Track

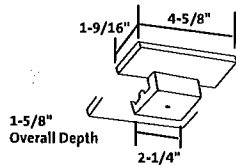
## Power Feeds

Catalog #	Type	Project
<b>General Track Information</b>		

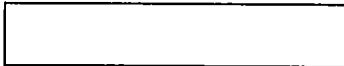
Power feeds are constructed of sturdy polycarbonate with galvanized steel back plates. Every electrical component is polarized and has a grounding capability to ensure safe usage. Visual polarity indicators simplify proper electrical installation. Twelve gauge insulated wire is used for internal connections. Solid copper track contacts provide good electrical conductivity for years of trouble free operation.

All track components are cULus listed. Installations are suitable for dry locations only. Maximum power rating is 2400 Watts per circuit (4800W total); 20A per circuit (40A total capacity) at 120V, 60Hz. NEC allows 80% of full capacity or 1920 Watts per circuit (3840W total).

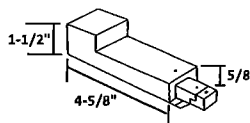
### 1-Circuit Track Power Feeds



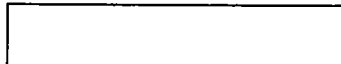
Floating Feed Point



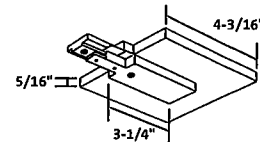
**LA-207-(B, P, U)**  
 • Can be installed anywhere along track. Kit includes square J-Box Canopy Cover, J-Box Mounting Bracket, Track Adaptor, and one LA-211 Series End Cap.



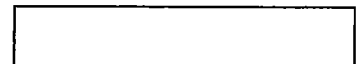
Surface Conduit End Feed



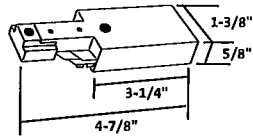
**LA-208-(B, P, U)**  
 • End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.  
**LA-208A-(B, P, U)**  
 • Reverse Polarity End Feed. (1) 1/2" top K.O. and (1) 1/2" end K.O. for surface conduit.



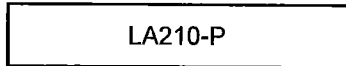
Outlet Box Feed Kit



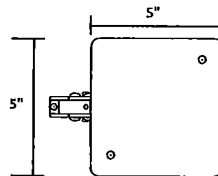
**LA-209-(B, P, U)**  
 • Square Cover Plate With End Feed. (1) 1/2" K.O. Kit includes J-Box Mounting Bracket, Threaded Nipple And Nut.



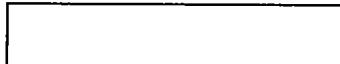
Top Access End Feed



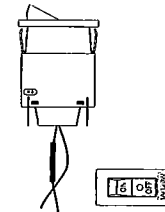
**LA-210-(B, P, U)**  
 • Power Feed. (1) 1/2" top K.O. for standard electrical conduit.  
**LA-210A-(B, P, U)**  
 • Reverse Polarity Power Feed. (1) 1/2" top K.O. for standard electrical conduit.



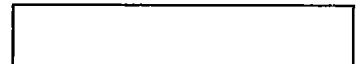
Regulator Current Limiting Device End Feed



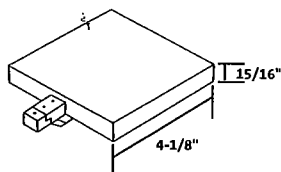
**LA-223-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.



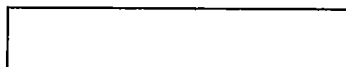
Illuminated Circuit Breaker



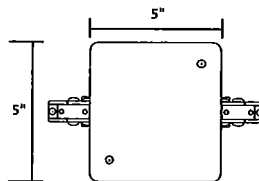
**REG1** - 120W, 1A  
**REG3** - 300W, 2.5A  
**REG6** - 600W, 5A  
**REG9** - 900W, 7.5A  
**REG10** - 1200W, 10A  
**REG12** - 1440W, 12A  
**REG14** - 1680W, 14A  
 Finish: -B, P, U



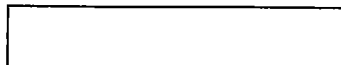
T-Bar End Feed



**LA-220-(B, P)**  
 • Ceiling End Feed has 4 1/8" square canopy cover. (3) 1/2" top K.O.'s can be used with T-grid installations.



Regulator Current Limiting Device In-line Feed



**LA-233-R-(B, P, U)**  
 Title 24 compliant (CA). (2) Illuminated circuit breakers required. 1-1/4" H.

**Polarity-Configuration Legend**

Forward Polarity Configuration

Reverse Polarity Configuration



1-800-728-0312

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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SWF842-A-SW-WG LAMPS

**Type:**  
**X8P**

Notes:

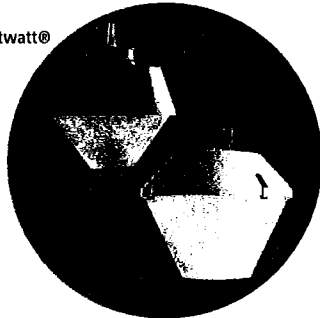
LEE07-6119

# SW/LW CFL

## COMPACT FLUORESCENT

### Features

Lightwatt®



Superwatt®

- Instant on – The compact fluorescent lamps are on as soon as they are energized.
- Instant re-strike – As above, the compact fluorescent lamps are on as soon as energized.
- Good Color – Compact Fluorescent lamps have a CRI of about 82 on a scale of 100.
- Better Lumen Maintenance – Compact Fluorescent lamps have a flatter lumen maintenance curve.
- Switch-able Dimming – Since each ballast powers two lamps, an eight lamp unit can be switched to provide 25%, 50%, 75% and 100% light output.
- Fail safe light output – Since these are multiple lamp source units, they provide a measure of "fail safe" lighting that single source fixtures can not.
- Shielding of Lamp Image – The Superwatt refractor does a good job of breaking up the lamp image.
- Superwatt Appearance – In comparison to all of the other CF highbays the Superwatt just plain looks better. In many applications this could tip the scales in your favor.

### Ordering Information Example:

SWF - 842 - A

LW - P - 084 - 4 - A - WH

SPECIFICATION GRADE

Series	Lamp/Watts	Refractor
Series	Superwatt® Series Compact Fluorescent	
Lamp type/Wattage		
426	(4) 26W PLT	
432	(4) 32W PLT	
442	(4) 42W PLT	
626	(6) 26W PLT	
632	(6) 32W PLT	
642	(6) 42W PLT	
826	(8) 26W PLT	
832	(8) 32W PLT	
842	(8) 42W PLT	
Refractor		
A	Acrylic	
P	Polycarbonate	
Options		
-INC	Incandescent Socket	
-LL	Less lamp	
-EM	One Emergency Ballast	

Note All fixtures are wet location listed.

Note All fixtures are pendant mount.

Note Voltage is Universal 120/277V 50/60Hz.

Note Options must be added as suffix to catalog number. Accessories must be ordered separately.

Series	Mount	Watts	Volts	Refractor	color
Series	Lightwatt				
LW	Lightwatt				
Mounting					
J	J-Box (damp location)				
P	Balanced Pendant (wet location); (damp location) with cord option <sup>1</sup>				
C	Ceiling thru-wire (wet location)				
B	Pipe wall bracket (wet location)				
S	Stanchion Davit (wet location)				
Wattage					
042	1 x 42W				
064	2 x 32W				
084	2 x 42W				
Voltage					
1	120V				
4	277V				
Refractor					
A	Acrylic				
P	Polycarbonate				
Color					
WH	White Lektrocote® (standard)				
GR	Gray Lektrocote®				

1 Fast-Lock J-Box mounting-recessed J-Box requires installation of the included 1 1/2" extension ring.

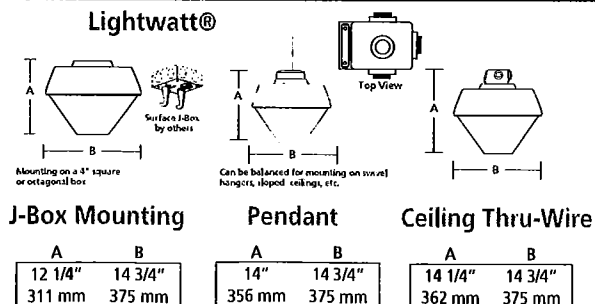
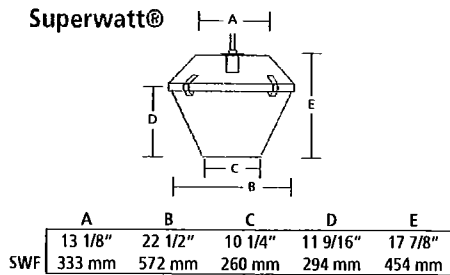
Note Lamp included.

Note Options must be added as suffix to catalog number. Accessories must be ordered separately.

### Accessories - Order Separately

Catalog Number	Description
SW-WG	Wire guard
A-Lens	Acrylic Bottom "Lift & Shift" Lens
P-Lens	Polycarbonate Bottom "Lift & Shift" Lens

### Dimensions



**HUBBELL**  
Hubbell Lighting



Submitted by Leesman Sales

**Job Name:**Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase**Catalog Number:**SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P  
Notes:**Type:****PSS1**

LEE07-6119

KW Industries

Page 1 of 4

## SSP Square Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"), 7 gauge (0.1793"), or 3 gauge (0.2391"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" or 4" x 6-1/2" inside opening, located 1'-6" above base, is standard on all poles. Optional 5" x 8" and 4" x 10" handholes are available (see options). A grounding provision is located inside the handhole ring.

### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	58	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P  
Notes:

**Type:**  
**PSS1**

LEE07-6119

SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	38	29	158
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	154
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.6	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	253
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	467
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	18.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES**

**Standard**  
BRZ Bronze  
BLK Black

**Galvanized**  
G Galvanized

**K-KLAD**  
K813 Bronze  
K821 Black

**K-KLAD Over Galvanizing**  
KZ13 Bronze  
KZ21 Black

**Job Name:**Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase**Catalog Number:**SSP15-4.0-11-DM10-KIM AR-KIM  
PS-P  
Notes:**Type:****PSS1**

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GRY	Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	K841	Gray	KZ41	Gray
GRN	Green		K891	Green	KZ91	Green
WHT	White		K881	White	KZ81	White
P	Primed		K845	Natural Aluminum	KZ45	Natural Aluminum
NA	Natural Aluminum					

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS****Tenon Mount**

2	2 3/8" x 4" TENON
3	2 7/8" x 4" TENON
3.5	3 1/2" x 6" TENON
4	4" x 6" TENON

**Drill Mount**

<b>DM10</b>	Drilled for 1 Luminaire
<b>DM2090</b>	Drilled for 2 Luminaires @ 90°
<b>DM2180</b>	Drilled for 2 Luminaires @ 180°
<b>DM3090</b>	Drilled for 3 Luminaires @ 90°
<b>DM4090</b>	Drilled for 4 Luminaires @ 90°

**Gain Mount**

<b>GMT4</b>	attachment for CXA
<b>GMT9</b>	attachment for CXASQ

**Open Mount**

<b>OT</b>	Open Top
<b>OTC</b>	Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

<b>BC</b>	Base Cover
<b>CPL</b>	Threaded Coupling*
<b>NPL</b>	Threaded Nipple*
<b>WPR2</b>	Weatherproof Duplex Receptacle* <sup>1</sup>
<b>WPRP</b>	Festoon Opening <sup>1</sup>

**Optional Handholes**

<b>58HH</b>	5" x 8" Handhole*
<b>410HH</b>	4" x 10" Handhole*

**Extra Handholes**

<b>XHH</b>	Extra Handhole*
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**Embedment Pole Options**

<b>E</b>	Embedded Pole
<b>GS</b>	Ground Sleeve
<b>CTE</b>	Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

<b>1S</b>	1 @ 0° *
<b>2S</b>	2 @ 180° *
<b>3S</b>	3 @ 90° *
<b>4S</b>	4 @ 90° *

Greater embedment depths are available upon request.  
Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

Type:

**PSS2**

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KW Industries

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## SSP Square Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"), 7 gauge (0.1793"), or 3 gauge (0.2391"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" or 4" x 6-1/2" inside opening, located 1'-6" above base, is standard on all poles. Optional 5" x 8" and 4" x 10" handholes are available (see options). A grounding provision is located inside the handhole ring.

### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	56	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

**Type:**

**PSS2**

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KW Industries

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SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	36	29	156
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	184
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.5	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	254
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	487
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	18.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES**

**Standard**

BRZ Bronze

BLK Black

**Galvanized**

G Galvanized

**K-KLAD**

K813 Bronze

K821 Black

**K-KLAD Over Galvanizing**

KZ13 Bronze

KZ21 Black



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM2180-KIM AR-  
KIM PS-P  
Notes:

Type:

**PSS2**

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<b>GRY</b> Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	<b>K841</b> Gray	<b>KZ41</b> Gray
<b>GRN</b> Green		<b>K891</b> Green	<b>KZ91</b> Green
<b>WHT</b> White		<b>K881</b> White	<b>KZ81</b> White
<b>P</b> Prinned		<b>K845</b> Natural Aluminum	<b>KZ45</b> Natural Aluminum
<b>NA</b> Natural Aluminum			

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

<b>Tenon Mount</b>		<b>Drill Mount</b>	
<b>2</b>	2 3/8" x 4" TENON	<b>DM10</b>	Drilled for 1 Luminaire
<b>3</b>	2 7/8" x 4" TENON	<b>DM2090</b>	Drilled for 2 Luminaires @ 90°
<b>3.5</b>	3 1/2" x 6" TENON	<b>DM2180</b>	Drilled for 2 Luminaires @ 180°
<b>4</b>	4" x 6" TENON	<b>DM3090</b>	Drilled for 3 Luminaires @ 90°
		<b>DM4090</b>	Drilled for 4 Luminaires @ 90°

<b>Gain Mount</b>		<b>Open Mount</b>	
<b>GMT4</b>	attachment for CXA	<b>OT</b>	Open Top
<b>GMT9</b>	attachment for CXASQ	<b>OTC</b>	Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

<b>BC</b>	Base Cover
<b>CPL</b>	Threaded Coupling*
<b>NPL</b>	Threaded Nipple*
<b>WPR2</b>	Weatherproof Duplex Receptacle**
<b>WPRP</b>	Festoon Opening**

**Optional Handholes**

<b>58HH</b>	5" x 8" Handhole*
<b>410HH</b>	4" x 10" Handhole*

**Extra Handholes**

<b>XHH</b>	Extra Handhole*
------------	-----------------

**Embedment Pole Options**

<b>E</b>	Embedded Pole
<b>GS</b>	Ground Sleeve
<b>CTE</b>	Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

<b>1S</b>	1 @ 0° *
<b>2S</b>	2 @ 180° *
<b>3S</b>	3 @ 90° *
<b>4S</b>	4 @ 90° *

Greater embedment depths are available upon request.  
Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
Notes:

**Type:**  
**PSS3**

LEE07-6119

KW Industries

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## SSP Square Non-Tapered Steel Poles

### Pole Shaft

The pole shaft is one piece construction, being fabricated from a weldable grade carbon steel structural tubing which has a uniform wall thickness of 11 gauge (0.1196"), 7 gauge (0.1793"), or 3 gauge (0.2391"). The pole shaft material shall conform to ASTM A-500 Grade C with a minimum yield strength of 50,000 psi. The pole shaft has a full length longitudinal resistance weld and is uniformly square in cross-section with flat sides, small corner radii and excellent torsional properties.

### Base Plate

The anchor base is fabricated from structural quality hot rolled carbon steel plate that meets or exceeds a minimum yield strength of 36,000 psi. The anchor base telescopes the pole shaft and is circumferentially welded top and bottom. All welds are performed in accordance with the American Welding Society specification AWS D1.1, latest edition.

### Anchor Bolts

Anchor bolts are fabricated from commercial quality hot rolled carbon steel bar that meets or exceeds a minimum yield strength of 55,000 psi. Four properly sized anchor bolts, each with two regular hex nuts and washers, are furnished and shipped with all poles unless otherwise specified. Anchor bolts shall have the threaded end galvanized a minimum of 8 inches in accordance with ASTM A-153. Fully galvanized anchor bolts are available upon request.

### Handhole

An oval reinforced gasketed handhole, having a nominal 3" x 5" or 4" x 6-1/2" inside opening, located 1'-6" above base, is standard on all poles. Optional 5" x 8" and 4" x 10" handholes are available (see options). A grounding provision is located inside the handhole ring.

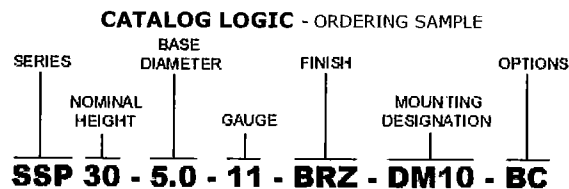
### Finishes

The **Standard Finish** is a polyester thermosetting powder coating applied to the surface of the substrate to a minimum of 3 mils for all color finishes. **Hot dip Galvanized** finish to a ASTM A-123 specification or primed finish is also available. For optional finishes, see **K-KLAD** and **K-KLAD Over Galvanizing**.

### HOW TO ORDER

When ordering KW lighting standards, mounting adaptors and accessories, be sure to specify the complete catalog number. Our catalog numbers reflect the precise specifications of the item ordered to ensure our customers will receive the product which meets their exact requirements.

The following explanation of the catalog numbers will be helpful in placing orders:



Catalog Number	Nominal Height	Pole Shaft	Gauge	Handhole Size	Anchor Bolt	Bolt Circle	80 MPH	90 MPH	100 MPH	Ship WT.
SSP10-4.0-11	10	4.0 x 10.0	11	3 x 5	0.75 x 17 x 3	8	42.1	33.5	27.1	87
SSP10-4.0-7	10	4.0 x 10.0	7	3 x 5	0.75 x 30 x 3	8	55	44	35.5	130
SSP10-5.0-11	10	5.0 x 10.0	11	3 x 5	1.00 x 36 x 4	11	58	44	34	151
SSP12-4.0-11	12	4.0 x 12.0	11	3 x 5	0.75 x 17 x 3	8	33.7	26.7	21.4	100
SSP12-4.0-7	12	4.0 x 12.0	7	3 x 5	0.75 x 30 x 3	8	47.5	37.3	29.8	150

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
**Notes:**

**Type:**

**PSS3**

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KW Industries

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SSP12-5.0-11	12	5.0 x 12.0	11	3 x 5	1.00 x 36 x 4	11	49	38	29	153
SSP14-4.0-11	14	4.0 x 14.0	11	3 x 5	0.75 x 17 x 3	8	27.4	21.5	17.1	113
SSP14-4.0-7	14	4.0 x 14.0	7	3 x 5	0.75 x 30 x 3	8	40	31	24.5	170
SSP14-5.0-11	14	5.0 x 14.0	11	3 x 5	1.00 x 36 x 4	11	40	30	23	164
SSP14-5.0-7	14	5.0 x 14.0	7	3 x 5	1.00 x 36 x 4	11	65	52	41.5	242
SSP15-4.0-11	15	4.0 x 15.0	11	3 x 5	0.75 x 17 x 3	8	20.7	16.1	12.6	119
SSP15-4.0-7	15	4.0 x 15.0	7	3 x 5	0.75 x 30 x 3	8	30.9	24.4	19.6	172
SSP15-5.0-11	15	5.0 x 15.0	11	3 x 5	1.00 x 36 x 4	11	36	27.5	21	192
SSP15-5.0-7	15	5.0 x 15.0	7	3 x 5	1.00 x 36 x 4	11	59	46.5	37	254
SSP16-4.0-11	16	4.0 x 16.0	11	3 x 5	0.75 x 17 x 3	8	18.7	14.4	11.2	125
SSP16-4.0-7	16	4.0 x 16.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP16-5.0-11	16	5.0 x 16.0	11	3 x 5	1.00 x 36 x 4	11	33.5	25	18	201
SSP16-5.0-7	16	5.0 x 16.0	7	3 x 5	1.00 x 36 x 4	11	54	43	34	266
SSP18-4.0-11	18	4.0 x 18.0	11	3 x 5	0.75 x 17 x 3	8	15.2	11.5	8.7	138
SSP18-4.0-7	18	4.0 x 18.0	7	3 x 5	0.75 x 30 x 3	8	27.2	20.7	16	210
SSP18-5.0-11	18	5.0 x 18.0	11	3 x 5	1.00 x 36 x 4	11	27	19.5	15	218
SSP18-5.0-7	18	5.0 x 18.0	7	3 x 5	1.00 x 36 x 4	11	46	36	28	291
SSP20-4.0-11	20	4.0 x 20.0	11	3 x 5	0.75 x 17 x 3	8	12.3	9	6.5	151
SSP20-4.0-7	20	4.0 x 20.0	7	3 x 5	0.75 x 30 x 3	8	19.6	15	11.5	219
SSP20-5.0-11	20	5.0 x 20.0	11	3 x 5	1.00 x 36 x 4	11	22.2	16.8	12.6	235
SSP20-5.0-7	20	5.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11	35.4	27.5	21.5	313
SSP20-6.0-7	20	6.0 x 20.0	7	3 x 5	1.00 x 36 x 4	11.5	56	42.5	33.5	368
SSP22-4.0-7	22	4.0 x 22.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP22-4.0-11	22	4.0 x 22.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP22-5.0-11	22	5.0 x 22.0	11	3 x 5	1.00 x 36 x 4	11	18.5	13.6	9.8	252
SSP22-5.0-7	22	5.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11	30.2	23.2	17.8	337
SSP22-6.0-7	22	6.0 x 22.0	7	3 x 5	1.00 x 36 x 4	11.5	49	37.5	28	398
SSP24-4.0-7	24	4.0 x 24.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP24-5.0-11	24	5.0 x 24.0	11	3 x 5	1.00 x 36 x 4	11	15.2	10.8	7.4	268
SSP24-5.0-7	24	5.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11	25.8	19.4	14.6	361
SSP24-6.0-7	24	6.0 x 24.0	7	3 x 5	1.00 x 36 x 4	11.5	42	31.5	23	428
SSP25-4.0-11	25	4.0 x 25.0	11	3 x 5	0.75 x 17 x 3	8	6.9	4.3	2.3	182
SSP25-4.0-7	25	4.0 x 25.0	7	3 x 5	0.75 x 30 x 3	8	12.2	8.7	6	266
SSP25-5.0-11	25	5.0 x 25.0	11	3 x 5	1.00 x 36 x 4	11	13.8	9.5	6.3	276
SSP25-5.0-7	25	5.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11	23.8	17.7	13.1	373
SSP25-6.0-7	25	6.0 x 25.0	7	3 x 5	1.00 x 36 x 4	11.5	39	28.5	21	443
SSP26-4.0-7	26	4.0 x 26.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP26-5.0-11	26	5.0 x 26.0	11	3 x 5	1.00 x 36 x 4	11	12.4	8.3	5.2	284
SSP26-5.0-7	26	5.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11	21.9	16.1	11.8	384
SSP26-6.0-7	26	6.0 x 26.0	7	3 x 5	1.00 x 36 x 4	11.5	35.5	25.5	18.5	457
SSP28-4.0-7	28	4.0 x 28.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP28-5.0-11	28	5.0 x 28.0	11	3 x 5	1.00 x 36 x 4	11	9.8	6.1	3.2	300
SSP28-5.0-7	28	5.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11	18.4	13.2	9.2	408
SSP28-6.0-7	28	6.0 x 28.0	7	3 x 5	1.00 x 36 x 4	11.5	30	21.5	15	487
SSP30-4.0-7	30	4.0 x 30.0	7	3 x 5	0.75 x 30 x 3	8	6.9	4	1	312
SSP30-5.0-11	30	5.0 x 30.0	11	3 x 5	1.00 x 36 x 4	11	6.5	3.5	1.2	315
SSP30-5.0-7	30	5.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11	13.4	9.1	5.9	432
SSP30-6.0-7	30	6.0 x 30.0	7	3 x 5	1.00 x 36 x 4	11.5	27.5	19.9	14.1	512
SSP30-6.0-3	30	6.0 x 30.0	3	3 x 5	1.00 x 36 x 4	12	34.3	25.3	10.5	645
SSP35-5.0-7	35	5.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11	7.2	3.7	1	491
SSP35-6.0-7	35	6.0 x 35.0	7	3 x 5	1.00 x 36 x 4	11.5	15	9.5	5.3	584
SSP35-6.0-3	35	6.0 x 35.0	3	3 x 5	1.00 x 36 x 4	12	19.7	13.2	8.2	739
SSP39-6.0-7	39	6.0 x 39.0	7	3 x 5	1.00 x 36 x 4	11.5	9.2	4.3	0.6	642
SSP39-6.0-3	39	6.0 x 39.0	3	3 x 5	1.00 x 36 x 4	12	13	7.4	3.1	814

**FINISHES**

**Standard**

BRZ Bronze

BLK Black

**Galvanized**

G Galvanized

**K-KLAD**

K813 Bronze

K821 Black

**K-KLAD Over Galvanizing**

K213 Bronze

K221 Black



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
SSP20-4.0-11-DM10-KIM AR KIM  
PS-P-CPL  
Notes:

**Type:**  
**PSS3**

LEE07-6119

KW Industries

Page 3 of 4

<b>GRY</b> Gray	<b>KIM LIGHTING PS-P (Platinum Silver)</b>	<b>K841</b> Gray	<b>KZ41</b> Gray
<b>GRN</b> Green		<b>K891</b> Green	<b>KZ91</b> Green
<b>WHT</b> White		<b>K881</b> White	<b>KZ81</b> White
<b>P</b> Primed		<b>K845</b> Natural Aluminum	<b>KZ45</b> Natural Aluminum
<b>NA</b> Natural Aluminum			

1 YEAR WARRANTY

5 YEAR WARRANTY

10 YEAR WARRANTY

**MOUNTING DESIGNATIONS**

**Tenon Mount**

- 2** 2 3/8 " x 4 " TENON
- 3** 2 7/8 " x 4 " TENON
- 3.5** 3 1/2 " x 6 " TENON
- 4** 4 " x 6 " TENON

**Drill Mount**

- DM10** Drilled for 1 Luminaire
- DM2090** Drilled for 2 Luminaires @ 90°
- DM2180** Drilled for 2 Luminaires @ 180°
- DM3090** Drilled for 3 Luminaires @ 90°
- DM4090** Drilled for 4 Luminaires @ 90°

**Gain Mount**

- GMT4** attachment for CXA
- GMT9** attachment for CXASQ

**Open Mount**

- OT** Open Top
- OTC** Open Top includes Pole Cap

**OPTIONS**

There are numerous options that can be ordered. Please indicate these selections under the options column in the catalog number. Example: CPL-WPR2-BC.

**Accessories**

- BC** Base Cover
- CPL** Threaded Coupling\*
- NPL** Threaded Nipple\*
- WPR2** Weatherproof Duplex Receptacle\* †
- WPRP** Festoon Opening\* †

**Optional Handholes**

- 5BHH** 5 " x 8 " Handhole\*
- 410HH** 4 " x 10 " Handhole\*

**Extra Handholes**

- XHH** Extra Handhole\*

**Embedment Pole Options**

- E** Embedded Pole
- GS** Ground Sleeve
- CTE** Coal Tar Epoxy

**For Embedment Poles:**

Recommended Mounting Height	Recommended Embedment Depth
Less than 20'	4'
20' - 33'	6'
Greater than 33'	7'

**Additional Simplex**

- 1S** 1 @ 0° \*
- 2S** 2 @ 180° \*
- 3S** 3 @ 90° \*
- 4S** 4 @ 90° \*

Greater embedment depths are available upon request. Embedment poles greater than 35' are not available.

\* Please advise size, location, and orientation. (Handholes are restricted by size of pole shaft diameter)

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
PSM FACTORY INSTALLED IN  
FIXTURES ABOVE  
Notes:

**Type:**  
**GTD**  
LEE07-6118



**Side-Lite™**

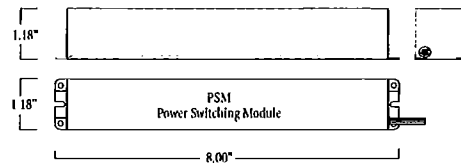
P.O. Box 1769 • New Port Richey, FL 34656-1769  
TOLL-FREE 888-900-7544 • FAX 727-848-0678  
Order Entry / Customer Service • TOLL-FREE  
800-480-4848 • FAX 662-349-0769  
www.sidelite.com

# PSM

**POWER SWITCHING MODULE**  
FOR GENERATOR-SUPPLIED OR CENTRAL  
INVERTER-SUPPLIED SYSTEMS

### Application

The Side-Lite Power Switching Module (PSM) works with a generator or central inverter system and a fluorescent fixture to provide emergency lighting regardless of fixture wall switch position (on/off). The PSM is used to bypass the fixture wall switch, permitting the generator or central inverter system to activate designated switchable fixtures. One PSM is installed per fixture. The device may be used with a multi-ballast arrangement if the ballast current requirements do not exceed the maximum PSM load rating of 3 amps. The PSM consists of relay switching circuitry and fusing in one compact galvanized steel case and is designed for use in indoor and damp locations.

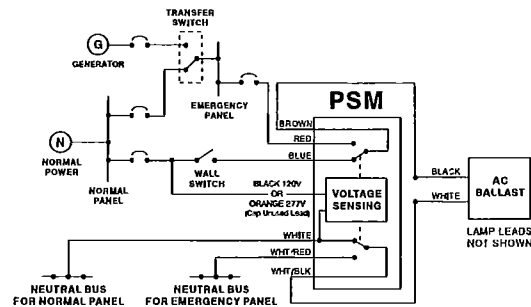


### Operation

When normal power fails, the PSM immediately and automatically switches the AC input power connection to an unswitched generator-supplied or central inverter system-supplied lighting circuit, bringing on designated switchable lighting fixtures. Routine maintenance is not required, however, *all* life safety unit equipment should be checked periodically. Please note that a test switch is not provided with the PSM. The PSM is considered auxiliary lighting equipment under UL 924, and neither UL nor the NEC requires the use of a test switch with this type of equipment.

### Installation

As with other Side-Lite unit equipment, the PSM does not affect normal fixture operation. It comes fully assembled and ready to install inside the fixture ballast channel. The PSM may be installed on top of the fixture by using the wire bundle covers, S-TWBC (sold separately). The PSM may be remotely located up to 50 feet, but this type of installation requires an enclosure and/or other hardware not included with the PSM. Contact your Side-Lite representative or the factory for details. In addition, to available wiring, the PSM requires an unswitched, direct connection to a generator-supplied or central inverter system-supplied emergency panel and an unswitched source on the same branch circuit as the switched supply. Please see the diagram for more information.



### UL Listed

The PSM has been approved by Underwriters Laboratories (UL 924) and is UL Listed for factory or field installation.



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
PSM FACTORY INSTALLED IN  
FIXTURES ABOVE  
Notes:

**Type:**  
**GTD**

LEE07-6119

# PSM



## Side-Lite™

### POWER SWITCHING MODULE

FOR GENERATOR-SUPPLIED OR CENTRAL  
INVERTER-SUPPLIED SYSTEMS

P.O. Box 1769 • New Port Richey, FL 34656-1769  
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Order Entry / Customer Service • TOLL-FREE  
800-480-4848 • FAX 662-349-0769  
[www.sidelite.com](http://www.sidelite.com)

#### Specification

The Side-Lite Power Switching Module (PSM) used in conjunction with a standard fluorescent fixture and an auxiliary generator or central inverter system shall provide emergency lighting. Should normal power fail, the module shall switch the AC input power connection to an unswitched generator-supplied or central inverter system-supplied lighting circuit, thereby allowing the generator or central inverter system to bring on designated switchable fixtures regardless of fixture wall switch position (on/off). The PSM shall consist of fusing and relay switching circuitry contained in one 8" x 1.18" x 1.18" galvanized steel case. The module shall have all inputs fused to 3 amps maximum; shall operate at 120 or 277 VAC; and shall draw 280 mA and 1.6 Watts during normal operation. The PSM shall be UL Listed for installation inside, on top of or remote from the fixture and shall comply with the current NEC. The module shall be warranted for five (5) full years from the date of purchase and shall be assembled in the USA.

#### Warranty

The PSM is warranted for five (5) full years from the date of purchase. The Side-Lite warranty covers only properly installed Power Switching Modules used under normal conditions from the date of purchase. For the full warranty period, Side-Lite will, at its option, repair or replace without charge a defective unit, provided it is returned to the factory transportation prepaid and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the Side-Lite unit.

#### Product Summary

<b>UL LISTED</b> Factory or Field Installation	<b>Recommended Applications</b> Auditoriums Classrooms Other locations with generator-supplied (or central inverter system-supplied) lighting	<b>AC Input Power Rating</b> 1.6 Watts	<b>Dimensions</b> 8" x 1.18" x 1.18" (204 mm x 30 mm x 30 mm) Mounting Center 7.60" (193 mm)
<b>Full Warranty</b> 5 Years (NOT pro-rata)		<b>Fusing</b> All inputs fused to 3 A Maximum	<b>Weight</b> 0.50 lbs. (0.23 kg)
<b>Dual Input Voltage</b> 120/277 VAC, 60 Hz	<b>AC Input Current</b> 280 mA	<b>Temperature Rating (Ambient)</b> 0°C to +50°C 32°F to 122°F	

Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT2000-RP

Notes:

**Type:**  
**2000 SQ FT**

LEE07-6119



**Building Automation, Inc.**



## OMNI-DT/OMNI-DT-RP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages.
- Optional Photocell Control and Relay
- 500 to 2000 sq. ft. mounted at 8'
- Multiple Sensor and Power Pack Connections
- 24VDC, Class 2 low voltage wiring
- Designed & Manufactured in USA



### GENERAL OPERATION

Occupancy sensors have two tasks; keeping the lights on while the room is occupied and keeping the lights off when unoccupied. Hubbell Building Automation's intelligent, continuously adapting sensor technology eliminates manual sensitivity and timer adjustments during installation and over the life of the product. The self-adapting microprocessor constantly assures maintenance free "Install and Forget" operation.

The OMNI-DT is a ceiling mount occupancy sensor that combines both ultrasonic (US) and passive infrared (PIR) sensing. Hubbell Building Automation's self-adapting OMNI-DT addresses areas with complex environments that are difficult to control with single technology sensors. The internal microprocessor analyzes the information from both the US and PIR technologies and determines the optimum setting to use in order to properly cover the space. The automatic timer and automatic sensitivity features of the Omni-DT work independently to prevent "false-offs" and

"false-ons." When the sensor detects motion immediately after it turns the lights out, a "false-off" is detected, timer and sensitivity are increased. If the sensor turns the lights on, but detects no immediate follow-up motion, "false-on" is detected, timer and sensitivity are decreased. The "Intelligent software" algorithm determines, for example, if the lights are staying on due to adjacent hallway traffic and responds by adapting its program to compensate for the false trigger and turns out the lights. The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.

In addition, the OMNI-DT has an optional photocell, which increases energy savings when engaged by preventing the lights from turning on when there is sufficient natural light. This feature is factory disabled and may be activated by the installer.

Designed specifically to meet the challenges found in rooms where tasks entail minor motion for long periods of time. Ultrasonic (doppler shift) motion detection gives maximum sensitivity yet can be vulnerable to false triggering from air conditioning currents, corridor activity and movement of inanimate objects. Infrared motion detection gives immunity to these false triggers, but lacks sensitivity at greater distances. Hubbell Building Automation's intelligent software reads the environment and adapts to meet these specific challenges. Should the room suddenly be reallocated into a copy room with high traffic patterns, the intelligent software will adapt as needed to provide the correct time out for the

*The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.*



Hubbell Building Automation, Inc. • 706 Brentwood Street Austin, Texas 78752  
888-698-3242 • 512-450-1100 • 512-450-1215 Fax • www.hubbell-automation.com



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT2000-RP

Notes:

**Type:**  
**2000 SQ FT**

LEE07-6119

lights. Using PIR sensing (high error immunity) with US (high sensitivity) provides good performance. Conventional ceiling mounted dual tech sensors use a simple formula for operation: BOTH for ON, EITHER for KEEP ON. This method requires that both sensors receive fixed-strength signals for ON or a single fixed-level signal for KEEP ON. The OMNI-DT uses a more sophisticated method called a composite signal where the signal strengths are added together to form a composite sum. The advantage of this method is that a weak PIR signal plus a strong US signal will turn the lights on because the sum is enough. The installer need not worry that the signal level be balanced for reliable lights on. This technology eliminates time consuming adjustments and callbacks found in non-intelligent sensors.

The sensor requires a 24V DC, MP Series power pack. The mounting base, provided with the sensor, allows quick and easy mounting.

**ADAPTIVE FUNCTIONS**

The OMNI constantly analyzes and adapts to changing conditions:

Period	Time	Action
Installation	60 minutes	Timer automatically resets from Test (8 seconds) to 8 minutes.
Learning	Four weeks	1. Response to Error Conditions: (false-ons, false offs) 2. Air current adaptation 3. Timer optimization

Post learning	After	1. 24 hour occupancy periods learned (circadian)
Occupancy	Four weeks	2. Weekly occupancy periods learned (Circadian)

**Adjustments Made:**

- Ultrasonic sensitivity
- Infrared sensitivity
- Timer
- Air current threshold

- 1. 24 hour occupancy periods learned (circadian)
- 2. Weekly occupancy periods learned

**Adjustments Made:**

- a. Generally occupied periods: Threshold+High Sensivity mode
- b. Generally unoccupied periods: Threshold=Miser mode

**SPECIFICATIONS**

**LED Lamp:** Red Infrared motion, Green Ultrasonic motion

**Construction:** Two ultrasonic transmitters and two narrow bandwidth receivers each 16mm in diameter. Frequency — Crystal controlled to ±.005%. Transducers — Oriented north and south (DT2000 only, others use single pairs), angled 30° down from horizontal. Housing — Rugged, high-impact, injection molded plastic KJB ABS Cyolac (UL-945VA)

flame class rating, UV inhibitors. Color-coded leads are 6"

**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g.)

**Color:** White.

**Power Requirements:** 24 VDC, 33 mA (use MP-series power pack.)

**Timer Setting:** Automatic - 8 min. to 32 min.; test mode - 8 seconds

**Output:** 24 VDC active high logic control signal with short circuit protection and optional dry contact (see -RP option).

**Operating Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% non-condensing, relative humidity, For indoor use only.

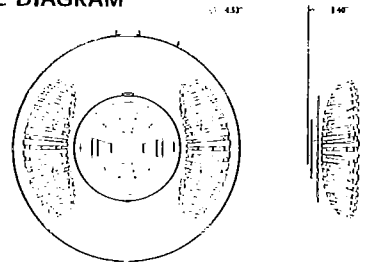
**RP Option:** Relay and Photocell Included (both). Relay: NO + NC contacts, 500ma rated @ 24vdc, three wire, isolated relay. Photocell, 0-1000 Lux adjustable.

**Warranty:** 5 years limited.

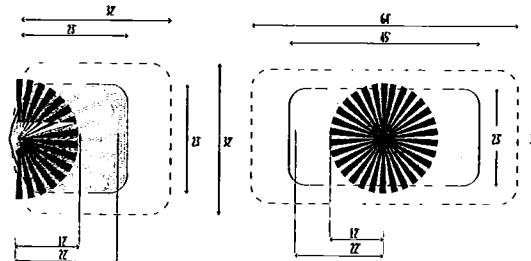
**MODELS**

Cat. No.	Color	Coverage	Application
OMNI-DT500	Off White	500 sq. ft.	Private Office
OMNI-DT500-RP	Off White	500 sq. ft.	Private Office
OMNI-DT1000	Off White	1000 sq. ft.	Open Office
OMNI-DT1000-RP	Off White	1000 sq. ft.	Open Office
OMNI-DT2000	Off White	2000 sq. ft.	Open Office
OMNI-DT2000-RP	Off White	2000 sq. ft.	Open Office

**RANGE DIAGRAM**



**ORTHOGRAPHIC PROJECTION**



DT-1000 Range Diagram

DT-500 Range Pattern is not provided

DT-2000 Range Diagram



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT1000-RP

Notes:

**Type:**  
**1000 SQ FT**

LFE07-6119



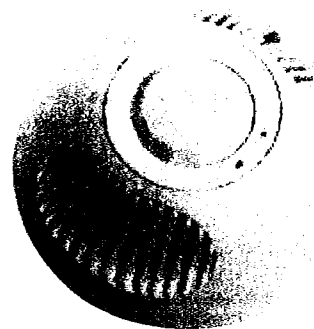
Building Automation, Inc.



## OMNI-DT/OMNI-DT-RP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory: settings saved in protected memory are not lost during power outages.
- Optional PhotoCell Control and Relay
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- 24VDC, Class 2 low voltage wiring
- Designed & Manufactured in USA



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In addition, the OMNI-DT has an optional photocell, which increases energy savings when engaged by preventing the lights from turning on when there is sufficient natural light. This feature is factory disabled and may be activated by the installer.

Designed specifically to meet the challenges found in rooms where tasks entail minor motion for long periods of time. Ultrasonic (doppler shift) motion detection gives maximum sensitivity yet can be vulnerable to false triggering from air conditioning currents, corridor activity and movement of inanimate objects. Infrared motion detection gives immunity to these false triggers, but lacks sensitivity at greater distances. Hubbell Building Automation's intelligent software reads the environment and adapts to meet these specific challenges. Should the room suddenly be reallocated into a copy room with high traffic patterns, the intelligent software will adapt as needed to provide the correct time out for the

*The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.*



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Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT1000-RP

Notes:

**Type:**  
**1000 SQ FT**

LEE07-8119

lights. Using PIR sensing (high error immunity) with US (high sensitivity) provides good performance. Conventional ceiling mounted dual tech sensors use a simple formula for operation: BOTH for ON, EITHER for KEEP ON. This method requires that both sensors receive fixed-strength signals for ON or a single fixed-level signal for KEEP ON. The OMNI-DT uses a more sophisticated method called a composite signal where the signal strengths are added together to form a composite sum. The advantage of this method is that a weak PIR signal plus a strong US signal will turn the lights on because the sum is enough. The installer need not worry that the signal level be balanced for reliable lights on. This technology eliminates time consuming adjustments and callbacks found in non-intelligent sensors.

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Adjustments Made:  
Ultrasonic sensitivity  
Infrared sensitivity  
Timer  
Air current threshold

Post learning	After	Occupancy	Periods (Circadian)
	Four weeks		

Adjustments Made:  
a. Generally occupied periods:  
Threshold+High Sensivity mode  
b. Generally unoccupied periods:  
Threshold=Miser mode

**SPECIFICATIONS**

**LED Lamp:** Red Infrared motion, Green Ultrasonic motion  
**Construction:** Two ultrasonic transmitters and two narrow bandwidth receivers each 16mm in diameter. Frequency — Crystal controlled to ±.005%. Transducers — Oriented north and south (DT2000 only, others use single pairs), angled 30° down from horizontal. Housing — Rugged, high-impact, injection molded plastic KJB ABS Cyolac (UL-945VA)

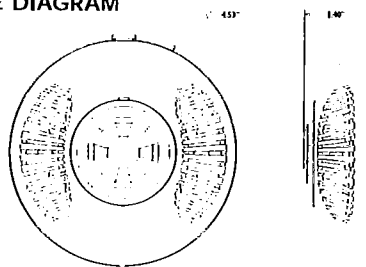
flame class rating, UV inhibitors. Color-coded leads are 6".

**Size & Weight:** 4.5" dia., 1.5" height; 5 oz. (114 mm dia., 38 mm height; 142 g.)  
**Color:** White.  
**Power Requirements:** 24 VDC, 33 mA (use MP-series power pack.)  
**Timer Setting:** Automatic - 8 min. to 32 min.; test mode - 8 seconds  
**Output:** 24 VDC active high logic control signal with short circuit protection and optional dry contact (see -RP option).  
**Operating Environment:** 32°F to 104°F (0°C to 40°C); 0% to 95% non-condensing, relative humidity. For indoor use only.  
**RP Option:** Relay and Photocell Included (both). Relay: NO + NC contacts, 500ma rated @ 24vdc, three wire, isolated relay. Photocell, 0-1000 Lux adjustable.  
**Warranty:** 5 years limited.

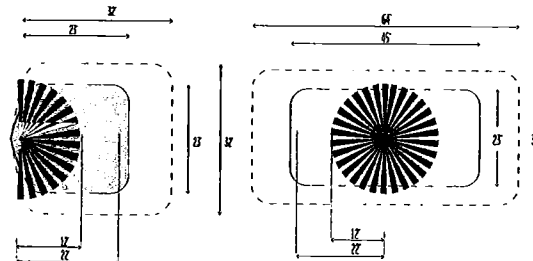
**MODELS**

Cat. No.	Color	Coverage	Application
OMNI-DT500	Off White	500 sq. ft.	Private Office
OMNI-DT500-RP	Off White	500 sq. ft.	Private Office
OMNI-DT1000	Off White	1000 sq. ft.	Open Office
<b>OMNI-DT1000-RP</b>	Off White	1000 sq. ft.	Open Office
OMNI-DT2000	Off White	2000 sq. ft.	Open Office
OMNI-DT2000-RP	Off White	2000 sq. ft.	Open Office

**RANGE DIAGRAM**



**ORTHOGRAPHIC PROJECTION**



DT-1000 Range Diagram  
DT-500 Range Pattern is not provided

DT-2000 Range Diagram



Submitted by Leesman Sales



**Job Name:**  
Cincinnati Public Schools - Roselawn  
Condon FDL Beacon Purchase

**Catalog Number:**  
OMNI-DT500-RP

Notes:

**Type:**  
**500 SQ ST**

LEE07-6119



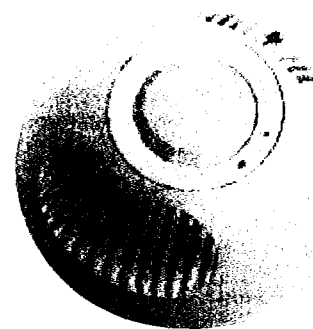
Building Automation, Inc.



## OMNI-DT/OMNI-DTRP (Option RP) *Dual Technology Ceiling Mount Sensor*

### KEY FEATURES

- INTELLIGENT – Continuously Adapting sensor.
- Ultrasonic & Infrared Sensing
- Simple, Fast Installation
- Snap-Lock Sensor, Ceiling Mounting
- Excellent false tripping immunity
- Non-Volatile Memory; settings saved in protected memory are not lost during power outages.
- Optional Photocell Control and Relay
- 500 to 2000 sq. ft. mounted at 8'
- Multiple Sensor and Power Pack Connections
- 24VDC, Class 2 low voltage wiring
- Designed & Manufactured in USA



### GENERAL OPERATION

Occupancy sensors have two tasks; keeping the lights on while the room is occupied and keeping the lights off when unoccupied. Hubbell Building Automation's intelligent, continuously adapting sensor technology eliminates manual sensitivity and timer adjustments during installation and over the life of the product. The self-adapting microprocessor constantly assures maintenance free "Install and Forget" operation.

The OMNI-DT is a ceiling mount occupancy sensor that combines both ultrasonic (US) and passive infrared (PIR) sensing. Hubbell Building Automation's self-adapting OMNI-DT addresses areas with complex environments that are difficult to control with single technology sensors. The internal microprocessor analyzes the information from both the US and PIR technologies and determines the optimum setting to use in order to properly cover the space. The automatic timer and automatic sensitivity features of the Omni-DT work independently to prevent "false-offs" and

"false-ons." When the sensor detects motion immediately after it turns the lights out, a "false-off" is detected, timer and sensitivity are increased. If the sensor turns the lights on, but detects no immediate follow-up motion, "false-on" is detected, timer and sensitivity are decreased. The "Intelligent software" algorithm determines, for example, if the lights are staying on due to adjacent hallway traffic and responds by adapting its program to compensate for the false trigger and turns out the lights. The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.

In addition, the OMNI-DT has an optional photocell, which increases energy savings when engaged by preventing the lights from turning on when there is sufficient natural light. This feature is factory disabled and may be activated by the installer.

Designed specifically to meet the challenges found in rooms where tasks entail minor motion for long periods of time. Ultrasonic (doppler shift) motion detection gives maximum sensitivity yet can be vulnerable to false triggering from air conditioning currents, corridor activity and movement of inanimate objects. Infrared motion detection gives immunity to these false triggers, but lacks sensitivity at greater distances. Hubbell Building Automation's intelligent software reads the environment and adapts to meet these specific challenges. Should the room suddenly be reallocated into a copy room with high traffic patterns, the intelligent software will adapt as needed to provide the correct time out for the

*The OMNI-DT is the sensor replacement combining both the superior minor motion detection of ultrasonic with the excellent long-range major motion detection of passive infrared.*



Hubbell Building Automation, Inc. • 706 Brentwood Street Austin, Texas 78752  
888-698-3242 • 512-450-1100 • 512-450-1215 Fax • www.hubbell-automation.com





# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account  
 multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
7870-0683-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart Saver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart Saver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart Saver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
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\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input checked="" type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.



# MERCANTILE SELF DIRECT Ohio Premium Motor/Pump/VFD Incentive Application

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.

Is this application:  **NEW** (original) or  **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input checked="" type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Other:		

How did you hear about the program? (check one)		
<input type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input checked="" type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of application	<input type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input type="checkbox"/> Tax ID number for payee	<input type="checkbox"/> Customer/vendor agree to Terms and Conditions
--	---	--	--

Customer Information					
Customer/Business	Cincinnati Public Schools	Contact	Don Elbe		
Phone	614-580-3352	Account Number	7870-0683-01		
Street Address (Where incentive should be mailed)		2651 Burnett Ave			
City	Cincinnati	State	OH	Zip Code	45219
Installation Street Address	1594 Summit Rd				
City	Cincinnati	State	OH	Zip Code	45237
E-mail Address					

\*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.

Vendor Information					
Vendor	Plug Smart	Contact	Lucas Dixon		
Phone	614-580-3352	Fax	1-800-518-5576		
Street Address		1275 Kinnear Road Suite 229			
City	Columbus	State	OH	Zip Code	43212
E-mail Address					

If Duke Energy has questions about this application, who should we contact?  Customer  Vendor

Payment Information		
Who should receive incentive payment?	<input checked="" type="checkbox"/> Customer	<input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of incentive directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000758
	Vendor Tax ID #	26-2368277

Terms and Conditions			
I have read and hereby agree to the Terms & Conditions and Program Requirements.			
Customer Signature	<i>Don Elbe</i>	Vendor Signature	<i>[Signature]</i>
Date	11-23-11	Date	11/23/2011
Title	Utility Mgmt Coord	Title	Project Manager

Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.

**Motor incentives will be removed from the Prescriptive Program effective March 31, 2011. To qualify for the current incentives, motors must be purchased by March 31, 2011 and installed by June 30, 2011. Applications must be received by September 30, 2011.**

**Certain motors will still be eligible for incentives using the custom program. Please refer to the Duke Energy Mercantile Self Direct website for further detail.**

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

Motor											
Motor	Make/Model or Catalog #	Quantity	Type	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1-5 HP	Baldor EM3218T	1	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$5/HP	5HP	89.5%	2800Hrs		8/19/2008	\$25.00
7.5-20 HP	Baldor EM3313T	3	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$4/HP	15HP	93%	2800Hrs		8/19/2008	\$180.00
25-100 HP	Baldor EM2535T	2	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2.50/HP	30HP	94.1%	2800Hrs		8/19/2008	\$150.00
125 – 250 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2/HP	HP	%	Hrs			

**\* See page four for required efficiency levels for motors.**

\*Incentive capped at 50% of project cost (equipment and external labor).

- Qualifying motors must be three-phase open drip (ODP) or totally enclosed fan cooled (TEFC) units with nominal speeds of 1200, 1800, or 3600 RPM.
- Efficiencies are to be full-load nominal efficiencies tested in accordance with IEE Standards 112, Method B. Please refer to attached table to determine qualifying efficiencies.
- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor shall be squirrel cage design and conform to NEMA Premium design A, B or C torque characteristics.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Replaced motors shall be disposed of or recycled (not to be resold or rewound).
- Motor(s) and pump(s) must operate a minimum of 2000 hours annually to be eligible.

**Motor incentives will be removed from the Prescriptive Program effective March 31, 2011. To qualify for the current incentives, motors must be purchased by March 31, 2011 and installed by June 30, 2011. Applications must be received by September 30, 2011.**

**Certain motors will still be eligible for incentives using the custom program. Please refer to the Duke Energy Mercantile Self Direct website for further detail.**

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

Motor											
Motor	Make/Model or Catalog #	Quantity	Type	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1-5 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$5/HP	HP	%	Hrs			
7.5-20 HP	Baldor EM3311T	3	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$4/HP	7.5HP	91%	2800Hrs		8/19/2008	\$90.00
25-100 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2.50/HP	HP	1%	Hrs			
125 – 250 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2/HP	HP	%	Hrs			

**\* See page four for required efficiency levels for motors.**

\*Incentive capped at 50% of project cost (equipment and external labor).

- Qualifying motors must be three-phase open drip (ODP) or totally enclosed fan cooled (TEFC) units with nominal speeds of 1200, 1800, or 3600 RPM.
- Efficiencies are to be full-load nominal efficiencies tested in accordance with IEE Standards 112, Method B. Please refer to attached table to determine qualifying efficiencies.
- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor shall be squirrel cage design and conform to NEMA Premium design A, B or C torque characteristics.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Replaced motors shall be disposed of or recycled (not to be resold or rewound).
- Motor(s) and pump(s) must operate a minimum of 2000 hours annually to be eligible.

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

High Efficiency Pumps								
Pump	Make/Model or Catalog #	Quantity	Incentive	Installed Nominal Efficiency* (pump curve)	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$61.00/PUMP	%	Hrs			
2 HP			\$87.50.00/PUMP	%	Hrs			
3 HP			\$87.50/PUMP	%	Hrs			
5 HP			\$85.00./PUMP	%	Hrs			
7.5 HP			\$124.50/PUMP	%	Hrs			
10 HP			\$82.50.00/PUMP	%	Hrs			
15 HP			\$145.00/PUMP	%	Hrs			
<b>20 HP</b>			\$200.00/PUMP	%	Hrs			

**\* See on page four for required efficiency levels for pumps. Pump curves are required.**

\*Incentive capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Pump efficiency is based on the design point on the pump curve. Documentation of the pump curve is required to receive an incentive.
- The pump efficiency at the design point on the pump curve must meet nominal efficiencies as stated in table on page 4.
- Duplicative to the first bullet point.

The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

Variable Frequency Drives (VFDs) – For Process Fluid Pumping Only (Retrofit* Application only)							
Process pumping <u>does not</u> include HVAC or swimming pool fluid pumping systems.							
List Process Pumping Application							
VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
5 HP			\$20.00/HP	Hrs			
7.5 HP			\$20.00/HP	Hrs			
10 HP			\$20.00/HP	Hrs			
15 HP			\$20.00/HP	Hrs			
20 HP			\$20.00/HP	Hrs			
25 HP			\$20.00/HP	Hrs			
30 HP			\$20.00/HP	Hrs			
40 HP			\$20.00/HP	Hrs			
50 HP			\$20.00/HP	Hrs			
<p><b>*Retrofit only – incentives are only available for new VFDs installed on existing fluid process pump systems.</b>  <b>** VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.</b>  <b>***Incentives are capped at 50% of project cost (equipment and external labor).</b></p>							

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- . Duplicative to the first bullet point.

The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

**Variable Frequency Drives (VFDs) – Applied to HVAC Fans Only  
 (Retrofit\* Application only)**

VFD HVAC Applications (please check one):  
 Supply Fan                                       Cooling Tower Fan                                       Return Fan  
 Exhaust Fan

VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$50.00/HP	Hrs			
2 HP			\$50.00/HP	Hrs			
3 HP			\$50.00/HP	Hrs			
5 HP			\$50.00/HP	Hrs			
7.5 HP			\$50.00/HP	Hrs			
10 HP			\$50.00/HP	Hrs			
15 HP			\$50.00/HP	Hrs			
20 HP			\$50.00/HP	Hrs			
25 HP			\$50.00/HP	Hrs			
30 HP			\$50.00/HP	Hrs			
40 HP			\$50.00/HP	Hrs			
50 HP			\$50.00/HP	Hrs			

\* Retrofit only – incentives are only available for new VFDs installed on existing HVAC fan systems.  
 \*\*VFDs over 50 HP and VFD's on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program.  
 \*\*\*Incentives are capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- Duplicative to the first bullet point.



The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

Variable Frequency Drives (VFDs) – Applied to HVAC Pumps Only (Retrofit* Application only)							
VFD HVAC Applications (please check one):							
<input type="checkbox"/> Chilled Water Pump		<input type="checkbox"/> Condenser Pump			<input type="checkbox"/> Hot Water Pump		
VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$50.00/HP	Hrs			
2 HP			\$50.00/HP	Hrs			
3 HP			\$50.00/HP	Hrs			
5 HP			\$50.00/HP	Hrs			
7.5 HP			\$50.00/HP	Hrs			
10 HP			\$50.00/HP	Hrs			
15 HP			\$50.00/HP	Hrs			
20 HP			\$50.00/HP	Hrs			
25 HP			\$50.00/HP	Hrs			
30 HP			\$50.00/HP	Hrs			
40 HP			\$50.00/HP	Hrs			
50 HP			\$50.00/HP	Hrs			
<p>* Retrofit only – incentives are only available for new VFDs installed on existing HVAC pumps systems.</p> <p>**VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.</p> <p>***Incentives are capped at 50% of project cost (equipment and external labor).</p>							

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- . Duplicative to the first bullet point.

## Efficiencies for Premium Motor/Pump Measures

Nominal Efficiencies for "NEMA Premium" Induction Motors Rated 600 volts or less (random wound)						
HP	Open Drip Proof			Totally Enclosed Fan-Cooled		
	1200 RPM	1800 RPM	3600 RPM	1200 RPM	1800 RPM	3600 RPM
1	82.5	85.5	77.0	82.5	85.5	77.0
1.5	86.5	86.5	84.0	87.5	86.5	84.0
2	87.5	86.5	85.5	88.5	86.5	85.5
3	88.5	89.5	85.5	89.5	89.5	86.5
5	89.5	89.5	86.5	89.5	89.5	88.5
7.5	90.2	91.0	88.5	91.0	91.7	89.5
10	91.7	91.7	89.5	91.0	91.7	90.2
15	91.7	93.0	90.2	91.7	92.4	91.0
20	92.4	93.0	91.0	91.7	93.0	91.0
25	93.0	93.6	91.7	93.0	93.6	91.7
30	93.6	94.1	91.7	93.0	93.6	91.7
40	94.1	94.1	92.4	94.1	94.1	92.4
50	94.1	94.5	93.0	94.1	94.5	93.0
60	94.5	95.0	93.6	94.5	95.0	93.6
75	94.5	95.0	93.6	94.5	95.4	93.6
100	95.0	95.4	93.6	95.0	95.4	94.1
125	95.0	95.4	94.1	95.0	95.4	95.0
150	95.4	95.8	94.1	95.8	95.8	95.0
200	95.4	95.8	95.0	95.8	96.2	95.4
250	95.4	95.8	95.0	95.8	96.2	95.8

Nominal Efficiencies for Pumps	
HP	Efficiency
1.5	efficiency of 65% or more for system
2	efficiency of 65% or more for system
3	efficiency of 67% or more for system
5	efficiency of 70% or more for system
7.5	efficiency of 73% or more for system
10	efficiency of 75% or more for system
15	efficiency of 77% or more for system
20	efficiency of 77% or more for system

## Program Requirements

### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

### Terms and Conditions

*I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. I understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and its affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.*

## Incentive Application Instructions

### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at [www.duke-energy.com](http://www.duke-energy.com).
2. Review program and equipment requirements on the incentive application. (Page7)
3. Purchase and install eligible energy-efficient equipment.
4. Complete and submit application for equipment that was installed after 1/1/2008.
5. **The following items must be included to verify projects. If they are not included, it will delay payment of incentive.**
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. **Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.**
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to **assign payment of the incentive directly to the vendor**, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
6. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
8. Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.
8. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.

## Mercantile Self Direct Incentive Program Requirements for Vendor Participation

### Program Overview

- Duke Energy offers its eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
- Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
  - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
  - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
- All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
- Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in its sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.

Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by emailing the Vendor Participation Agreement (VPA) to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or faxing to **513-419-5572**.

### Guidelines for Vendor Activities

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.
- Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit [www.duke-energy.com](http://www.duke-energy.com).



## Mercantile Self Direct Rebate Program

Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*	Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	Thermal Storage	<input type="checkbox"/>	<input type="checkbox"/>
Heating Ventilation & Cooling	<input type="checkbox"/>	<input type="checkbox"/>	Pumps/Motors/VFDs	<input type="checkbox"/>	<input type="checkbox"/>
Food Service	<input type="checkbox"/>	<input type="checkbox"/>	Chillers	<input type="checkbox"/>	<input type="checkbox"/>
Water Heating	<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>
Process Equipment (air compressors, injection molding, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Window Film	<input type="checkbox"/>	<input type="checkbox"/>

\* Check all that apply

Vendors who wish to be listed as a Mercantile Self Direct Incentive Program participating Vendor shall complete this form. A signed copy of this form must be on file at Duke Energy in order for the Vendor to receive incentive payments. Fax form to **513-419-5572** or email to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com).

I have read and understand the Mercantile Self Direct Incentive Program Requirements for Vendor Participation, and I agree to comply with all requirements set forth therein. By signing this agreement, I agree to provide my customers with information and documentation that is true and accurate to the best of my knowledge. I hereby represent and warrant that the Tax ID and Vendor Tax Status provided below are true and accurate. I agree that any confidential information concerning my customer, including but not limited to Duke Energy service account information, will be used for the sole purpose of facilitating the customer's participation in the Mercantile Self Direct Incentive Program. Further, I understand that I am responsible for making sure everyone working for me understands the requirements prior to soliciting customer participation.

Vendor Federal Tax ID Number	
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To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a third-party vendor. The third-party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the third-party vendor have signed confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, As you will not be qualified to participate in the incentive program.

Vendor Tax Status	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Partnership	<input type="checkbox"/> Other
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Contact me via	<input type="checkbox"/> Phone	<input type="checkbox"/> E-Mail	<input type="checkbox"/> Mail	
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Company Name	
Mailing Address	
City, State, Zip	
Phone/Fax	
Primary E-mail Address	
Secondary E-mail Address	
Vendor Signature	
Title	
Print Name	
Date	

For more information, call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

**6 SUPPLY FAN SECTION(80 ins)** SECTION **7**

Air volume	26950	cfm	Motor power	30.0	HP
External static pressure	2.00	ins WC	Motor type	ODP	
Total static pressure	4.48	ins WC	Frame size	286 T frame	
Type	-		Electrical supply	230-460/60/3	
Blade type/Class	Airfoil / 2		Motor efficiency	Premium	
Fan wheel diameter	33.00	ins	Motor speed	1750	rpm
Brake horsepower	27.14	HP	Motor pole	4	
Operating/Max speed	1187 / 1579	rpm	Full load current	72.4 / 36.2	A
Orientation	Top horizontal		Lock rotor current	448 / 224	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.64	
Drain pan side	-		Bearing type	Extended - L50 (400K)	
Wheel guard	None		Outlet velocity	2354	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	2B5V124	Motor sheave	2B5V80
Number of belts	2	Belt	5VX950

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	6 x 12 ins
Drive side door width	30	Light	None
Opp drv side door width	30		
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)

Tread Plate floor liner	None
Liner	(As casing details)
Insulation	(As casing details)
Sound baffles	Sound baffle included
Special static pressure	-

ins WC Filter Gauge -

**7 ACCESS SECTION(24 ins)** SECTION **8**

Drain pan	None	Drain side	-
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**DOOR DATA**

Door location	Removable panels	Window size	None
Drive side door width	20	Light	None
Opp drv side door width	20		
Door opening	Outward		

**SPECIAL**

**7 SUPPLY FAN SECTION(80 ins)** SECTION **7**

Air volume	29800	cfm	Motor power	40.0	HP
External static pressure	2.00	ins WC	Motor type	ODP	
Total static pressure	4.34	ins WC	Frame size	324 T frame	
Type	-		Electrical supply	230-460/60/3	
Blade type/Class	Airfoil / 2		Motor efficiency	Premium	
Fan wheel diameter	33.00	ins	Motor speed	1750	rpm
Brake horsepower	30.37	HP	Motor pole	4	
Operating/Max speed	1230 / 1579	rpm	Full load current	96 / 43	A
Orientation	Top horizontal		Lock rotor current	630 / 315	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.65	
Drain pan side	-		Bearing type	Extended - L50 (400K)	
Wheel guard	None		Outlet velocity	2603	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	3B5V110	Motor sheave	3B5V74
Number of belts	3	Belt	5VX880

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	None
Drive side door width	30	ins	Light
Opp drv side door width	30	ins	None
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)

Tread Plate floor liner	None			
Liner	(As casing details)			
Insulation	(As casing details)			
Sound baffles	Sound baffle included			
Special static pressure	-	ins WC	Filter Gauge	-

**8 ACCESS SECTION(24 ins)** SECTION **8**

Drain pan	None	Drain side	-
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**DOOR DATA**

Door location	Removable panels	Window size	None
Drive side door width	20	ins	Light
Opp drv side door width	20	ins	None
Door opening	Outward		

**SPECIAL**

Tread Plate floor liner	None			
Liner	(As casing details)			
Insulation	(As casing details)			
Sound baffles	Sound baffle included			
Special static pressure	-	ins WC	Filter Gauge	-





**1 RETURN/EXHAUST FAN SECTION(32 ins)** SECTION **1**

Air volume	3180	cfm	Motor power	5.0	HP
External static pressure	0.75	ins WC	Motor type	ODP	
Total static pressure	0.77	ins WC	Frame size	134 T frame	
Type	Centrifugal		Electrical supply	230-460/60/3	
Blade type/Class	Forward curved / 1		Motor efficiency	Premium	
Fan wheel diameter	9.50	ins	Motor speed	1750	rpm
Brake horsepower	2.98	HP	Motor pole	4	
Operating/Max speed	1732 / 2223	rpm	Full load current	13.6 / 6.8	A
Orientation	Top horizontal		Lock rotor current	96 / 48	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.51	
Drain pan side	-		Bearing type	Standard - L50 (200K)	
Wheel guard	None		Outlet velocity	3278	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	BK70	Motor sheave	1VP71
Number of belts	1	Belt	B35

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Rubber in shear
Seismic restraint	None

**DOOR DATA**

Door location	Drive side	Window size	None
Drive side door width	28 ins	Light	None
Opp drv side door width	28 ins		
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)	
Tread Plate floor liner	None
Liner	(As casing details)
Insulation	(As casing details)
Sound baffles	Sound baffle included
Special static pressure	- ins WC Filter Gauge -

**2 ECONOMIZER(50 ins)** SECTION **2 & 3**

Drain pan	None	Drain side	-
	<b>OUTSIDE AIR</b>	<b>RETURN AIR</b>	<b>EXHAUST AIR</b>
Length x Width	22.00 x 44.00	20.00 x 44.00	20.00 x 44.00 ins
Location	Top	Internal	Top
Dampers	None	None	None
Actuation	-	-	-
Hoods			
Rated cfm	3400	3180	3180 cfm
Air pressure drop	0.02	0.02	0.02 in WC

**DOOR DATA**

Door location	Drive side	Window size	None
Door width	22 ins	Light	None
Door opening	Outward		

**SPECIAL**

CD 50 dampers	
Tread Plate floor liner	None
Liner	(As casing details)
Insulation	(As casing details)
Sound baffles	None
Special static pressure	0.10 ins WC Filter Gauge -

**9 SUPPLY FAN SECTION(32 ins)**

SECTION

8

Air volume	3400	cfm	Motor power	7.5	HP
External static pressure	1.50	ins WC	Motor type	ODP	
Total static pressure	3.89	ins WC	Frame size	213 T frame	
			Electrical supply	230-460/60/3	
Type	Centrifugal		Motor efficiency	Premium	
Blade type/Class	Forward curved / 2		Motor speed	1750	rpm
Fan wheel diameter	9.50	ins	Motor pole	4	
Brake horsepower	5.49	HP	Full load current	20 / 10	A
Operating/Max speed	2416 / 2896	rpm	Lock rotor current	122 / 80	A
Orientation	Top horizontal		Motor supplier	Generic	
Air modulation	None		Actual drive service fac.	1.69	
Drain pan	None		Bearing type	Extended - L50 (500K)	
Drain pan side	-		Outlet velocity	3505	ft/m
Wheel guard	None		Inlet screen	None	
Belt guard	None		Outlet screen	None	
Inspection port	None				

**DRIVES**

Fan sheave	2BK45	Motor sheave	2VP65
Number of belts	2	Belt	BX28

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Rubber in shear
Seismic restraint	None

**DOOR DATA**

Door location	Drive side	Window size	None
Drive side door width	28	Light	None
Opp drv side door width	30		
Door opening	Outward		

**SPECIAL**

Extra belts	1 set(s)		
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**NOTES**

Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on ARI Standard 430.  
Important Notice

This unit may not meet ASHRAE Standard 90.1 - 1999 fan motor power limitations. If that code applies, alternate fan selections may be required.

The designer and installer must ensure compliance with applicable codes. A component supplier cannot determine the brake horsepower ("BHP") for other motors in the air handling system.

Before approving this unit, determine whether ASHRAE Standard 90.1 - 1999 has been adopted in the specific jurisdiction or contract specifications in which the unit will be installed.

**8 SUPPLY FAN SECTION(46 ins)**

SECTION

7

Air volume	6230	cfm	Motor power	7.5	HP
External static pressure	1.00	ins WC	Motor type	ODP	
Total static pressure	3.52	ins WC	Frame size	213 T frame	
			Electrical supply	230-460/60/3	
Type	Centrifugal		Motor efficiency	Premium	
Blade type/Class	Forward curved / 2		Motor speed	1750	rpm
Fan wheel diameter	18.03	ins	Motor pole	4	
Brake horsepower	6.22	HP	Full load current	20 / 10	A
Operating/Max speed	1108 / 1450	rpm	Lock rotor current	122 / 80	A
Orientation	Top horizontal		Motor supplier	Generic	
Air modulation	None		Actual drive service fac.	1.57	
Drain pan	None		Bearing type	Extended - L50 (500K)	
Drain pan side	-		Outlet velocity	2173	ft/m
Wheel guard	None		Inlet screen	None	
Belt guard	None		Outlet screen	None	
Inspection port	None				

**DRIVES**

Fan sheave	1B5V90	Motor sheave	1VP65
Number of belts	1	Belt	5VX490

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	None
Drive side door width	30	ins	Light
Opp drv side door width	30	ins	None
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)

Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**9 ACCESS SECTION(24 ins)**

SECTION

8

Drain pan	None	Drain side	-
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**DOOR DATA**

Door location	Removable panels	Window size	None
Drive side door width	20	ins	Light
Opp drv side door width	20	ins	None
Door opening	Outward		

**SPECIAL**

Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**6 SUPPLY FAN SECTION(80 ins)**

SECTION 7

Air volume	26950	cfm	Motor power	30.0	HP
External static pressure	2.00	ins WC	Motor type	ODP	
Total static pressure	4.26	ins WC	Frame size	286 T frame	
Type	-		Electrical supply	230-460/60/3	
Blade type/Class	Airfoil / 2		Motor efficiency	Premium	
Fan wheel diameter	33.00	ins	Motor speed	1750	rpm
Brake horsepower	26.01	HP	Motor pole	4	
Operating/Max speed	1170 / 1579	rpm	Full load current	72.4 / 36.2	A
Orientation	Top horizontal		Lock rotor current	448 / 224	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.64	
Drain pan side	-		Bearing type	Extended - L50 (400K)	
Wheel guard	None		Outlet velocity	2354	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	2B5V124	Motor sheave	2B5V80
Number of belts	2	Belt	5VX950

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	6 x 12 ins
Drive side door width	30 ins	Light	None
Opp drv side door width	30 ins		
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)			
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**7 ACCESS SECTION(24 ins)**

SECTION 8

Drain pan	None	Drain side	-
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**DOOR DATA**

Door location	Removable panels	Window size	None
Drive side door width	20 ins	Light	None
Opp drv side door width	20 ins		
Door opening	Outward		

**SPECIAL**

-			
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

1 RETURN/EXHAUST FAN SECTION(52 ins)				SECTION	1
Air volume	10700	cfm	Motor power	7.5	HP
External static pressure	1.00	ins WC	Motor type	ODP	
Total static pressure	1.04	ins WC	Frame size	213 T frame	
Type	Centrifugal		Electrical supply	230-460/60/3	
Blade type/Class	Forward curved / 2		Motor efficiency	Premium	
Fan wheel diameter	20.00	ins	Motor speed	1750	rpm
Brake horsepower	6.66	HP	Motor pole	4	
Operating/Max speed	624 / 1200	rpm	Full load current	20 / 10	A
Orientation	Top horizontal		Lock rotor current	122 / 80	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.64	
Drain pan side	-		Bearing type	Extended - L50 (500K)	
Wheel guard	None		Outlet velocity	2054	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	1B5V160	Motor sheave	1VP65
Number of belts	1	Belt	5VX710

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	None
Drive side door width	30	ins	Light
Opp drv side door width	30	ins	None
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)			
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**2 ECONOMIZER(64 ins)**

SECTION 2 &amp; 3

Drain pan	None	Drain side	-
	OUTSIDE AIR	RETURN AIR	EXHAUST AIR
Length x Width	28.00 x 76.00	28.00 x 76.00	28.00 x 76.00
Location	Top	Internal	Top
Dampers	None	None	None
Actuation	-	-	-
Hoods			
Rated cfm	10700	10700	10700
Air pressure drop	0.04	0.04	0.04
			cfm in WC

**DOOR DATA**

Door location	Both sides	Window size	None
Door width	28	ins	Light
Door opening	Outward		None

**SPECIAL**

cd 50 dampers			
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	None		
Special static pressure	0.16	ins WC	Filter Gauge -

11 SUPPLY FAN SECTION(46 ins)				SECTION	11
Air volume	10700	cfm	Motor power	15.0	HP
External static pressure	1.00	ins WC	Motor type	ODP	
Total static pressure	3.92	ins WC	Frame size	254 T frame	
Type	Centrifugal		Electrical supply	230-460/60/3	
Blade type/Class	Forward curved / 2		Motor efficiency	Premium	
Fan wheel diameter	18.03	ins	Motor speed	1750	rpm
Brake horsepower	12.13	HP	Motor pole	4	
Operating/Max speed	1153 / 1450	rpm	Full load current	37.8 / 18.9	A
Orientation	Top horizontal		Lock rotor current	233.6 / 117	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.55	
Drain pan side	-		Bearing type	Extended - L50 (500K)	
Wheel guard	None		Outlet velocity	3702	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	2B5V86	Motor sheave	2VP65
Number of belts	2	Belt	5VX450

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	None
Drive side door width	30	ins	Light
Opp drv side door width	30	ins	None
Door opening	Outward		

**SPECIAL**

Extra belts 1 set(s)			
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**NOTES**

Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on ARI Standard 430.  
Important Notice

This unit may not meet ASHRAE Standard 90.1 - 1999 fan motor power limitations. If that code applies, alternate fan selections may be required.

The designer and installer must ensure compliance with applicable codes. A component supplier cannot determine the brake horsepower ("BHP") for other motors in the air handling system.

Before approving this unit, determine whether ASHRAE Standard 90.1 - 1999 has been adopted in the specific jurisdiction or contract specifications in which the unit will be installed.

6 SUPPLY FAN SECTION(46 ins)				SECTION 6	
Air volume	11420	cfm	Motor power	15.0	HP
External static pressure	1.50	ins WC	Motor type	ODP	
Total static pressure	3.96	ins WC	Frame size	254 T frame	
Type	Centrifugal		Electrical supply	230-460/60/3	
Blade type/Class	Forward curved / 2		Motor efficiency	Premium	
Fan wheel diameter	18.03	ins	Motor speed	1750	rpm
Brake horsepower	13.58	HP	Motor pole	4	
Operating/Max speed	1171 / 1450	rpm	Full load current	37.8 / 18.9	A
Orientation	Top horizontal		Lock rotor current	233.6 / 117	A
Air modulation	None		Motor supplier	Generic	
Drain pan	None		Actual drive service fac.	1.60	
Drain pan side	-		Bearing type	Extended - L50 (500K)	
Wheel guard	None		Outlet velocity	3952	ft/m
Belt guard	None		Inlet screen	None	
Inspection port	None		Outlet screen	None	

**DRIVES**

Fan sheave	2B5V86	Motor sheave	2VP65
Number of belts	2	Belt	5VX450

**ANTI-VIBRATION MOUNTS / SPRINGS**

Type	Spring
Seismic restraint	None

**DOOR DATA**

Door location	Both sides	Window size	None
Drive side door width	30 ins	Light	None
Opp drv side door width	30 ins		
Door opening	Outward		

**SPECIAL**

Extra belts	1 set(s)		
Tread Plate floor liner	None		
Liner	(As casing details)		
Insulation	(As casing details)		
Sound baffles	Sound baffle included		
Special static pressure	-	ins WC	Filter Gauge -

**NOTES**

Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on ARI Standard 430.  
As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 1999. The approving authority is responsible for compliance of multi-component building systems.

**SHIPPING SECTION DETAILS**

	Length (inches)	Weight (lb)
Section 1	32	425
Section 2	22	495
Section 3	16	284
Section 4	28	607
Section 5	28	1150
Section 6	46	1313
<b>TOTALS</b>	<b>172.00 (Lower level total)</b>	<b>4274 (Entire unit weight)</b>

UNIT SOUND	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated	80	80	74	69	66	59	44	38
Unit discharge	88	88	86	86	86	82	79	74
Unit return	85	85	80	79	74	66	56	50

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### Specifications: EM2535T

208V AMPS:	74.1
BEARING-DRIVE-END:	6311
BEARING-OPP-DRIVE-END:	6309
CUSTOMER-PART-NUMBER:	--
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	94.1
ENCLOSURE:	OPSB
FRAME:	286T
GREASE:	POLYREX EM
HERTZ:	60
CATALOG NUMBER:	EM2535T
SPEC. NUMBER:	40G048W942
INSULATION-CLASS:	F
KVA-CODE:	G
MAX. SPACE HEATER TEMP.:	--
SPEED [rpm]:	1770
OUTPUT [hp]:	30
PHASE:	3
POWER-FACTOR:	85
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
SPACE-HEATER-AMPS:	--
SPACE-HEATER-VOLTS:	--
VOLTAGE:	230/460
FL AMPS:	70/35

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## Specifications: EM2513T

SPEC. NUMBER:	39K057W916
CATALOG NUMBER:	EM2513T
FL AMPS:	35.4/17.7
208V AMPS:	37.4
BEARING-DRIVE-END:	6309
BEARING-OPP-DRIVE-END:	6208
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	93
ENCLOSURE:	OPSB
FRAME:	254T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	G
SPEED [rpm]:	1765
OUTPUT [hp]:	15
PHASE:	3
POWER-FACTOR:	86
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	230/460

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### Specifications: EM3218T

SPEC. NUMBER:	36G548S270G1
CATALOG NUMBER:	EM3218T
FL AMPS:	14-13.2/6.6
208V AMPS:	14
BEARING-DRIVE-END:	6206
BEARING-OPP-DRIVE-END:	6205
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	89.5
ENCLOSURE:	OPSB
FRAME:	184T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	J
SPEED [rpm]:	1750
OUTPUT [hp]:	5
PHASE:	3
POWER-FACTOR:	80
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	208-230/460

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[AC Motors](#) | [Premium Efficient](#) | [7.5 HP](#) | [1400-1800 RPM](#) |

**Specifications: EM3311T**

SPEC. NUMBER:	37F614S520G1
CATALOG NUMBER:	EM3311T
FL AMPS:	20.4-19.4/9.7
208V AMPS:	--
BEARING-DRIVE-END:	6307
BEARING-OPP-DRIVE-END:	6206
DESIGN CODE:	A
DOE-CODE:	010A
FL EFFICIENCY:	91
ENCLOSURE:	OPSB
FRAME:	213T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	J
SPEED [rpm]:	1770
OUTPUT [hp]:	7.5
PHASE:	3
POWER-FACTOR:	79
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	208-230/460

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March 2, 2012



To whom it may concern:

This letter is to confirm that for the renovation to Cincinnati Public school Roselawn (1594 Summit Rd), for the custom rebate application, the lighting project was installed with a minimum unit cost listed below.

DESCRIPTION	QUANTITY	PRICE/FIXTURE	AMOUNT
L28 - Columbia CS8-232-4E88RLH277	30	\$79.00	\$2,370.00
G21 - Alera CV-2T5-S-PM	188	\$431.00	\$81,028.00
A2 - Columbia ST824-232G	32	\$130.00	\$4,160.00
A32 - Columbia ST824-332G	132	\$135.00	\$17,820.00
A31 - Columbia ST824-332G	52	\$135.00	\$7,020.00
B28 - Alera CV-2T5-PERF	126	\$431.00	\$54,306.00
C31 - Columbia P4D24-332G	7	\$115.00	\$805.00
S2 - Prescolite CFT632EB	48	\$50.00	\$2,400.00
C32 - Columbia P4D24-332G-	7	\$115.00	\$805.00
V2 - Con Tech LA210-P	16	\$27.00	\$432.00
S1 - Prescolite CFT632EB-STF602	47	\$50.00	\$2,350.00
D4 - Columbia SM24-432-FSA12	16	\$152.00	\$2,432.00
D6 - Day-Brite AVW232-PMW	5	\$182.00	\$910.00
D6F - Day-Brite AVW232-PMW	7	\$182.00	\$1,274.00
L24 - Columbia CS4-232-EB88RLH277	5	\$58.00	\$290.00
G1 - Alera CV-2T5-S-PM	25	\$431.00	\$10,775.00
C3 - Columbia P4D24-332G	2	\$115.00	\$230.00
J3 - Columbia STR24-332-MPO	2	\$231.00	\$462.00
D2 - Luminaire VPF84-232-PRS	14	\$290.00	\$4,060.00
A1 - Columbia ST814-232G	9	\$130.00	\$1,170.00
D1 - Columbia CS4-228-EB5277	14	\$182.00	\$2,548.00
S5 - Con Tech RL20 CTR2002	6	\$32.00	\$192.00
G4 - Columbia WT24-432G	1	\$242.00	\$242.00
L14 - Columbia CS4-132-EB88RLH277	5	\$58.00	\$290.00

V1 - Con Tech CTL838P	12	\$43.00	\$516.00
X8P - Hubbell SWF842-A-SW	28	\$825.00	\$23,100.00

<b>TOTAL</b>	<b>\$221,987.00</b>
--------------	---------------------

This is also to confirm that for the renovation to Roselawn (1594 Summit Rd), for the prescriptive rebate application, occupancy sensors and motors were installed with a minimum unit cost listed below.

DESCRIPTION	Model Number	QUANTITY	Nominal Size (Tons)	PRICE/FIXTURE	AMOUNT
Self Direct Occupancy Sensor	DT-2000, DT-1000, DT-500	161	-	\$117.89	\$18,980.29
SelfDirect Motor	Baldor EM2518T	1	-	\$830.00	\$830.00
SelfDirect Motor	Baldor EM3313T	3	-	\$1,477.00	\$4,431.00
SelfDirect Motor	Baldor EM2535T	2	-	\$3,052.00	\$6,104.00
SelfDirect Motor	Baldor EM3311T	3	-	\$1,220.00	\$3,660.00

<b>TOTAL</b>	<b>\$34,005.29</b>
--------------	--------------------

Thank you for your attention to this matter,

*Don Elbe*

Don Elbe  
Utility Management Coordinator

**Turner  TYS**  
Rebuilding Cincinnati Public Schools

December 4, 2009

Angie Tolle  
Cincinnati Public Schools  
2315 Iowa Avenue  
Cincinnati, OH 45206

Dear Angie:

Attached is **Pay Application** for the **Roselawn-Condon School**, please process payment for the **January 1, 2009 check distribution**.

Contractor	Application #	Monthly Billing	Total Billing To Date	Contract Amount to Date
BP#7 Beacon Electric	#17	\$ 2,500.00	\$ 2,336,541.00	\$ 2,336,541.00

Please call if you have any questions.

Sincerely,  
TURNER/DAG/TYS



James T. DeLage  
Project Executive

/bcs

Attachments

cc: John Kennedy - ATA/Beilharz  
Greg Rohr - Turner/DAG/TYS  
File 0025 - 10960PB

T:\PROJECTS\Roselawn-Condon\00250 Pay Application\2009-12-04 beacon pay app.doc

2315 Iowa Avenue, Cincinnati, OH 45206, Phone 513-363-0875, Fax 513-363-0880

**Cincinnati Public Schools**

2315 Iowa Avenue  
Cincinnati, Ohio 45206

Contractor's Name: Beacon Electrical Contractors  
Address: 7815 Redsky Drive, Cincinnati, OH 45249

**Contractor Pay Application Summary**

Project Name: CPS Roselawn-Condon School  
Bid Package No.: #7 Electrical/Technology

1	Original Contract Amount	\$	2,145,000.00
2	Net Changes to Date	\$	191,541.00
3	Current Contract Amount	\$	2,336,541.00
4	Labor Completed to Date	\$	841,041.00
5	Material Completed to Date	\$	1,495,500.00
6	Total Work Completed to Date	\$	2,336,541.00
7	Store Material to Date	\$	0.00
8	Less Retained to Date	\$	0.00
9	Total Amount Due	\$	2,336,541.00
10	Less Previous Payments	\$	2,334,041.00
11	Less Amount Retained to Cover Lien	\$	0.00
12	Less Amount Retained for Liquidated Damages	\$	0.00
13	Less Other Amounts Withheld	\$	0.00
14	Current Due	\$	2,500.00
15	Balance to Complete	\$	0.00

**OSFC approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

Ohio School Facilities Commission

Date

Comments:

**APPLICATION AND CERTIFICATE FOR PAYMENT**

TO OWNER: Cincinnati Public Schools

PROJECT: Roselawn-Condron School

APPLICATION No:

17

PERIOD TO: 11/31/09

PROJECT NOS:

Bid Package #7

CONTRACT DATE:

FROM CONTRACTOR: Beacon Electrical Contractors

VIA ARCHITECT ATA - Bellharz



*Maureen L. Merkel*  
**MAUREEN L. MERKEL**  
 Notary Public, State of Ohio  
 My Commission Expires  
 July 8, 2013

CONTRACT FOR: Electrical / Technology

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below, in connection with the Contract.  
 Continuation sheet is attached.

1. ORIGINAL CONTRACT SUM	.....	\$	2,145,000.00
2. Net Change by Change Orders	.....	\$	191,541.00
3. CONTRACT SUM TO DATE	.....	\$	2,336,541.00
4. TOTAL COMPLETED & STORED TO DATE	.....	\$	2,336,541.00
5. RETAINAGE			
a. 8-50% of Completed Labor	.....	\$	0.00
b. 8% of Stored Material	.....	\$	0.00
Total Retainage	.....	\$	0.00
6. TOTAL EARNED LESS RETAINAGE	.....	\$	2,336,541.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	.....	\$	2,334,041.00
8. CURRENT PAYMENT DUE	.....	\$	2,500.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE	.....	\$	0.00

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner		
Total approved this month		
<b>TOTALS</b>		
NET CHANGES by Change Order		

The Contractor certified that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by the State have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

Contractor *[Signature]* Date 11-9-09

Based upon on-site observations, the firm affirms that the work has progressed to the percentage of completeness indicated on the pay request.

Asphalt *[Signature]* Date 11-20-09

Construction Manager *[Signature]* Date 11-24-09

Approved:

School District Treasurer \_\_\_\_\_ Date \_\_\_\_\_



ITEM NUMBER	DESCRIPTION OF WORK	MATERIAL	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
				PREVIOUS APPS.	THIS PERIOD					
1	General									
2	Bond, Insurance, etc.	LABOR	21,500.00	21,500.00	0.00	0.00	21,500.00	100.00%	0.00	0.00
3		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
4	Permits, Fees, etc.	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
5		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
6	Allowances	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
7		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
8	Demolition	LABOR	50,000.00	50,000.00	0.00	0.00	50,000.00	100.00%	0.00	0.00
9		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10	Temporary Power	LABOR	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
11		MATERIAL	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
12	Mobilization	LABOR	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
13		MATERIAL	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
14	Building Rough In/Wiring (Phase 1)									
15	Branch/Feeder Conduit	LABOR	74,550.00	74,550.00	0.00	0.00	74,550.00	100.00%	0.00	0.00
16		MATERIAL	71,750.00	71,750.00	0.00	0.00	71,750.00	100.00%	0.00	0.00
17	Branch/Feeder Wiring	LABOR	52,500.00	52,500.00	0.00	0.00	52,500.00	100.00%	0.00	0.00
18		MATERIAL	61,250.00	61,250.00	0.00	0.00	61,250.00	100.00%	0.00	0.00
19	Surface Raceway/Wiring	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
20		MATERIAL	4,200.00	4,200.00	0.00	0.00	4,200.00	100.00%	0.00	0.00
21	AV & Security Wiring	LABOR	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
22		MATERIAL	5,250.00	5,250.00	0.00	0.00	5,250.00	100.00%	0.00	0.00
23	Telephone/Data Wiring	LABOR	7,000.00	7,000.00	0.00	0.00	7,000.00	100.00%	0.00	0.00
24		MATERIAL	5,250.00	5,250.00	0.00	0.00	5,250.00	100.00%	0.00	0.00
25	Network Equipment Wiring	LABOR	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
26		MATERIAL	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
27	Building Equipment/Finishes (Phase 1)									
28	Switchgear/Disc/Starters Equipment	LABOR	4,200.00	4,200.00	0.00	0.00	4,200.00	100.00%	0.00	0.00
29		MATERIAL	17,675.00	17,675.00	0.00	0.00	17,675.00	100.00%	0.00	0.00
30	Light Fixtures/Controls	LABOR	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
31		MATERIAL	73,500.00	73,500.00	0.00	0.00	73,500.00	100.00%	0.00	0.00
32	Devices/Equipment	LABOR	1,750.00	1,750.00	0.00	0.00	1,750.00	100.00%	0.00	0.00
33		MATERIAL	2,625.00	2,625.00	0.00	0.00	2,625.00	100.00%	0.00	0.00
34	Fire Alarm System Equipment	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
35		MATERIAL	8,750.00	8,750.00	0.00	0.00	8,750.00	100.00%	0.00	0.00
36	Generator Equipment	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
37		MATERIAL	35,000.00	35,000.00	0.00	0.00	35,000.00	100.00%	0.00	0.00
38	AV & Security Equipment	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
39		MATERIAL	435,000.00	435,000.00	0.00	0.00	435,000.00	100.00%	0.00	0.00
40	Telephone/Data Equipment	LABOR	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
41		MATERIAL	185,000.00	185,000.00	0.00	0.00	185,000.00	100.00%	0.00	0.00
42	Network Equipment	LABOR	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
43		MATERIAL	85,000.00	85,000.00	0.00	0.00	85,000.00	100.00%	0.00	0.00
44	Dimming System Equipment	LABOR	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
45		MATERIAL	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
46	Building Rough In/Wiring (Phase 2)									
47	Branch/Feeder Conduit	LABOR	106,500.00	106,500.00	0.00	0.00	106,500.00	100.00%	0.00	0.00
48		MATERIAL	102,500.00	102,500.00	0.00	0.00	102,500.00	100.00%	0.00	0.00
49	Branch/Feeder Wiring	LABOR	75,000.00	75,000.00	0.00	0.00	75,000.00	100.00%	0.00	0.00
50		MATERIAL	87,500.00	87,500.00	0.00	0.00	87,500.00	100.00%	0.00	0.00
51	Surface Raceway/Wiring	LABOR	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
52		MATERIAL	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
53	AV & Security Wiring	LABOR	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
54		MATERIAL	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
	<b>SUB TOTAL</b>		<b>1,730,250.00</b>	<b>1,730,250.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1,730,250.00</b>	<b>100.00%</b>	<b>0.00</b>	<b>0.00</b>

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Building Rough In/Wiring (Phase 2 Cont.)	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00%	0.00	0.00
2	Telephone/Data Wiring	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
3	Network Equipment Wiring	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
4	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
5	Building Equipment/Finishes (Phase 2)	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
6	Switchgear/Disc/Starters Equipment	32,825.00	32,825.00	0.00	0.00	32,825.00	100.00%	0.00	0.00
7	Light Fixtures/Controls	12,500.00	12,500.00	0.00	0.00	12,500.00	100.00%	0.00	0.00
8	Devices/Equipment	136,500.00	136,500.00	0.00	0.00	136,500.00	100.00%	0.00	0.00
9	Fire Alarm System Equipment	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
10	AV & Security Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
11	Telephone/Data Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
12	AV & Security Equipment	16,250.00	16,250.00	0.00	0.00	16,250.00	100.00%	0.00	0.00
13	Telephone/Data Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
14	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
15	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
16	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
17	Building Rough In/Wiring (Phase 3)	29,950.00	29,950.00	0.00	0.00	29,950.00	100.00%	0.00	0.00
18	Branch/Feeder Conduit	30,750.00	30,750.00	0.00	0.00	30,750.00	100.00%	0.00	0.00
19	Branch/Feeder Wiring	22,500.00	22,500.00	0.00	0.00	22,500.00	100.00%	0.00	0.00
20	Surface Raceway/Wiring	26,250.00	26,250.00	0.00	0.00	26,250.00	100.00%	0.00	0.00
21	AV & Security Wiring	1,800.00	1,800.00	0.00	0.00	1,800.00	100.00%	0.00	0.00
22	Telephone/Data Wiring	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
23	Network Equipment Wiring	2,250.00	2,250.00	0.00	0.00	2,250.00	100.00%	0.00	0.00
24	Building Equipment/Finishes (Phase 3)	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
25	Switchgear/Disc/Starters Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
26	Light Fixtures/Controls	1,800.00	1,800.00	0.00	0.00	1,800.00	100.00%	0.00	0.00
27	Devices/Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
28	Fire Alarm System Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	AV & Security Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
30	Telephone/Data Equipment	1,125.00	1,125.00	0.00	0.00	1,125.00	100.00%	0.00	0.00
31	AV & Security Equipment	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
32	Telephone/Data Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
34	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
36	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
37	Network Equipment	3,750.00	3,750.00	0.00	0.00	3,750.00	100.00%	0.00	0.00
38	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
39	Network Equipment	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
40	Network Equipment	1,125.00	1,125.00	0.00	0.00	1,125.00	100.00%	0.00	0.00
41	Network Equipment	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
42	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
44	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Network Equipment	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
46	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Network Equipment	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
48	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Network Equipment	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
50	Network Equipment	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
51	Network Equipment	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
52	Network Equipment	8,500.00	8,500.00	0.00	0.00	8,500.00	100.00%	0.00	0.00
53	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Network Equipment	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
<b>SUB TOTAL</b>		<b>414,750.00</b>	<b>414,750.00</b>	<b>0.00</b>	<b>0.00</b>	<b>414,750.00</b>	<b>100.00%</b>	<b>0.00</b>	<b>0.00</b>

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Change Order #1	(3,760.00)	(3,760.00)	0.00	0.00	(3,760.00)	100.00%	0.00	0.00
2	Change Order #1	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
3	Change Order #2	7,342.00	7,342.00	0.00	0.00	7,342.00	100.00%	0.00	0.00
4	Change Order #2	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5	Change Order #3	15,397.00	15,397.00	0.00	0.00	15,397.00	100.00%	0.00	0.00
6	Change Order #3	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7	Change Order #4	19,702.00	19,702.00	0.00	0.00	19,702.00	100.00%	0.00	0.00
8	Change Order #4	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9	Change Order #5	21,666.00	21,666.00	0.00	0.00	21,666.00	100.00%	0.00	0.00
10	Change Order #5	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
11	Change Order #6	7,694.00	7,694.00	0.00	0.00	7,694.00	100.00%	0.00	0.00
12	Change Order #6	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
13	Change Order #7	6,960.00	6,960.00	0.00	0.00	6,960.00	100.00%	0.00	0.00
14	Change Order #7	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
15	Change Order #8	18,150.00	18,150.00	0.00	0.00	18,150.00	100.00%	0.00	0.00
16	Change Order #8	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
17	Change Order #9	11,241.00	11,241.00	0.00	0.00	11,241.00	100.00%	0.00	0.00
18	Change Order #9	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
19	Change Order #10	8,737.00	8,737.00	0.00	0.00	8,737.00	100.00%	0.00	0.00
20	Change Order #10	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
21	Change Order #11	9,550.00	9,550.00	0.00	0.00	9,550.00	100.00%	0.00	0.00
22	Change Order #11	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
23	Change Order #12	2,598.00	2,598.00	0.00	0.00	2,598.00	100.00%	0.00	0.00
24	Change Order #12	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
25	Change Order #13	4,667.00	4,667.00	0.00	0.00	4,667.00	100.00%	0.00	0.00
26	Change Order #13	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
27	Change Order #14	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
28	Change Order #14	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	Change Order #15	14,123.00	14,123.00	0.00	0.00	14,123.00	100.00%	0.00	0.00
30	Change Order #15	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
31	Change Order #16	7,758.00	7,758.00	0.00	0.00	7,758.00	100.00%	0.00	0.00
32	Change Order #16	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Change Order #17	3,679.00	3,679.00	0.00	0.00	3,679.00	100.00%	0.00	0.00
34	Change Order #17	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Change Order #18	1,114.00	1,114.00	0.00	0.00	1,114.00	100.00%	0.00	0.00
36	Change Order #18	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
37	Change Order #19	3,460.00	3,460.00	0.00	0.00	3,460.00	100.00%	0.00	0.00
38	Change Order #19	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
39	Change Order #20	9,659.00	9,659.00	0.00	0.00	9,659.00	100.00%	0.00	0.00
40	Change Order #20	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
41	Change Order #21	1,214.00	1,214.00	0.00	0.00	1,214.00	100.00%	0.00	0.00
42	Change Order #21	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Change Order #22	5,570.00	5,570.00	0.00	0.00	5,570.00	100.00%	0.00	0.00
44	Change Order #22	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Change Order #23	1,814.00	1,814.00	0.00	0.00	1,814.00	100.00%	0.00	0.00
46	Change Order #23	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Change Order #24	306.00	306.00	0.00	0.00	306.00	100.00%	0.00	0.00
48	Change Order #24	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Change Order #25	1,695.00	1,695.00	0.00	0.00	1,695.00	100.00%	0.00	0.00
50	Change Order #25	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
51	Change Order #26	5,526.00	5,526.00	0.00	0.00	5,526.00	100.00%	0.00	0.00
52	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
53	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Change Order #26	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
SUB TOTAL		188,362.00	188,362.00	0.00	0.00	188,362.00	100.00%	0.00	0.00

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	Change Order #27	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
2	Change Order #28	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
3	Change Order #28	(3,364.00)	(3,364.00)	0.00	0.00	(3,364.00)	100.00%	0.00	0.00
4	Change Order #29	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
5	Change Order #29	4,043.00	4,043.00	0.00	0.00	4,043.00	100.00%	0.00	0.00
6	Change Order #30	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
7	Change Order #30	2,500.00	2,500.00	0.00	0.00	2,500.00	100.00%	0.00	0.00
8	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
9	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
10	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
11	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
12	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
13	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
14	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
15	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
16	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
17	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
18	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
19	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
20	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
21	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
22	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
23	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
24	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
25	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
26	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
27	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
28	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
29	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
30	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
31	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
32	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
33	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
34	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
35	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
36	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
37	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
38	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
39	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
40	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
41	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
42	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
43	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
44	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
45	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
46	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
47	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
48	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
49	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
50	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
51	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
52	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
53	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
54	Change Order #	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
SUB TOTAL		3,179.00	679.00	2,500.00	0.00	3,179.00	100.00%	0.00	0.00
TOTAL		2,336,541.00	2,334,041.00	2,500.00	0.00	2,336,541.00	100.00%	0.00	0.00

**LABOR**

Said affiant further says that the following shows the names and addresses of every unpaid laborer in the employ of BEACON ELECTRIC COMPANY

is due, or to become due, for labor done to date hereof.

NOTE-If the fact is that every laborer has been paid in full, then recite: "Every laborer has been paid in full." If not, then give each unpaid laborer's name and address and the amount due or to become due.

NAME	ADDRESS	HOURS	Amount Due or to Become Due for Labor Furnished to Date Hereof
EVERY LABORER HAS BEEN PAID IN FULL			

Affiant further states that there is due or to become due to BEACON ELECTRIC COMPANY for work performed or machinery, material or fuel furnished to CPS Roselawn-Condon School to date hereof under said contracts, the sum of \$ 2,500.00 (Owner or Contractor)

That the amounts due or to become due to said sub-contractors, material men and laborers, for work done or machinery, material or fuel furnished to the data hereof, to BEACON ELECTRIC COMPANY are fully and correctly set forth opposite their names, respectively, in the aforesaid statements, and further evidenced by certificates of every person furnishing machinery, material or fuel, hereto attached, and made a part hereof.

Affiant further says that BEACON ELECTRIC COMPANY has not employed or purchased or procured machinery, material or fuel from, or sub-contracted with any person, firm or corporation, other than those above mentioned, and owes for no labor performed, or machinery, material or fuel furnished, under said contracts, other than above set forth.

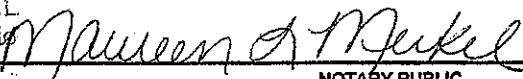
  
 JOE N. MELLENCAMP, President

SWORN TO BEFORE ME AND SUBSCRIBED IN MY PRESENCE, at CINCINNATI Ohio

this 9th day of November, 2009



MAUREEN L. MERKEL  
 Notary Public, State of Ohio  
 My Commission Expires  
 July 3, 2013

  
 NOTARY PUBLIC

1. Secy., Treas., one of firm, or agent, as case may be.
2. Name and address.
3. "Owner," "part-owner," "lessee," or "authorized agent of the owner, part-owner or lessee," or "original" or "principal contractor under a contract with \_\_\_\_\_ the owner, part-owner or lessee," as the case may be.

4. "Constructing, altering or repairing a boat, vessel or other watercraft," or "erecting, altering, repairing or removing a house, mill, manufactory, or any furnace or furnace material therein, or other building appurtenance, fixture, bridge or other structure," or "digging, drilling, boring, operating, completing and repairing of any gas well, oil well or other well," or "altering, repairing or constructing any oil derrick, oil tank, oil or gas pipe line," or "furnishing tile for the drainage of any lot or land."
5. Accurate description of property.
6. Contractor or sub-contractor executing affidavit.



Cincinnati Public Schools  
2315 Iowa Avenue  
Cincinnati, Ohio 45206

Contractor's Name:  
Address:

Century Construction, Inc.  
34 Kenton Lands Rd. - PO Box 18870  
Erlanger, KY 41018

### Contractor Pay Application Summary

Project Name  
Bid Package No.

Roselawn-Condon School  
3-9

1	Original Contract Amount		
2	Net Changes to Date	\$	2,157,626.00
3	Current Contract Amount	\$	72,665.00
<hr/>			
4	Labor Completed to Date	\$	2,230,291.00
5	Material Completed to Date	\$	811,898.00
6	Total Work Completed to Date	\$	1,418,393.00
7	Store Material to Date	\$	2,230,291.00
8	Less Retained to Date	\$	-
9	Total Amount Due	\$	-
10	Less Previous Payments	\$	2,230,291.00
11	Less Amount Retained to Cover Lien	\$	2,228,760.00
12	Less Amount Retained for Liquidated Damages	\$	-
13	Less Other Amounts Withheld	\$	-
14	Current Due	\$	-
15	Balance to Complete	\$	1,531.00

**OSFC approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

Ohio School Facilities Commission \_\_\_\_\_

Date \_\_\_\_\_

Comments:


**APPLICATION AND CERTIFICATE FOR PAYMENT**

**TO OWNER:** Cincinnati Public Schools  
CPS Facilities  
Cincinnati, OH 45206

**PROJECT:**

Roselawn-Condou School

**APPLICATION NO:** 16  
**PERIOD TO:** 3/25/2009  
**PROJECT NOS:** D-137 R  
**CONTRACT DATE:** 08/15/07

**FROM CONTRACTOR:** Century Construction, Inc.  
34 Kenton Lands Rd  
Erlanger, KY 41018

**VIA ARCHITECT:** Cincinnati Public Schools  
CPS Facilities  
Cincinnati, OH 45206

**CONTRACT FOR:** HVAC

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below. In connection with the Contract Continuation sheet is attached.

1. ORIGINAL CONTRACT SUM.....\$ 2,157,626.00
2. Net Change by Change Orders.....\$ 72,665.00
3. CONTRACT SUM TO DATE.....\$ 2,230,291.00
4. TOTAL COMPLETED & STORED TO DATE.....\$ 2,230,291.00
5. RETAINAGE
  - a. 8-50% of Completed Labor.....\$
  - b. 8% of Stored Material.....\$
  - Total Retainage.....\$
6. TOTAL EARNED LESS RETAINAGE.....\$ 2,230,291.00
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT.....\$ 2,228,760.00
8. CURRENT PAYMENT DUE.....\$ 1,531.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE.....\$

The Contractor certified that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by the State have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

*Scott B. Blunt* V.P.  
Contractor Date 3/21/08

*Alvina S. Rosty, Notary* My Commission Expires 8/28/12  
Based upon on-site observations, the firm affirms that the work has progressed to the percentage of completeness indicated on the pay request.

*Jim Caldwell*  
Architect Date 20.1.08

*Sam Re*  
Construction Manager Date 6.11.08

Approved:

School District Treasurer \_\_\_\_\_ Date \_\_\_\_\_

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner	71134.00	
Total approved this month	1631.00	
<b>TOTALS</b>	<b>72665.00</b>	
<b>NET CHANGES by Change Order</b>	<b>72665.00</b>	

00400 J

Contractor Pay Application



**CONTINUATION SHEET**

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 075521  
 ARCHITECTS PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)	THIS PERIOD					
010	Bond & Insurance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
015	Material	\$27,164.00	\$27,164.00	\$0.00	\$0.00	\$0.00	\$27,164.00	\$0.00	\$0.00
020	Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
025	Mobilization	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
030	Material	\$700.00	\$700.00	\$0.00	\$0.00	\$0.00	\$700.00	\$0.00	\$0.00
035	Labor	\$700.00	\$700.00	\$0.00	\$0.00	\$0.00	\$700.00	\$0.00	\$0.00
040	Phase I Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
045	Material	\$61,827.00	\$61,827.00	\$0.00	\$0.00	\$0.00	\$61,827.00	\$0.00	\$0.00
050	Labor	\$89,066.00	\$89,066.00	\$0.00	\$0.00	\$0.00	\$89,066.00	\$0.00	\$0.00
051	Control's Engineering	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
052	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
053	Labor	\$39,420.00	\$39,420.00	\$0.00	\$0.00	\$0.00	\$39,420.00	\$0.00	\$0.00
055	Phase I Demo - Pipe & Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
060	Material	\$8,944.00	\$8,944.00	\$0.00	\$0.00	\$0.00	\$8,944.00	\$0.00	\$0.00
065	Labor	\$18,030.00	\$18,030.00	\$0.00	\$0.00	\$0.00	\$18,030.00	\$0.00	\$0.00
070	Phase I Penthouse Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
075	Material	\$18,048.00	\$18,048.00	\$0.00	\$0.00	\$0.00	\$18,048.00	\$0.00	\$0.00
080	Labor	\$19,841.00	\$19,841.00	\$0.00	\$0.00	\$0.00	\$19,841.00	\$0.00	\$0.00
085	Phase I Duct Rough-In	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
090	Material	\$89,600.00	\$89,600.00	\$0.00	\$0.00	\$0.00	\$89,600.00	\$0.00	\$0.00
095	Labor	\$84,000.00	\$84,000.00	\$0.00	\$0.00	\$0.00	\$84,000.00	\$0.00	\$0.00
100	Phase I Penthouse Duct Rough-In & Demo	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
105	Material	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
110	Labor	\$22,400.00	\$22,400.00	\$0.00	\$0.00	\$0.00	\$22,400.00	\$0.00	\$0.00
115	Phase I Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
120	Material	\$17,903.00	\$17,903.00	\$0.00	\$0.00	\$0.00	\$17,903.00	\$0.00	\$0.00
125	Labor	\$26,854.00	\$26,854.00	\$0.00	\$0.00	\$0.00	\$26,854.00	\$0.00	\$0.00
130	Phase I Penthouse Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
135	Material	\$10,744.00	\$10,744.00	\$0.00	\$0.00	\$0.00	\$10,744.00	\$0.00	\$0.00
140	Labor	\$16,115.00	\$16,115.00	\$0.00	\$0.00	\$0.00	\$16,115.00	\$0.00	\$0.00
145	Phase I Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
150	Material	\$47,065.00	\$47,065.00	\$0.00	\$0.00	\$0.00	\$47,065.00	\$0.00	\$0.00
155	Labor	\$31,376.00	\$31,376.00	\$0.00	\$0.00	\$0.00	\$31,376.00	\$0.00	\$0.00
160	Phase I Penthouse Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00



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# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 075521  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
165	Material	\$31,377.00	\$31,377.00	\$0.00	\$0.00	\$0.00	\$31,377.00	\$0.00	\$0.00
170	Labor	\$20,918.00	\$20,918.00	\$0.00	\$0.00	\$0.00	\$20,918.00	\$0.00	\$0.00
175	Phase I Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
180	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
185	Labor	\$6,533.00	\$6,533.00	\$0.00	\$0.00	\$0.00	\$6,533.00	\$0.00	\$0.00
190	Phase II Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
195	Material	\$27,562.00	\$27,562.00	\$0.00	\$0.00	\$0.00	\$27,562.00	\$0.00	\$0.00
200	Labor	\$36,754.00	\$36,754.00	\$0.00	\$0.00	\$0.00	\$36,754.00	\$0.00	\$0.00
205	Phase II Penthouse Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
210	Material	\$5,598.00	\$5,598.00	\$0.00	\$0.00	\$0.00	\$5,598.00	\$0.00	\$0.00
215	Labor	\$7,692.00	\$7,692.00	\$0.00	\$0.00	\$0.00	\$7,692.00	\$0.00	\$0.00
220	Phase II Duct Rough-in	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
225	Material	\$69,440.00	\$69,440.00	\$0.00	\$0.00	\$0.00	\$69,440.00	\$0.00	\$0.00
230	Labor	\$58,240.00	\$58,240.00	\$0.00	\$0.00	\$0.00	\$58,240.00	\$0.00	\$0.00
235	Phase II Penthouse Duct Rough-in & Demo	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
240	Material	\$53,760.00	\$53,760.00	\$0.00	\$0.00	\$0.00	\$53,760.00	\$0.00	\$0.00
245	Labor	\$41,440.00	\$41,440.00	\$0.00	\$0.00	\$0.00	\$41,440.00	\$0.00	\$0.00
250	Phase II Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
255	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
260	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
265	Phase II Penthouse Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
270	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
275	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
280	Phase II Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
285	Material	\$20,273.00	\$20,273.00	\$0.00	\$0.00	\$0.00	\$20,273.00	\$0.00	\$0.00
290	Labor	\$13,517.00	\$13,517.00	\$0.00	\$0.00	\$0.00	\$13,517.00	\$0.00	\$0.00
295	Phase II Penthouse Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
300	Material	\$13,516.00	\$13,516.00	\$0.00	\$0.00	\$0.00	\$13,516.00	\$0.00	\$0.00
305	Labor	\$9,011.00	\$9,011.00	\$0.00	\$0.00	\$0.00	\$9,011.00	\$0.00	\$0.00
310	Phase II Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
315	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
320	Labor	\$6,533.00	\$6,533.00	\$0.00	\$0.00	\$0.00	\$6,533.00	\$0.00	\$0.00
325	Phase III Piping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
330	Material	\$6,714.00	\$6,714.00	\$0.00	\$0.00	\$0.00	\$6,714.00	\$0.00	\$0.00

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# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: PERIOD TO: 3/25/2009  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN DORE)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
335	Labor	\$9,515.00	\$9,515.00	\$0.00	\$0.00	\$0.00	\$9,515.00	\$0.00	\$0.00
340	Phase III Duct Rough-in	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
345	Material	\$22,400.00	\$22,400.00	\$0.00	\$0.00	\$0.00	\$22,400.00	\$0.00	\$0.00
350	Labor	\$15,680.00	\$15,680.00	\$0.00	\$0.00	\$0.00	\$15,680.00	\$0.00	\$0.00
355	Phase III Insulation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
360	Material	\$14,323.00	\$14,323.00	\$0.00	\$0.00	\$0.00	\$14,323.00	\$0.00	\$0.00
365	Labor	\$21,484.00	\$21,484.00	\$0.00	\$0.00	\$0.00	\$21,484.00	\$0.00	\$0.00
370	Phase III Controls	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
375	Material	\$8,449.00	\$8,449.00	\$0.00	\$0.00	\$0.00	\$8,449.00	\$0.00	\$0.00
380	Labor	\$5,632.00	\$5,632.00	\$0.00	\$0.00	\$0.00	\$5,632.00	\$0.00	\$0.00
385	Phase III Balancing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
390	Material	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
395	Labor	\$6,534.00	\$6,534.00	\$0.00	\$0.00	\$0.00	\$6,534.00	\$0.00	\$0.00
400	Coordination Drawings	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
405	Material	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
410	Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
415	VAV's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
420	Material	\$19,040.00	\$19,040.00	\$0.00	\$0.00	\$0.00	\$19,040.00	\$0.00	\$0.00
425	Labor	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
430	Pumps & Accessories	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
435	Material	\$27,000.00	\$27,000.00	\$0.00	\$0.00	\$0.00	\$27,000.00	\$0.00	\$0.00
440	Labor	\$3,000.00	\$3,000.00	\$0.00	\$0.00	\$0.00	\$3,000.00	\$0.00	\$0.00
445	AHU's & HR's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
450	Material	\$265,440.00	\$265,440.00	\$0.00	\$0.00	\$0.00	\$265,440.00	\$0.00	\$0.00
455	Labor	\$50,000.00	\$50,000.00	\$0.00	\$0.00	\$0.00	\$50,000.00	\$0.00	\$0.00
460	Chillers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
465	Material	\$251,000.00	\$251,000.00	\$0.00	\$0.00	\$0.00	\$251,000.00	\$0.00	\$0.00
470	Labor	\$3,880.00	\$3,880.00	\$0.00	\$0.00	\$0.00	\$3,880.00	\$0.00	\$0.00
475	MAU	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
480	Material	\$5,600.00	\$5,600.00	\$0.00	\$0.00	\$0.00	\$5,600.00	\$0.00	\$0.00
485	Labor	\$1,080.00	\$1,080.00	\$0.00	\$0.00	\$0.00	\$1,080.00	\$0.00	\$0.00
490	Cabinet & Unit Heaters	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
495	Material	\$13,440.00	\$13,440.00	\$0.00	\$0.00	\$0.00	\$13,440.00	\$0.00	\$0.00
500	Labor	\$2,000.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$0.00	\$0.00

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G703-1992

# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 PERIOD TO: 07/5521  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN DOR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D + E)						
505	AC Units	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
510	Material	\$7,000.00	\$7,000.00	\$0.00	\$0.00	\$0.00	\$7,000.00	\$0.00	\$0.00
515	Labor	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00
520	VFD's	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
525	Material	\$26,880.00	\$26,880.00	\$0.00	\$0.00	\$0.00	\$26,880.00	\$0.00	\$0.00
530	Labor	\$2,000.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00	\$0.00	\$0.00
535	Exhaust & Return Fans	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
540	Material	\$28,000.00	\$28,000.00	\$0.00	\$0.00	\$0.00	\$28,000.00	\$0.00	\$0.00
545	Labor	\$17,920.00	\$17,920.00	\$0.00	\$0.00	\$0.00	\$17,920.00	\$0.00	\$0.00
550	Louvers & Dampers	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
555	Material	\$35,840.00	\$35,840.00	\$0.00	\$0.00	\$0.00	\$35,840.00	\$0.00	\$0.00
560	Labor	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
565	Air Devices	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
570	Material	\$16,800.00	\$16,800.00	\$0.00	\$0.00	\$0.00	\$16,800.00	\$0.00	\$0.00
575	Labor	\$33,600.00	\$33,600.00	\$0.00	\$0.00	\$0.00	\$33,600.00	\$0.00	\$0.00
580	Punch List/Commissioning & Start-Up	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
585	Material	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00
590	Labor	\$1,000.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$0.00	\$0.00
595	Allowance	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
600	Remaining	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
601	Allowance AA 1	\$4,595.00	\$4,595.00	\$0.00	\$0.00	\$0.00	\$4,595.00	\$0.00	\$0.00
602	Allowance AA 2	\$509.00	\$509.00	\$0.00	\$0.00	\$0.00	\$509.00	\$0.00	\$0.00
603	Allowance AA 3	\$484.00	\$484.00	\$0.00	\$0.00	\$0.00	\$484.00	\$0.00	\$0.00
604	Allowance AA 4	\$910.00	\$910.00	\$0.00	\$0.00	\$0.00	\$910.00	\$0.00	\$0.00
605	Allowance AA 5	\$870.00	\$870.00	\$0.00	\$0.00	\$0.00	\$870.00	\$0.00	\$0.00
606	Allowance AA 6	\$2,632.00	\$2,632.00	\$0.00	\$0.00	\$0.00	\$2,632.00	\$0.00	\$0.00
620	CO #1	\$18,455.00	\$18,455.00	\$0.00	\$0.00	\$0.00	\$18,455.00	\$0.00	\$0.00
625	CO #2	\$1,123.00	\$1,123.00	\$0.00	\$0.00	\$0.00	\$1,123.00	\$0.00	\$0.00
630	CO #3	\$4,968.00	\$4,968.00	\$0.00	\$0.00	\$0.00	\$4,968.00	\$0.00	\$0.00
640	CO #4	\$4,282.00	\$4,282.00	\$0.00	\$0.00	\$0.00	\$4,282.00	\$0.00	\$0.00
645	CO #5	\$2,864.00	\$2,864.00	\$0.00	\$0.00	\$0.00	\$2,864.00	\$0.00	\$0.00
650	CO #6	\$7,933.00	\$7,933.00	\$0.00	\$0.00	\$0.00	\$7,933.00	\$0.00	\$0.00
655	CO #7	\$386.00	\$386.00	\$0.00	\$0.00	\$0.00	\$386.00	\$0.00	\$0.00
660	CO #8	\$1,854.00	\$1,854.00	\$0.00	\$0.00	\$0.00	\$1,854.00	\$0.00	\$0.00

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**CONTINUATION SHEET**

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing Contractor's signed Certification, is attached. In tabulations below, amounts are stated to the nearest dollar. Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.: 0016  
 APPLICATION DATE: 3/25/2009  
 ARCHITECT'S PROJECT NO.: 075521

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		E THIS PERIOD	F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G TOTAL COMPLETED AND STORED TO DATE (D+E+F)	H BALANCE TO FINISH (C-G)	I RETAINAGE (IF VARIABLE) RATE
			FROM PREVIOUS APPLICATION (D+E)						
665	CO #9	\$4,568.00	\$4,568.00	\$0.00	\$0.00	\$0.00	\$4,568.00	\$0.00	\$0.00
670	CO #10	\$1,527.00	\$1,527.00	\$0.00	\$0.00	\$0.00	\$1,527.00	\$0.00	\$0.00
680	CO #11	\$2,187.00	\$2,187.00	\$0.00	\$0.00	\$0.00	\$2,187.00	\$0.00	\$0.00
690	CO #12	\$565.00	\$565.00	\$0.00	\$0.00	\$0.00	\$565.00	\$0.00	\$0.00
700	CO #13	\$409.00	\$409.00	\$0.00	\$0.00	\$0.00	\$409.00	\$0.00	\$0.00
710	CO #14	\$10,060.00	\$10,060.00	\$0.00	\$0.00	\$0.00	\$10,060.00	\$0.00	\$0.00
720	CO #15	\$8,384.00	\$8,384.00	\$0.00	\$0.00	\$0.00	\$8,384.00	\$0.00	\$0.00
730	CO #16	\$1,569.00	\$1,569.00	\$0.00	\$0.00	\$0.00	\$1,569.00	\$0.00	\$0.00
740	CO #17	(\$3,364.00)	\$0.00	(\$3,364.00)	\$0.00	\$0.00	(\$3,364.00)	\$0.00	\$0.00
750	CO #18	\$4,895.00	\$0.00	\$4,895.00	\$0.00	\$0.00	\$4,895.00	\$0.00	\$0.00
		\$2,230,291.00	\$2,228,760.00	\$1,531.00	\$0.00	\$2,230,291.00	100.00%	\$0.00	\$0.00



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**South Avondale School**  
**Supporting Documentation**

# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account  
 multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
5600-3638-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input checked="" type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
--	---	---	--

\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input checked="" type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.



# MERCANTILE SELF DIRECT Ohio Lighting Incentive Application

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.

Is this application:  **NEW** (original) or  **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input checked="" type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Other:		
How did you hear about the program? (check one)		
<input type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input checked="" type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of application	<input type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input type="checkbox"/> Tax ID number for payee	<input type="checkbox"/> Customer/vendor agree to Terms and Conditions
--	---	--	--

Customer Information					
Customer/Business	Cincinnati Public Schools	Contact	Don Elbe		
Phone	614-580-3352	Account Number	5600-3638-01		
Street Address (Where incentive should be mailed)		2651 Burnett Ave			
City	Cincinnati	State	OH	Zip Code	45219
Installation Street Address	636 Prospect Place				
City	Cincinnati	State	OH	Zip Code	45229
E-mail Address					

\*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.

Vendor Information					
Vendor	Plug Smart	Contact	Lucas Dixon		
Phone	614-580-3352	Fax	1-800-518-5576		
Street Address		1275 Kinnear Road Suit 229			
City	Columbus	State	OH	Zip Code	43212
E-mail Address	lucas.dixon@plugsmart.com				

If Duke Energy has questions about this application, who should we contact?  Customer  Vendor

Payment Information		
Who should receive incentive payment?	<input checked="" type="checkbox"/> Customer	<input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of incentive directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000758
	Vendor Tax ID #	26-2368277

Terms and Conditions			
I have read and hereby agree to the Terms & Conditions and Program Requirements.			
Customer Signature	<i>Don Elbe</i>	Vendor Signature	<i>[Signature]</i>
Date	11-23-11	Date	11/23/2011
Title	Utility Mgmt Coord	Title	Project Manager

Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.

**NOTE: All Fixtures must be installed indoors, with the exception of Traffic and Pedestrian Signals and where otherwise noted.**

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800 )	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8 (T8 U tube lamps are eligible for incentives based on the total measured length of the lamp.)</b>							
T8 8ft 2 lamp replacing T12 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$3.50		Hrs.			
T8 8ft 1 lamp replacing T12 8ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 4ft 4 lamp replacing T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$5.50		Hrs.			
T8 4ft 3 lamp replacing T12 4ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 3ft 4 lamp replacing T12 3ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$3.25		Hrs.			
T8 3ft 2 lamp replacing T12 3ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 1 lamp replacing T12 3ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 4 lamp replacing T12 2ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$3.00		Hrs.			
T8 2ft 3 lamp replacing T12 2ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$2.10		Hrs.			
T8 2ft 2 lamp replacing T12 2ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$1.50		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors (heated and cooled enclosed space).
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Eligible T8 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%.
- *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

**NOTE: All Fixtures must be installed indoors, with the exception of Traffic and Pedestrian Signals and where otherwise noted.**

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800 )	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8</b> (T8 U tube lamps are eligible for incentives based on the total measured length of the lamp.)							
T8 HO 8ft 1 lamp replacing T12 HO 8ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 HO 8ft 2 lamp replacing T12 HO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$7.00		Hrs.			
T8 HB 4ft 3L replacing 150-249W HID(retrofit only )	Ballast model# Lamp model #	\$15.00		Hrs.			
T8 HB 4ft 4L a replacing 250-399W HID(retrofit only )	Ballast model# Lamp model #	\$20.00		Hrs.			
T8 HB 4ft 6L replacing 400-999W HID (retrofit only)	Ballast model# Lamp model #	\$25.00		Hrs.			
T8 HB 4ft 8L replacing a 400-999W HID(retrofit only )	Ballast model# Lamp model #	\$20.00		Hrs.			
2 fixtures – T8 HB 4ft 8 Lamp (32W) replacing 1,000 W HID (2 for 1 replacement (retrofit only)	Ballast model# Lamp model #	\$60.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors (heated and cooled enclosed space).
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Eligible T8 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%.
- *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

<b>Fixtures = Lamps + Ballast</b> <i>Fixtures must be permanently retrofitted to the lamp count specified. Reflectors may be utilized to maintain necessary lighting levels.</i>	<b>Ballast and Model Numbers</b>	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced by T8 with delamping</b>							
T8 8ft 1 lamp replacing T12 8 ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$5.00		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.50		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 4 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 2 lamp replacing T12 3 ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 3ft 1 lamp replacing T12 3 ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 2ft 3 lamp replacing T12 2 ft 4 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 2 lamp replacing T12 2 ft 3 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 2 lamp (retrofit only)*	Ballast model# Lamp model #	\$1.50		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps .
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T12 8ft and 4ft fixture replaced by T8 High Performance</b>							
Replace T12 and T12 HO 8' fixtures with High Performance T8 4ft lamps and ballast. Approved lamps and ballasts must be listed on the CEE High performance T8 qualified product list found on the web at <a href="http://www.cee1.org">www.cee1.org</a> .							
High Performance T8 4ft 2 lamp fixture replacing T12 8ft 1 lamp fixture	Ballast model# Lamp model #	\$5.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 8ft 2 lamp fixture	Ballast model# Lamp model #	\$5.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 High Output 8ft 1 lamp fixture	Ballast model# Lamp model #	\$10.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 High Output 8ft 2 lamp fixture	Ballast model# Lamp model #	\$12.50		Hrs.			
High Performance T8 4ft 1 lamp fixture replacing T12 4ft 1 lamp	Ballast model# Lamp model #	\$3.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 4ft 2 lamp	Ballast model# Lamp model #	\$4.00		Hrs.			
High Performance T8 4ft 3 lamp fixture replacing T12 4 ft 3 lamp	Ballast model# Lamp model #	\$6.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 4 ft 4 lamp	Ballast model# Lamp model #	\$8.00		Hrs.			
<b>T-12 4ft fixture replaced by Reduced Wattage T8 Lighting</b>							
Replace standard T12 systems with 4' 25W lamps, 28W lamps, and approved CEE ballast. In order to qualify for incentives, bulbs and ballasts must be from CEE reduced-wattage approved list. To view the CEE Reduced Wattage T8 qualified product list, go to <a href="http://www.cee1.org">www.cee1.org</a> . <b>Note:</b> Reduced Watt T8 compatibility varies; consult manufacturer's literature before specifying products.							
Reduced Wattage T8 4ft 1 lamp of 28W or less & ballast replacing standard T12 4ft 1 lamp – 34 W	Ballast model# Lamp model #	\$4.00		Hrs.			
Reduced Wattage T8 4ft 2 lamp of 28 W or less & ballast replacing standard T12 4 ft 2 lamp – 34 W	Ballast model# Lamp model #	\$5.00		Hrs.			
Reduced Wattage T8 4ft 3 lamp of 28 W or less & ballast replacing standard T12 4 ft 3 lamp – 34 W	Ballast model# Lamp model #	\$7.00		Hrs.			
Reduced Wattage T8 4ft 4 lamp of 28 W or less & ballast replacing standard T12 4 ft 4 lamp – 34 W	Ballast model# Lamp model #	\$9.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Normal or low ballast factor ballasts must be utilized to be eligible.
- Reduced watt T8 lamps should not be used in dimming applications unless the lamp and ballast manufacturers have approved a specific application for dimming or frequent switching. May demonstrate dim light, spiraling, pulsing and other undesirable behavior in cooler temperature rooms and while warming up. System performance varies based on lamp or ballast components.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-12 fixtures replaced with T5 Electronic Ballasts</b>							
T5 4ft (28 watt) 1 lamp replacing T12 4ft 1 lamp (retrofit only)	Ballast model# Lamp model #	\$2.50		Hrs.			
T5 4ft (28 watt) 2 lamp replacing T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$4.00		Hrs.			
T5 4ft (28 watt) 3 lamp replacing T12 4ft 3 lamp (retrofit only)	Ballast model# Lamp model #	\$5.00		Hrs.			
T5 4ft (28 watt) 4 lamp replacing T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$6.00		Hrs.			
T5 HO 4ft 1 (54 watt) lamp replacing 34W T12 4ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$3.00		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 34W T12 4ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 60W T12 8 ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$4.50		Hrs.			
T5 HO 4ft 3 (54 watt) lamp replacing 95W T12 HO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$5.50		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 60W T12 8ft 4 lamp (retrofit only)	Ballast model# Lamp model #	\$6.50		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 95W T12 VHO 8ft 2 lamp (retrofit only)	Ballast model# Lamp model #	\$6.50		Hrs.			
T5 HO HB 2L replacing 150-249W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$15.00		Hrs.			
T5 HO HB 3L replacing 250-399W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$20.00		Hrs.			
T5 HO HB 4L replacing 400-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$25.00		Hrs.			
T5 HO HB 6L replacing 400-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$20.00		Hrs.			
T5 HO HB 8L replacing 750-999W HID (retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$37.50		Hrs.			
2 fixtures – T5 HO HB 6 Lamp replacing 1,000 W HID (2 for 1 retrofit only) Fixture efficiency	Ballast model# Lamp model #	\$60.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-5 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- Eligible T5 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%. *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.

- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
<b>T-8 Fixtures replaced by High Performance T8 Lighting</b> Replace standard T8 systems with High Performance T8 4ft lamps and ballast. Approved lamps and ballasts must be listed on the CEE High performance T8 qualified product list found on the web at <a href="http://www.cee1.org">www.cee1.org</a> .							
T8 4ft High Performance 1 lamp & ballast replacing standard T8 4ft 1 lamp fixture	Ballast model# Lamp model #	\$2.00		Hrs.			
T8 4ft High Performance 2 lamp & ballast replacing standard T8 4ft 2 lamp fixture	Ballast model# Lamp model #	\$3.00		Hrs.			
T8 4ft High Performance 3 lamp & ballast replacing standard T8 4ft 3 lamp fixture	Ballast model# Lamp model #	\$3.10		Hrs.			
T8 4ft High Performance 4 lamp & ballast replacing standard T8 4ft 4 lamp fixture	Ballast model# Lamp model #	\$6.00		Hrs.			
<b>T-8 Fixtures replaced by Reduced Wattage High Performance T8 Lighting</b> Replace standard T8 systems with 4' 25W lamps, 28W lamps approved CEE ballast OR relamp existing T8 fixtures with reduced wattage T8 lamps 28W or less. In order to qualify for incentives bulbs and ballasts must be from CEE reduced-wattage approved list. To view the CEE Reduced Wattage T8 qualified product list, go to <a href="http://www.cee1.org">www.cee1.org</a> . <b>Note:</b> reduced wattage T8 compatibility varies; consult manufacturer's literature before specifying products.							
Reduced Wattage T8 4ft 1 lamp of 28W or less & ballast replacing standard T8 4ft 1 lamp – 32W	Ballast model# Lamp model #	\$2.00		Hrs.			
Reduced Wattage T8 4ft 2 lamp of 28W or less & ballast replacing standard T8 4ft 2 lamp – 32W	Ballast model# Lamp model #	\$3.00		Hrs.			
Reduced Wattage T8 4ft 3 lamp of 28W or less & ballast replacing standard T8 4ft 3 lamp – 32W	Ballast model# Lamp model #	\$5.00		Hrs.			
Reduced Wattage T8 4ft 4 lamp of 28W or less & ballast replacing standard T8 4ft 4 lamp – 32W	Ballast model# Lamp model #	\$6.00		Hrs.			
Relamp T8 4ft 32W fixtures with Reduced Wattage T8 lamps 28 watts or less	Ballast model# Lamp model #	\$2.50 / lamp		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps .
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Reduced watt T8 lamps should not be used in dimming applications unless the lamp and ballast manufacturers have approved a specific application for dimming or frequent switching. May demonstrate dim light, spiraling, pulsing and other undesirable behavior in cooler temperature rooms and while warming up. System performance varies based on lamp or ballast components.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

CFL Lamps and Fixtures	Incentive	Qty	Annual Operating Hours (minimum of 1800)	Equipment Cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
42W 8 lamp HB CFL replacing 400W HID (retrofit only) Model Number	\$25.00		Hrs.			
CFL – Screw In (lamp only) replacing an incandescent (retrofit only) Model Number	\$0.75 / lamp		Hrs.			
CFL – Screw-In dimmable or 3-way bulb replacing an incandescent dimmable or 3-way bulb (retrofit only) Model Number	\$1.00 / lamp		Hrs.			
CFL – Hardwired Fixture replacing incandescent fixture (only pin based CFL's qualify) Model Number	\$5.00 / fixture		Hrs.			
Up to 30W CFL Flood Lamp with Reflector replacing 100W or less incandescent (retrofit only) Model Number	\$1.50 / lamp		Hrs.			
33W – 115W CFL lamp replacing 100 W or more incandescent Model Number	\$2.50 / lamp		Hrs.			
<b>Energy Star LED Lamps</b>						
Replace incandescent bulbs with Energy Star LED (retrofit only) <i>LED lamps must be listed on the Energy Star Qualified Light Bulbs list to qualify.</i> <a href="http://www.energystar.gov/index.cfm?fuseaction=iledl.display_products_pdf">http://www.energystar.gov/index.cfm?fuseaction=iledl.display_products_pdf</a> Model Number	\$5.00 / lamp		Hrs.			
Replace 60-100W incandescent with ENERGY STAR qualified LED downlight 18 Watts or less. (retrofit only) <i>Product must appear on ENERGY STAR Qualified LED Lighting qualified products list, and must contain the word "downlight".</i> <a href="http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pd">http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pd</a> Model Number	\$7.50 / fixture		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.



Metal Halide						
320W Pulse Start Halide replacing 400W HID (retrofit only) **check one <input type="checkbox"/> R <input type="checkbox"/> FE Model Number	\$12.50			Hrs.		
Ceramic Metal Halide						
20W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen of at least 100 W Model Number	\$15.00			Hrs.		
39W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen of at least 150 W Model Number	\$15.00			Hrs.		
50W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen for a total of 195W Model Number	\$15.00			Hrs.		
70W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogen for a total of 225W Model Number	\$15.00			Hrs.		
100W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogens for a total of 270W Model Number	\$15.00			Hrs.		
150W Ceramic Metal Halide fixture replacing <input type="checkbox"/> Incandescent or <input type="checkbox"/> Halogens for a total of 360W Model Number	\$15.00			Hrs.		
25 W or less Ceramic Metal Halide with integral ballast replacing 70 W or greater incandescent flood light Model Number	\$5.00/lamp			Hrs.		

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- Incentives for pulse start metal halide fixtures are for 320w pulse start metal halide lamp/ballast combinations. In a retrofit application, the fixture must be hard-wired ballast retrofit or new fixture. Screw in retrofit lamps do not qualify. Pulse start lamp wattage must be lower than existing probe start lamp wattage.
- Ceramic Metal Halide Incentive is for complete hardwired fixtures containing ceramic metal halide lamp and electronic ceramic metal halide ballast.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Measure	Incentive	Qty	Annual Operating Hrs (minimum of 1800)	Equipment cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
21" Tubular Skylight/Light Tube (at least one light fixture per light tube must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies) Check One ** <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number	\$37.50 / fixture					
LED Exit Signs (replacing or retrofitting existing incandescent or compact fluorescent exit sign) Check one <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number	\$5.00 / fixture					
LED Lighting In Reach-in Freezer or Cooler Case (replacing fluorescent fixtures) Model Number	\$25.00 / door					
LED Case Lighting Sensor Controls Check one <input type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number      Model Number	5.00 / sensor					
Under 500 W connected to sensor check one <input checked="" type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number CM-PDT-10, WV-PDT-16, and WSD-PDT-2P	\$10.00 / sensor	1	2800	\$117.89	8/19/2008	\$10.00
Over 500 W connected to sensor check one <input checked="" type="checkbox"/> R <input type="checkbox"/> NC <input type="checkbox"/> FE Model Number CM-PDT-10, WV-PDT-16, and WSD-PDT-2P	\$20.00 / sensor	23	2800	\$2,711.47	8/19/2008	575

- Replacement must result in energy savings to qualify
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- Tubular Skylight requires at least one light fixture per light tube that must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies)
- LED exit signs shall use 5 watts or less including the battery charger when active. They must meet State Fire Marshal codes and be UL rated.
- Occupancy Sensors (under and over 500) must be either wall, ceiling, or fixture mounted. Rapid or programmed start ballasts are recommended for fluorescent fixtures.
- Occupancy Sensors (under 500W) installed on or built into High Bay fixtures are eligible for incentives.
- LED Lighting in Reach-in Freezer or Cooler Case: Must install a LED lighting system and replace (or in lieu of) a fluorescent lighting system for reach-in refrigerated display case.
- Fluorescent magnetic ballasts cannot be used to power the LED case lighting system. Existing fluorescent fixture end connectors and ballasts must be removed.
- LED case lighting system must be a permanently installed luminaire. LED lamps that install into fluorescent lamp sockets are not eligible for incentives.
- LED Case Lighting Sensor Controls may only be installed with LED lighting systems. End of aisle and individual case sensors qualify.
- Incentive capped at 50% of the equipment cost.
- New construction or replacement of failed equipment must apply for Self Direct Custom program.

Outdoor Lighting	Incentive	Qty	Annual Operating Hrs (minimum of 1800)	Equipment cost (w/o labor)	Date Installed and Operable (mm/yy)	Total Incentive
Exterior LED or Induction fixture replacing up to 175W HID Model Number	\$20 / fixture					
Exterior LED or Induction fixture replacing 176W – 250W HID Model Number	\$25 / fixture					
Exterior LED or Induction fixture replacing 251W – 400W HID Model Number	\$40 / fixture					
Exterior LED or Induction fixture replacing > 400 W HID Model Number	\$75/ fixture					
Garage LED or Induction fixture replacing up to 175 W HID Model Number	\$50/ fixture					
Garage LED or Induction fixture replacing 176W – 250W HID Model Number	\$75/ fixture					
Garage LED or Induction fixture replacing 251W – 400 W HID Model Number	\$125/ fixture					
Garage LED or Induction fixture replacing > 400 W HID Model Number	\$200/ fixture					
LED Auto Traffic Signals (replacing incandescent) Model Number	\$6.25 / lamp					
LED Pedestrian Signals (replacing incandescent) Model Number	\$12.50/ signal					

- Replacement must result in energy savings to qualify
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- or and garage LED and induction lighting must result in a total power **reduction** of 40% or more.
- or and garage LEDs should be listed on either the Energy Star or Design Lights consortium qualifying products lists:
  1. [http://www.energystar.gov/index.cfm?fuseaction=ssl.display\\_products\\_com\\_pdf](http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pdf)
  2. <http://www.designlights.org/documents/NEEPDLCQPL.xls>
- and pedestrian signals using LED lights must replace conventional incandescent signals.
- ve capped at 50% of the equipment cost.
- construction or replacement of failed equipment must apply for Self Direct Custom program.

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## Program Requirements

### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

## Terms and Conditions

*I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. I understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and it's affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties) and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.*

## Incentive Application Instructions

### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at [www.duke-energy.com](http://www.duke-energy.com).
2. Review program and equipment requirements on the incentive application. (Page7)
3. Purchase and install eligible energy-efficient equipment.
4. Complete and submit application for equipment that was installed after 1/1/2008.
5. **The following items must be included to verify projects. If they are not included, it will delay payment of incentive.**
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. **Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.**
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to **assign payment of the incentive directly to the vendor**, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
6. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
8. Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.
8. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.

## Mercantile Self Direct Rebate Program Requirements for Vendor Participation

### Program Overview

- Duke Energy offers its eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
  - Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
    - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
    - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
  - All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
  - Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by emailing the Vendor Participation Agreement (VPA) to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or faxing to **513-419-5572**.

### Guidelines for Vendor Activities

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.
- Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.
- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in its sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit [www.duke-energy.com](http://www.duke-energy.com).



## Mercantile Self Direct Incentive Program

Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*	Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	Thermal Storage	<input type="checkbox"/>	<input type="checkbox"/>
Heating Ventilation & Cooling	<input type="checkbox"/>	<input type="checkbox"/>	Pumps/Motors/VFD's	<input type="checkbox"/>	<input type="checkbox"/>
Food Service	<input type="checkbox"/>	<input type="checkbox"/>	Chillers	<input type="checkbox"/>	<input type="checkbox"/>
Water Heating	<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>
Process Equipment (air compressors, injection molding, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Window Film	<input type="checkbox"/>	<input type="checkbox"/>

\* Check all that apply

Vendors who wish to be listed as a Mercantile Self Direct Incentive Program participating Vendor shall complete this form. A signed copy of this form must be on file at Duke Energy in order for the Vendor to receive incentive payments. Fax form to **513-419-5572** or email to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com).

I have read and understand the Mercantile Self Direct Incentive Program Requirements for Vendor Participation, and I agree to comply with all requirements set forth therein. By signing this agreement, I agree to provide my customers with information and documentation that is true and accurate to the best of my knowledge. I hereby represent and warrant that the Tax ID and Vendor Tax Status provided below are true and accurate. I agree that any confidential information concerning my customer, including but not limited to Duke Energy service account information, will be used for the sole purpose of facilitating the customer's participation in the Mercantile Self Direct Incentive Program. Further, I understand that I am responsible for making sure everyone working for me understands the requirements prior to soliciting customer participation.

Vendor Federal Tax ID Number	
------------------------------	--

To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a third-party vendor. The third-party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the third-party vendor have signed confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

Vendor Tax Status	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Partnership	<input type="checkbox"/> Other
-------------------	--------------------------------------	---	--------------------------------------	--------------------------------

Contact me via	<input type="checkbox"/> Phone	<input type="checkbox"/> E-Mail	<input type="checkbox"/> Mail
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Company Name	
Mailing Address	
City, State, Zip	
Phone/Fax	
Primary E-mail Address	
Secondary E-mail Address	
Vendor Signature	
Title	
Print Name	
Date	

For more information, call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).



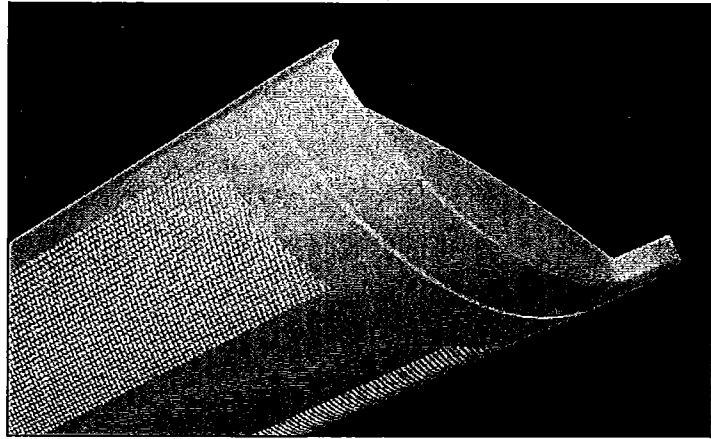
TYPE 134

# FINELITE

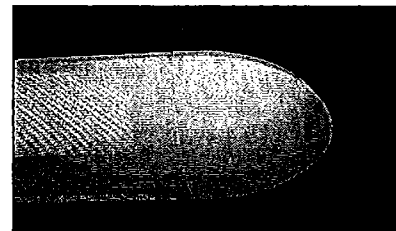
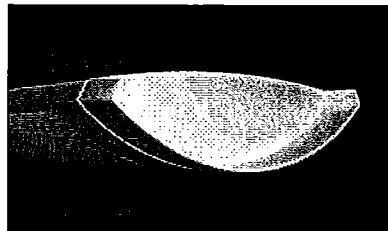
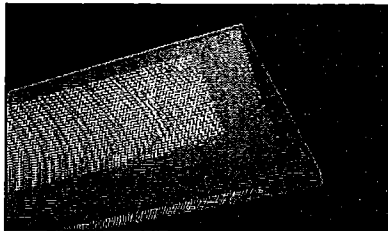
## Series 5 - Technical Sheet

Series 5 is a beautiful, well-proportioned luminaire that proves you never need to sacrifice *style* when choosing *affordable* indirect/direct lighting systems.

The Series 5 is a slim, curving 2.4" by 9.5" low profile lighting fixture with optical performance and mechanical fit that compares favorably to similar luminaires costing much more. The softly radiant down-light portion is achieved by a precision punched 0.062" diameter perforation pattern over most of the fixture surface.

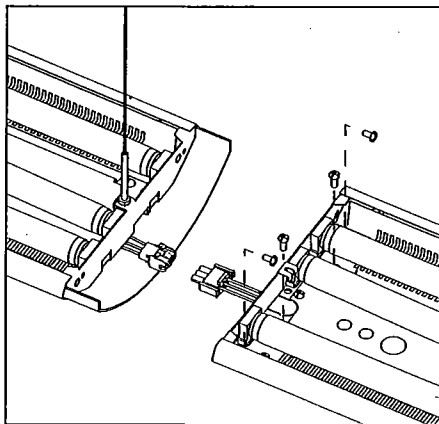


### THREE ENDCAP DESIGNS - FLAT, RECESSED, ROUNDED



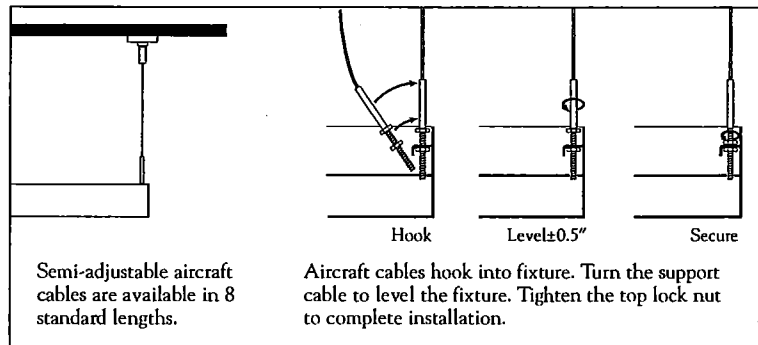
The flat endcap (standard FE) fits tightly against the fixture adding only 0.1" at each end. The recessed endcap (option XE) has a 1/8" reveal and extends 1.5" on each end. The new sculpted endcap (option RE) also has a 1/8" reveal and increases the overall fixture length by 5.675" on each end.

### PRECISION JOINING

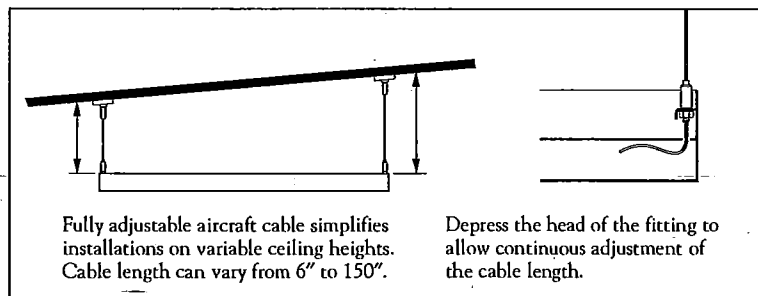


Series 5's new 14 gauge die-formed steel joining aligner (tolerance 0.010") slides easily into the fixture and fits securely against the welded end bracket. Electrical wiring is easy with quick connect plugs, the joining fixture slides onto the aligner, and two screws secure the connection. The aligner provides absolute light leak protection and a strong foundation for the joint.

### STANDARD FIXTURE SUPPORT



### OPTIONAL ADJUSTABLE FIXTURE SUPPORT



# FINELITE

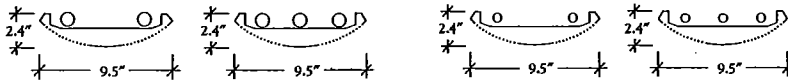
## Series 5 - Technical Sheet

The Series 5 fixture is available in the following lengths.

Modular section lengths offer standard 4'0" and 8'0" support spacing that aligns with grid ceiling systems.

ENDCAP KEY			
Code	FE	RE	XE
Style	Flat (STD)	Rounded	Recessed
Added length at each end	0.1"	5.675"	1.5"

### PERF OR INDIRECT - T8, T5HO



Improved photometrics with new optional SPEC reflector system.

### SPECIFICATIONS

**CONSTRUCTION:** 20 gauge die-formed steel body with 14 gauge die-formed internal joiner system, plug-together wiring standard. All components hard tooled to tolerances of 0.005".

Precision-punched 0.062" diameter perforations cover the bottom side of the fixture in two parallel columns.

**ENDCAPS:** Flat Endcap (FE) standard, 20 gauge die-formed steel endcaps, adds 0.1" at each end.

*Optional: Recessed Endcap (XE), die-cast aluminum Recessed Endcap with 1/8" reveal. Recessed endcap adds 1.5" each end.*

*Optional: Rounded Endcap (RE), injection molded sculpted endcap with 1/8" reveal. No exposed fasteners, holes or knockouts. Rounded Endcap adds 5.675" at each end.*

**REFLECTORS:** Die-formed pre-painted aluminum, 91% reflective white. Virgin acrylic-

UV stabilized lens diffuser over perforations is standard. *Options: Extended performance reflector (EP) with 95% reflective specular components; Fully Specular Reflector System (SPEC) with specular slotted side reflectors.*

**ACCESSORY:** *Optional Dust Cover, clear acrylic. NOTE: Will significantly impact light level performance. Consult Factory.*

**ELECTRICAL:** 120 or 277 volt prewired. Plug-together wiring standard. Fixture and electrical components UL and C-UL listed and fixture will bear UL and C-UL labels. *Optional Adders: Dual circuit, emergency circuits, low profile emergency battery packs.*

**LAMPING:** Series 5 perforated fixtures available in 2 or 3 lamp cross sections with T8 or T5HO lamps. Series 5 indirect fixtures available in 1, 2, or 3 lamp cross sections with T8 or T5HO lamps.

**BALLAST:** Electronic instant start low profile ballast <20% THD standard. *Optional*

*Adders: Rapid Start, High Output T5.*

**MOUNTING OPTIONS:** Semi-adjustable aircraft cable ( $\pm 0.5"$ ) in lengths of 12", 15", 18", 21", 24", 27", 30", 36". *Optional Adders: Fully adjustable aircraft cable in lengths up to 150". Rigid stems.*

**SUPPORT CABLES:** Stainless steel with plated hardware.

**FEED:** 18 gauge straight cord. 14 gauge feed cord used when fixture current exceeds 6 amps. *Optional Adders: Coil Cord Feed, Rigid Stem Feed.*

**FINISHES:** Finelite White standard. 185 colors available from Tiger Drylac's RAL color chart for a nominal adder.

**LENGTHS:** 4' and 8' section lengths can be combined to make longer runs.

**WEIGHT:** Fixture weight = 2.5 lb/ft.

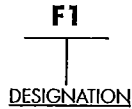
ORDERING INFORMATION	
Quantity _____	2 - S5-P - .32 - 2T8 - SC - 91W - 277 - AC 18 - FE
Finelite Series 5 (P-Perforated, I-Indirect) _____	
Run length (4', 8' multiples standard) _____	
Number of lamps in cross section (2, 3 T8, 1, 2, 3 T5-HO) _____	
Circuiting (SC-single circuit, DC-dual circuit) _____	
Reflector System (91W, EP, SPEC) _____	
Voltage (120, 277, 347 Volts) _____	
Mounting (AC/FA/Stem) _____	
Endcap FE (flat), RE (rounded), XE (recessed) _____	

# FLUORESCENT OPTIONS

## FLEX

(FACTORY WIRED)

SUFFIX TO CATALOG NUMBER:



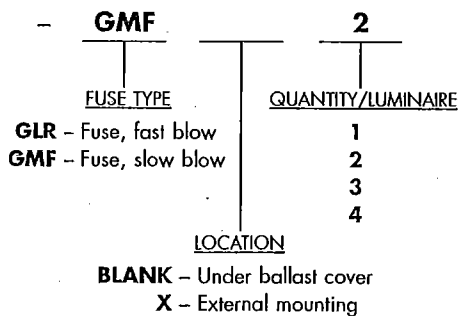
Other by quotation only.

F1	3/8" Diameter, three wires (Black, White, Green), 18 gauge, 6'
F2	3/8" Diameter, four wires (Black, White, Red, Green), 18 gauge, 6'
F2/SW	3/8" Diameter, five wires (Black, White, Red, Blue, Green), 18 gauge, 6'
F3	1/2" Diameter, four wires (Black, White, Green, Brown), 18 gauge, 6'
F4	1/2" Diameter, four wires (Black, White, Green, Brown), 14 gauge, 6'
F5	1/2" Diameter, three wires (Black, White, Green), 12 gauge, 6'
F6	1/2" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
F7	3/8" Diameter, three wires (Brown, White, Green), 14 gauge, 6'
F8	3/8" Diameter, three wires (Black, White, Green), 14 gauge, 6'
F9	3/8" Diameter, three wires (Black, White, Green), 12 gauge, 6'
F10	1/2" Diameter, three wires (Black, White, Green), 14 gauge, 6'
F11	3/8" Diameter, four wires (Black, White, Red, Green), 14 gauge, 6'
F12	3/8" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
F13	1/2" Diameter, three wires (Black, White, Green), 18 gauge, 6'

All of the above include two straight connectors. Consult factory representative for other types.

**FUSING** FOR FLOURESCENT LUMINAIRES ONLY  
(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:



NUMBER:

EXAMPLE: -GLR1=One GLR fuse per fixture mounted under ballast cover.

Contact Factory Representative for other types.

## EMERGENCY FLUORESCENT BALLAST

(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:



Other by quotation only.

E1	DEB-1 Standard Emergency Ballast*, for T8/T12/CF lamps, 350-450 lumens
E1LP	DEB-1LP Low Profile Standard Emergency Ballast, for F32T8 lamp, 450 lumens
E3	DEB-3 High Lumen Emergency Ballast*, for T8/T12/CF lamps, 3000 lumens with F32T8
E5	DEB-5 Premium Emergency Ballast*, for T8/T12/CF lamps, 1350 lumens with F32T8
E5LP	DEB-5LP Low Profile Premium Emergency Ballast*, for T8/T12/CF lamps, 1375-1400 lumens with F32T8
E5ST	DEB-5ST Premium Emergency Ballast with self-test*, for T8/T12/CF lamps, 1350 lumens with F32T8
E6	DEB-6LP Low Profile Emergency Ballast*, for T5/T5HO/T8/CF lamps, 1230 lumens with F54T5HO
E7	DEB-7B Specification Emergency Ballast*, for T8/T12/CF lamps, 600-700 lumens
E7LP	DEB-7LP Low Profile Specification Emergency Ballast*, for T5/T5HO/T8/CF lamps, 700 lumens with F54T5HO
E7W	DEB-7W Emergency Ballast (wet location)*, for T8/T12/CF lamps, 600-700 lumens
ESW	DEB-5W Premium Emergency Ballast (wet location)*, for T8/T12/CF lamps, 1350 lumens with F32T8
E65	DEB-65 Emergency Ballast (for hazardous location luminaires)*, for T8/T12/CF lamps, 350-700 lumens

\*See pages 533-535 for detailed emergency ballast info.

## LAMPS

(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:

LPT835

DESIGNATION

Other by quotation only.

LPESCW	Generic, T12 Cool White, Energy Saving
LPESWW	Generic, T12 Warm White, Energy Saving
LPCWX	Generic, T12 Cool White, DELUXE
LPT730	Generic, T8 730 3000K 70+ CRI
LPT735	Generic, T8 735 3500K 70+ CRI
LPT741	Generic, T8 741 4100K 70+ CRI
LPT830	Generic, T8/T5/T5HO 830 3000K 80+ CRI
LPT835	Generic, T8/T5/T5HO 835 3500K 80+ CRI
LPT841	Generic, T8/T5/T5HO 841 4100K 80+ CRI
LPT830HL	Generic, high lumen T8 830 3000K 80+ CRI
LPT835HL	Generic, high lumen T8 835 3500K 80+ CRI
LPT841HL	Generic, high lumen T8 841 4100K 80+ CRI

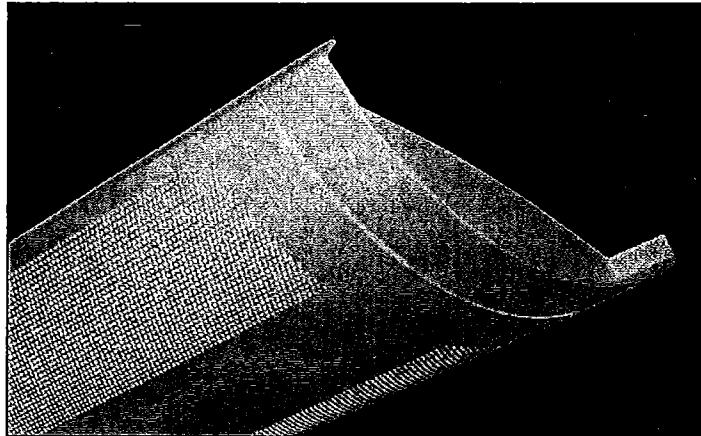
\*For lamps by a specific manufacturer, substitute P for Philips, G for G.E., or S for Sylvania in place of the T (example: LPP735).

# FINELITE

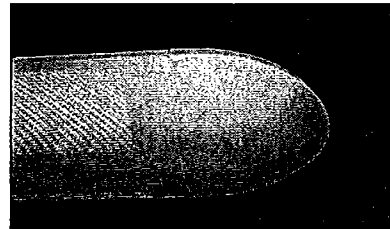
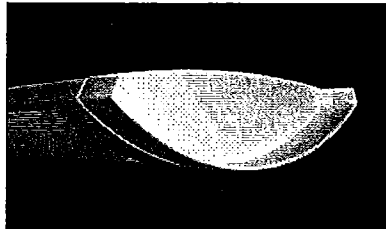
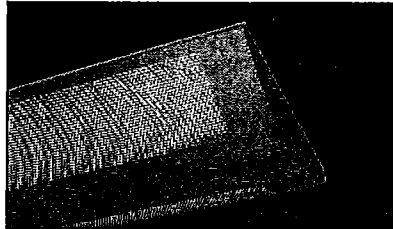
## Series 5 - Technical Sheet

**Series 5** is a beautiful, well-proportioned luminaire that proves you never need to sacrifice *style* when choosing *affordable* indirect/direct lighting systems.

The Series 5 is a slim, curving 2.4" by 9.5" low profile lighting fixture with optical performance and mechanical fit that compares favorably to similar luminaires costing much more. The softly radiant down-light portion is achieved by a precision punched 0.062" diameter perforation pattern over most of the fixture surface.

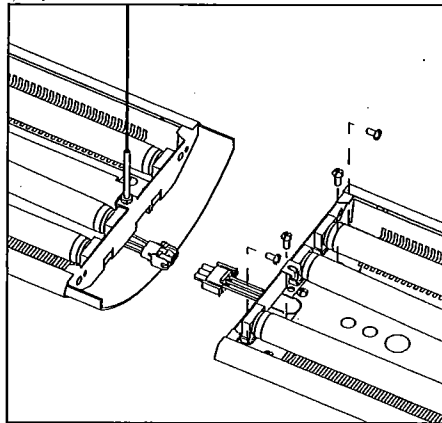


### THREE ENDCAP DESIGNS - FLAT, RECESSED, ROUNDED



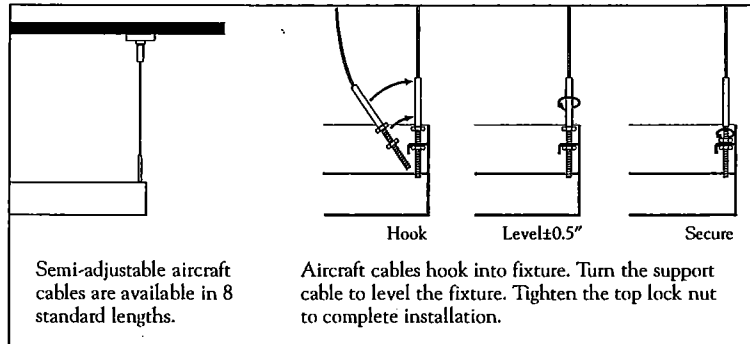
The flat endcap (standard FE) fits tightly against the fixture adding only 0.1" at each end. The recessed endcap (option XE) has a 1/8" reveal and extends 1.5" on each end. The new sculpted endcap (option RE) also has a 1/8" reveal and increases the overall fixture length by 5.675" on each end.

### PRECISION JOINING

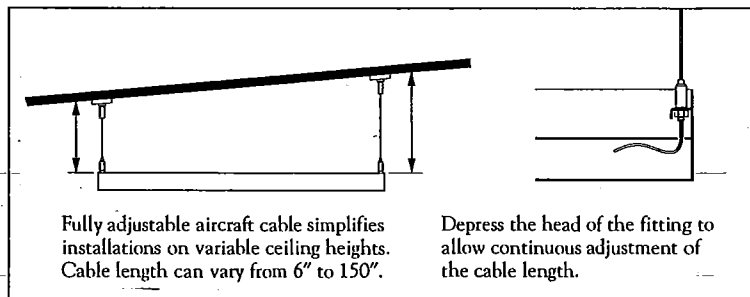


Series 5's new 14 gauge die-formed steel joining aligner (tolerance 0.010") slides easily into the fixture and fits securely against the welded end bracket. Electrical wiring is easy with quick connect plugs, the joining fixture slides onto the aligner, and two screws secure the connection. The aligner provides absolute light leak protection and a strong foundation for the joint.

### STANDARD FIXTURE SUPPORT



### OPTIONAL ADJUSTABLE FIXTURE SUPPORT

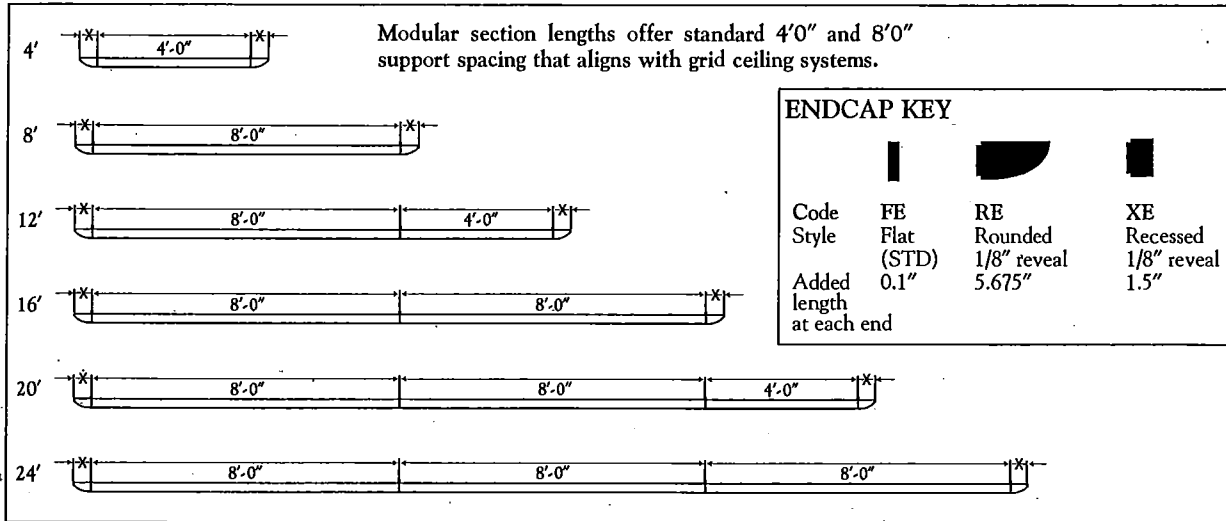


KSID: 560.09/00

# FINELITE

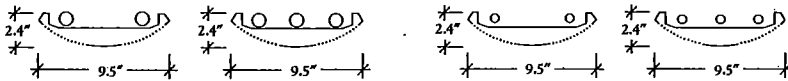
## Series 5 - Technical Sheet

The Series 5 fixture is available in the following lengths.



ENDCAP KEY			
Code	FE	RE	XE
Style	Flat (STD)	Rounded	Recessed
Added length at each end	0.1"	5.675"	1.5"

### PERF OR INDIRECT - T8, T5HO



Improved photometrics with new optional SPEC reflector system.

### SPECIFICATIONS

**CONSTRUCTION:** 20 gauge die-formed steel body with 14 gauge die-formed internal joiner system, plug-together wiring standard. All components hard tooled to tolerances of 0.005".

Precision-punched 0.062" diameter perforations cover the bottom side of the fixture in two parallel columns.

**ENDCAPS:** Flat Endcap (FE) standard, 20 gauge die-formed steel endcaps, adds 0.1" at each end.

*Optional:* Recessed Endcap (XE), die-cast aluminum Recessed Endcap with 1/8" reveal. Recessed endcap adds 1.5" each end.

*Optional:* Rounded Endcap (RE), injection molded sculpted endcap with 1/8" reveal. No exposed fasteners, holes or knockouts. Rounded Endcap adds 5.675" at each end.

**REFLECTORS:** Die-formed pre-painted aluminum, 91% reflective white. Virgin acrylic-

UV stabilized lens diffuser over perforations is standard. Options: Extended performance reflector (EP) with 95% reflective specular components; Fully Specular Reflector System (SPEC) with specular slotted side reflectors.

**ACCESSORY:** Optional Dust Cover, clear acrylic. NOTE: Will significantly impact light level performance. Consult Factory.

**ELECTRICAL:** 120 or 277 volt prewired. Plug-together wiring standard. Fixture and electrical components UL and C-UL listed and fixture will bear UL and C-UL labels. *Optional Adders:* Dual circuit, emergency circuits, low profile emergency battery packs.

**LAMPING:** Series 5 perforated fixtures available in 2 or 3 lamp cross sections with T8 or T5HO lamps. Series 5 indirect fixtures available in 1, 2, or 3 lamp cross sections with T8 or T5HO lamps.

**BALLAST:** Electronic instant start low profile ballast <20% THD standard. *Optional*

*Adders: Rapid Start, High Output T5.*

**MOUNTING OPTIONS:** Semi-adjustable aircraft cable ( $\pm 0.5"$ ) in lengths of 12", 15", 18", 21", 24", 27", 30", 36". *Optional Adders:* Fully adjustable aircraft cable in lengths up to 150". Rigid stems.

**SUPPORT CABLES:** Stainless steel with plated hardware.

**FEED:** 18 gauge straight cord. 14 gauge feed cord used when fixture current exceeds 6 amps. *Optional Adders:* Coil Cord Feed, Rigid Stem Feed.

**FINISHES:** Finelite White standard. 185 colors available from Tiger Drylac's RAL color chart for a nominal adder.

**LENGTHS:** 4' and 8' section lengths can be combined to make longer runs.

**WEIGHT:** Fixture weight = 2.5 lb/ft.

ORDERING INFORMATION	
Quantity _____	
Finelite Series 5 (P-Perforated, I-Indirect) _____	
Run length (4', 8' multiples standard) _____	
Number of lamps in cross section (2, 3 T8, 1, 2, 3 T5-HO) _____	
Circuiting (SC-single circuit, DC-dual circuit) _____	
Reflector System (91W, EP, SPEC) _____	
Voltage (120, 277, 347 Volts) _____	
Mounting (AC/FA/Stem) _____	
Endcap FE (flat), RE (rounded), XE (recessed) _____	

*EB10R*

*S5-P - 32' - 3 - T8 - SC - 91W - 277 - AC 18 - FE*

# FLUORESCENT OPTIONS

## FLEX

(FACTORY WIRED)

**SUFFIX TO CATALOG NUMBER:**

**F1**

DESIGNATION

Other by quotation only.

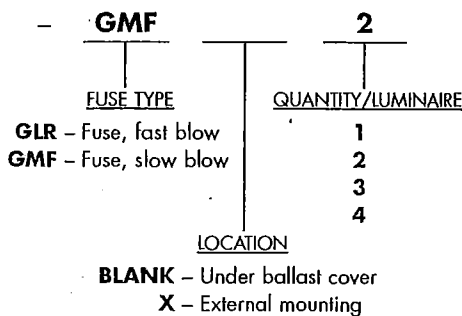
F1	3/8" Diameter, three wires (Black, White, Green), 18 gauge, 6'
F2	3/8" Diameter, four wires (Black, White, Red, Green), 18 gauge, 6'
F2/5W	3/8" Diameter, five wires (Black, White, Red, Blue, Green), 18 gauge, 6'
F3	1/2" Diameter, four wires (Black, White, Green, Brown), 18 gauge, 6'
F4	1/2" Diameter, four wires (Black, White, Green, Brown), 14 gauge, 6'
F5	1/2" Diameter, three wires (Black, White, Green), 12 gauge, 6'
F6	1/2" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
F7	3/8" Diameter, three wires (Brown, White, Green), 14 gauge, 6'
F8	3/8" Diameter, three wires (Black, White, Green), 14 gauge, 6'
F9	3/8" Diameter, three wires (Black, White, Green), 12 gauge, 6'
F10	1/2" Diameter, three wires (Black, White, Green), 14 gauge, 6'
F11	3/8" Diameter, four wires (Black, White, Red, Green), 14 gauge, 6'
F12	3/8" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
F13	1/2" Diameter, three wires (Black, White, Green), 18 gauge, 6'

All of the above include two straight connectors. Consult factory representative for other types.

## FUSING FOR FLOURESCENT LUMINAIRES ONLY

(INSTALLED IN LUMINAIRE)

**SUFFIX TO CATALOG NUMBER:**



**NUMBER:**

EXAMPLE: **-GLR1** = One GLR fuse per fixture mounted under ballast cover.

Contact Factory Representative for other types.

## EMERGENCY FLUORESCENT BALLAST

(INSTALLED IN LUMINAIRE)

**SUFFIX TO CATALOG NUMBER:**

**E7**

DESIGNATION

Other by quotation only.

E1	DEB-1 Standard Emergency Ballast*, for T8/T12/CF lamps, 350-450 lumens
E1LP	DEB-1LP Low Profile Standard Emergency Ballast, for F32T8 lamp, 450 lumens
E3	DEB-3 High Lumen Emergency Ballast*, for T8/T12/CF lamps, 3000 lumens with F32T8
E5	DEB-5 Premium Emergency Ballast*, for T8/T12/CF lamps, 1350 lumens with F32T8
E5LP	DEB-5LP Low Profile Premium Emergency Ballast*, for T8/T12/CF lamps, 1375-1400 lumens with F32T8
E5ST	DEB-5ST Premium Emergency Ballast with self-test*, for T8/T12/CF lamps, 1350 lumens with F32T8
E6	DEB-6LP Low Profile Emergency Ballast*, for T5/T5HO/T8/CF lamps, 1230 lumens with F54T5HO
E7	DEB-7B Specification Emergency Ballast*, for T8/T12/CF lamps, 600-700 lumens
E7LP	DEB-7LP Low Profile Specification Emergency Ballast*, for T5/T5HO/T8/CF lamps, 700 lumens with F54T5HO
E7W	DEB-7W Emergency Ballast (wet location)*, for T8/T12/CF lamps, 600-700 lumens
E5W	DEB-5W Premium Emergency Ballast (wet location)*, for T8/T12/CF lamps, 1350 lumens with F32T8
E65	DEB-65 Emergency Ballast (for hazardous location luminaires)*, for T8/T12/CF lamps, 350-700 lumens

\*See pages 533-535 for detailed emergency ballast info.

## LAMPS

(INSTALLED IN LUMINAIRE)

**SUFFIX TO CATALOG NUMBER:**

**LPT835**

DESIGNATION

Other by quotation only.

LPESCW	Generic, T12 Cool White, Energy Saving
LPESWW	Generic, T12 Warm White, Energy Saving
LPCWX	Generic, T12 Cool White, DELUXE
LPT730*	Generic, T8 730 3000K 70+ CRI
LPT735*	Generic, T8 735 3500K 70+ CRI
LPT741*	Generic, T8 741 4100K 70+ CRI
LPT830	Generic, T8/T5/T5HO 830 3000K 80+ CRI
LPT835*	Generic, T8/T5/T5HO 835 3500K 80+ CRI
LPT841*	Generic, T8/T5/T5HO 841 4100K 80+ CRI
LPT830HL*	Generic, high lumen T8 830 3000K 80+ CRI
LPT835HL*	Generic, high lumen T8 835 3500K 80+ CRI
LPT841HL*	Generic, high lumen T8 841 4100K 80+ CRI

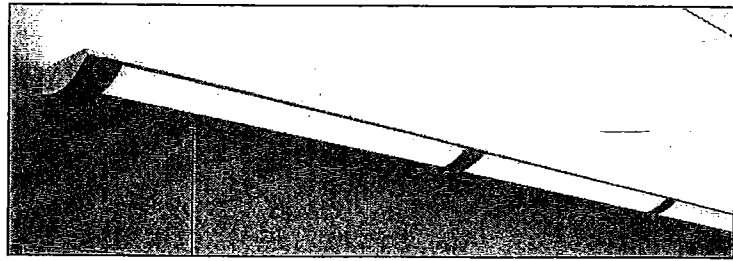
\*For lamps by a specific manufacturer, substitute P for Philips, G for G.E., or S for Sylvania in place of the T (example: LPP735).

PS5

# FINELITE

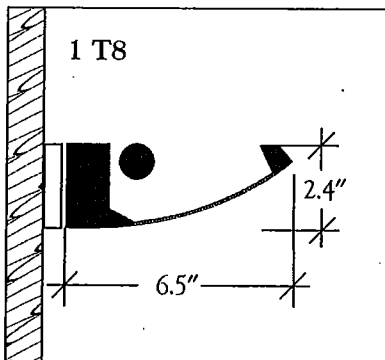
## Series 5 Wall Mount - Technical Sheet

Series 5 Wall Mount provides 94% uplight and 6% downlight in a beautifully curved, low profile fixture. The 0.062" precision punched perforations follow the curve of the fixture and make an attractive display wherever it is installed.

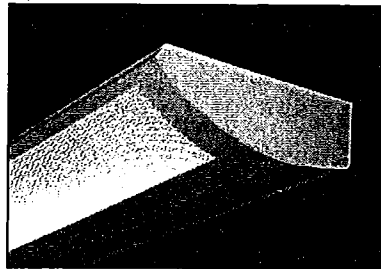


Series 5 Wall Mount is available in 1 or 2 T8 lamp cross sections as well as 1 or 2 lamp T5 and 1 or 2 lamp T5-HO cross sections with either flat endcaps (standard), or optional rounded endcaps.

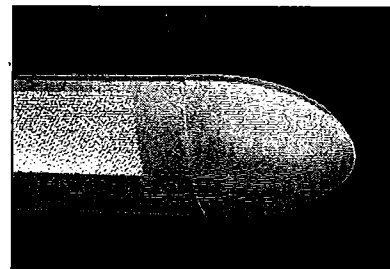
### 1 OR 2 LAMP T8, T5, T5-HO



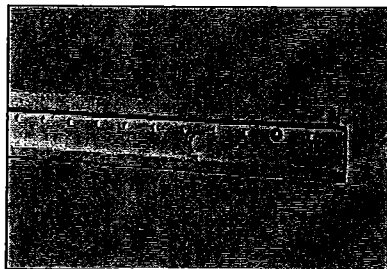
### STANDARD FLAT



### ROUNDED ENDCAP

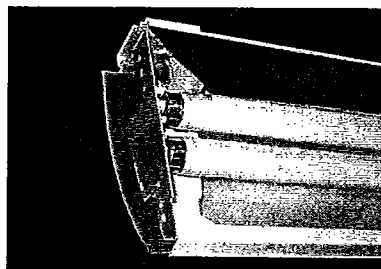


### MOUNTING BRACKET



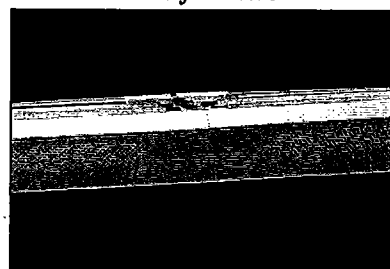
Continuous mounting bracket provides a secure edge for the fixture to hang from.

### ALIGNER BRACKET



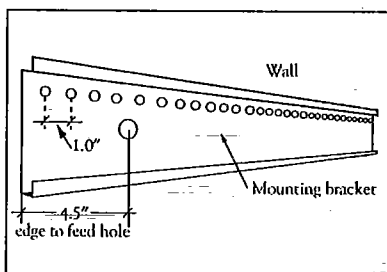
14-gauge die-formed steel aligner plate slides easily into fixture for seamless light leak protection.

### PRECISION JOINTS



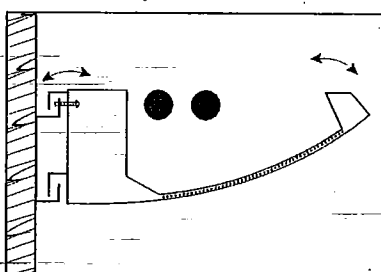
Joints are seamless and tight without light loss leaks.

### MOUNTING BRACKET



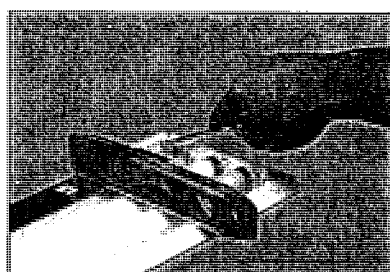
Continuous hole pattern allows easy attachment to wall studs. Fixture fits securely directly against wall.

### RACK ADJUSTMENT



Unique rack adjustment provides secure attachment to the wall and easy leveling.

### LEVELING DETAIL

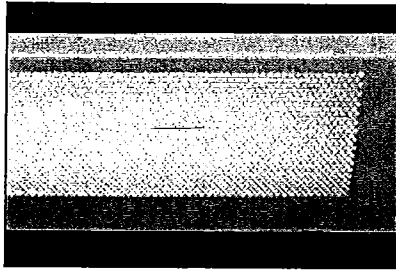


Fixture is leveled by adjusting a screw at each end and at 4' intervals along the length of the run.

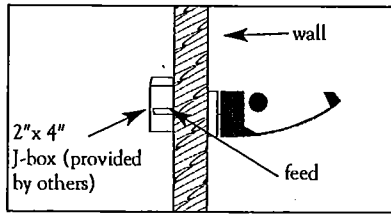
# FINELITE

## Series 5 Wall Mount - Technical Sheet

### PERFORATION CLOSE-UP

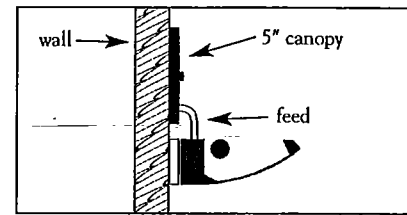


### STANDARD FEED



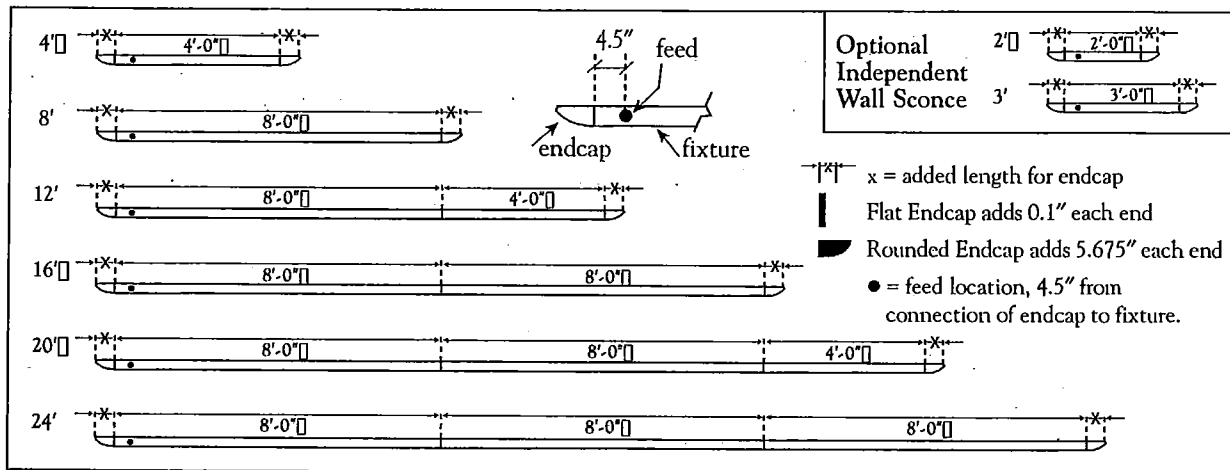
The feed passes through the wall to a standard 2" x 4" J-box (provided by others).

### OPTIONAL FEED



The feed is wall mounted in a standard 5" canopy and connected to the fixture.

The Series 5 Wall Mount fixture is available in the following lengths. Additional 4' or 8' segments can be added to create runs as long as required. Fixture also available as an independent 2' or 3' wall sconce.



### SPECIFICATIONS

**CONSTRUCTION:** 20 gauge die-formed steel body with 14 gauge die-formed internal joiner system, plug-together wiring standard. All components hard tooled to tolerances of 0.005".

Precision-punched 0.062" diameter perforations cover the bottom side of the fixture in one column.

**ENDCAPS:** Flat Endcap (FE) standard, 20 gauge die-formed steel endcaps, add 0.1" at each end.

*Optional: Rounded Endcap (RE), injection molded sculpted endcap with 0.100" reveal. No exposed fasteners, holes, or knockouts. Rounded Endcap adds 5.675" at each end.*

**REFLECTORS:** Die-formed, specular reflector system (SPEC). Virgin acrylic-UV stabilized lens diffuser over perforations is standard.

**ACCESSORY:** *Optional Dust Cover, clear acrylic. NOTE: Will significantly impact light level performance. Consult factory.*

**ELECTRICAL:** 120 or 277 volts prewired. Plug-together wiring standard. Fixture and electrical components UL/C-UL listed and fixture will bear UL/C-UL labels. *Optional Adders: 347 volt prewired, dual circuit, emergency circuits, emergency battery packs.*

**LAMPING:** Available in 1 or 2 lamp T8, T5, or T5-HO lamp cross sections. *Consult factory.*

**MOUNTING:** Fixture hangs securely from mounting bracket fastened directly to wall. Mounting bracket in 2', 3', 4', 8' lengths. Fixture hangs 0.5" from wall.

**FEED:** 18 gauge wire. 14 gauge wire used when fixture current exceeds 6 amps. *Optional feed uses cord.*

**FINISHES:** Finelite White standard. 185 colors available from Tiger Drylac's RAL color chart for a nominal adder.

**LENGTHS:** 4' and 8' section lengths can be combined to make longer runs. *Optional: Independent 2' or 3' wall sconce. Consult factory.*

**WEIGHT:** Fixture weight = 2 lb/ft.

ORDERING INFORMATION		6 (2) - S5WM - 4'-52' - 2T8 - SC - SPEC - 277 - FE					
Quantity	_____	_____	_____	_____	_____	_____	_____
Finelite Series 5 Wall Mount	_____	_____	_____	_____	_____	_____	_____
Run length (4', 8' multiples standard, 2', 3' wall sconce)	_____	_____	_____	_____	_____	_____	_____
Number of lamps in cross section (1, 2 T8, 1, 2 T5, 1, 2 T5-HO)	_____	_____	_____	_____	_____	_____	_____
Circuiting (SC-single circuit, DC-dual circuit)	_____	_____	_____	_____	_____	_____	_____
Reflector System (SPEC)	_____	_____	_____	_____	_____	_____	_____
Voltage (120, 277, 347 Volts)	_____	_____	_____	_____	_____	_____	_____
Endcap FE (flat) RE (rounded)	_____	_____	_____	_____	_____	_____	_____

EBDR W/841  
LAMP



# FLUORESCENT OPTIONS

## FLEX

(FACTORY WIRED)

SUFFIX TO CATALOG NUMBER:

**F1**

DESIGNATION

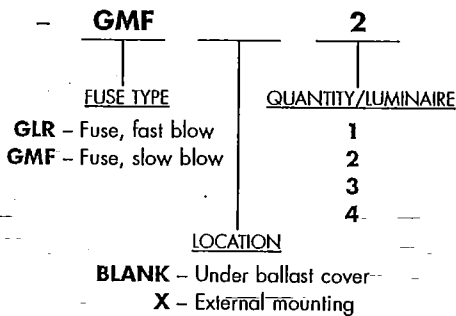
Other by quotation only.

<b>F1</b>	3/8" Diameter, three wires (Black, White, Green), 18 gauge, 6'
<b>F2</b>	3/8" Diameter, four wires (Black, White, Red, Green), 18 gauge, 6'
<b>F2/5W</b>	3/8" Diameter, five wires (Black, White, Red, Blue, Green), 18 gauge, 6'
<b>F3</b>	1/2" Diameter, four wires (Black, White, Green, Brown), 18 gauge, 6'
<b>F4</b>	1/2" Diameter, four wires (Black, White, Green, Brown), 14 gauge, 6'
<b>F5</b>	1/2" Diameter, three wires (Black, White, Green), 12 gauge, 6'
<b>F6</b>	1/2" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
<b>F7</b>	3/8" Diameter, three wires (Brown, White, Green), 14 gauge, 6'
<b>F8</b>	3/8" Diameter, three wires (Black, White, Green), 14 gauge, 6'
<b>F9</b>	3/8" Diameter, three wires (Black, White, Green), 12 gauge, 6'
<b>F10</b>	1/2" Diameter, three wires (Black, White, Green), 14 gauge, 6'
<b>F11</b>	3/8" Diameter, four wires (Black, White, Red, Green), 14 gauge, 6'
<b>F12</b>	3/8" Diameter, four wires (Black, White, Red, Green), 12 gauge, 6'
<b>F13</b>	1/2" Diameter, three wires (Black, White, Green), 18 gauge, 6'

All of the above include two straight connectors. Consult factory representative for other types.

**FUSING** FOR FLOURESCENT LUMINAIRES ONLY  
(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:



NUMBER:

EXAMPLE: **-GLR1**=One GLR fuse per fixture mounted under ballast cover.

Contact Factory Representative for other types.

## EMERGENCY FLUORESCENT BALLAST

(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:

**E7**

DESIGNATION

Other by quotation only.

<b>E1</b>	DEB-1 Standard Emergency Ballast*, for T8/T12/CF lamps, 350-450 lumens
<b>E1LP</b>	DEB-1LP Low Profile Standard Emergency Ballast, for F32T8 lamp, 450 lumens
<b>E3</b>	DEB-3 High Lumen Emergency Ballast*, for T8/T12/CF lamps, 3000 lumens with F32T8
<b>E5</b>	DEB-5 Premium Emergency Ballast*, for T8/T12/CF lamps, 1350 lumens with F32T8
<b>E5LP</b>	DEB-5LP Low Profile Premium Emergency Ballast*, for T8/T12/CF lamps, 1375-1400 lumens with F32T8
<b>E5ST</b>	DEB-5ST Premium Emergency Ballast with self-test*, for T8/T12/CF lamps, 1350 lumens with F32T8
<b>E6</b>	DEB-6LP Low Profile Emergency Ballast*, for T5/T5HO/T8/CF lamps, 1230 lumens with F54T5HO
<b>E7</b>	DEB-7B Specification Emergency Ballast*, for T8/T12/CF lamps, 600-700 lumens
<b>E7LP</b>	DEB-7LP Low Profile Specification Emergency Ballast*, for T5/T5HO/T8/CF lamps, 700 lumens with F54T5HO
<b>E7W</b>	DEB-7W Emergency Ballast (wet location)*, for T8/T12/CF lamps, 600-700 lumens
<b>E5W</b>	DEB-5W Premium Emergency Ballast (wet location)*, for T8/T12/CF lamps, 1350 lumens with F32T8
<b>E65</b>	DEB-65 Emergency Ballast (for hazardous location luminaires)*, for T8/T12/CF lamps, 350-700 lumens

\*See pages 533-535 for detailed emergency ballast info.

## LAMPS

(INSTALLED IN LUMINAIRE)

SUFFIX TO CATALOG NUMBER:

**LPT835**

DESIGNATION

Other by quotation only.

<b>LPESCW</b>	Generic, T12 Cool White, Energy Saving
<b>LPESWW</b>	Generic, T12 Warm White, Energy Saving
<b>LPGWX</b>	Generic, T12 Cool White, DELUXE
<b>LPT730*</b>	Generic, T8 730 3000K 70+ CRI
<b>LPT735*</b>	Generic, T8 735 3500K 70+ CRI
<b>LPT741*</b>	Generic, T8 741 4100K 70+ CRI
<b>LPT830*</b>	Generic, T8/T5/T5HO 830 3000K 80+ CRI
<b>LPT835*</b>	Generic, T8/T5/T5HO 835 3500K 80+ CRI
<b>LPT841*</b>	Generic, T8/T5/T5HO 841 4100K 80+ CRI
<b>LPT830HL*</b>	Generic, high lumen T8 830 3000K 80+CRI
<b>LPT835HL*</b>	Generic, high lumen T8 835 3500K 80+CRI
<b>LPT841HL*</b>	Generic, high lumen T8 841 4100K 80+CRI

\*For lamps by a specific manufacturer, substitute **P** for Philips, **G** for G.E., or **S** for Sylvania in place of the **T** (example: **LPP735**).

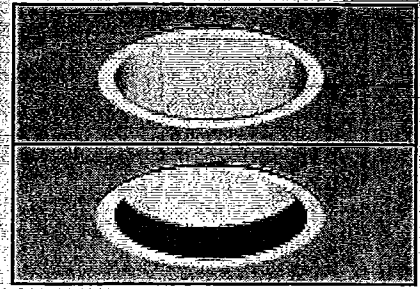
# OM8250PAR38

8" PAR Downlights

CAT. NO: *OM8-250PAR38-CS-FB*

TYPE: PS7

PROJECT: SOUTH AVONDALE SCHOOL



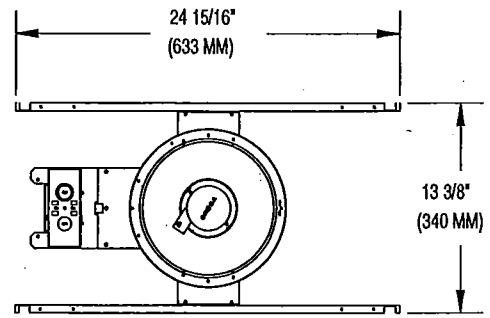
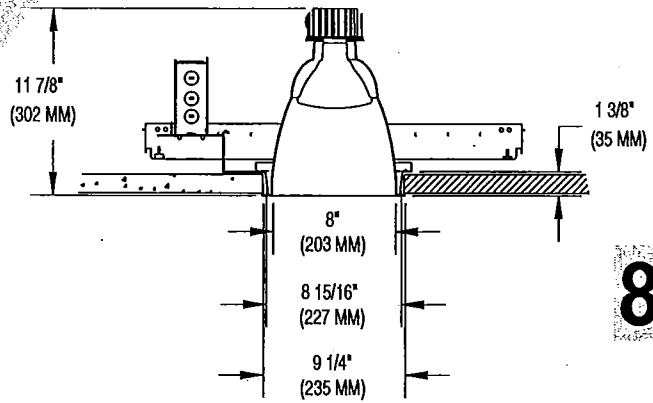
## PRODUCT INFORMATION

### Applications

A low brightness open reflector downlight for use with PAR38 incandescent lamps. Provides broad, uniform light distribution with high efficiency for general illumination of areas such as lobbies, reception areas, schools, restaurants, hotels and offices.

### Specifications

- Mounting pan** - Precision die-stamped .16 gauge galvanized steel mounting pan and yoke assembly. Accommodates ceiling materials up to 1-3/8" thick.
- Installation** - Mounting pan has pre-installed C-channel with vertical and horizontal adjustments. Yoke adjusts for proper positioning of lamp within reflector. Junction box and mounting brackets are accessible from below ceiling.
- Reflectors** - Precision spun .051 aluminum reflector, self flanged with clear specular Alzak finish. Reflector is screw mounted for positive attachment to socket assembly. Standard flat flange is painted white. Optional polished flange matching reflector finish available, add FF to catalog number.
- Baffle** - Precision machined .051 aluminum with deep grooves to eliminate aperture glare, anodized matte black or matte white finish. Standard flat flange is painted white. Optional black flange available, add FF to catalog number.
- Socket enclosure** - Die cast aluminum heat sink, medium base 250V porcelain socket with nickel-plated copper screw shell and 200°C wire positions lamp at optical focal plane of reflector for maximum performance.
- Junction box** - Extra large 43.75-cubic inch 16 gauge galvanized steel with snap-on covers. Approved for through wiring with up to 8 #12 AWG conductors.
- Thermal protection** - A thermal protection device which meets all U.L. and NEC requirements is standard.
- U.L. Listed** - For use in damp locations and approved for Through Branch Circuit Wiring. I.B.E.W. union made.



8

\* Canadian Specifications may vary from these shown, consult Canadian Division.

*with LAMP*

## CATALOG SYSTEM AND OPTIONS

EXAMPLE OF COMPLETE CATALOG NUMBER: OM8250PAR38-CS

OMEGA Aprt.	Lamp (by others)	Reflector Option	Reflector Finish*	Frame Options**	Slope Adapter Angle
OM8	250 PAR38	BB Black Baffle	CS Clear Specular	fb Flat Bar Hangers	5
			CSS Clear Semi-Specular	SAB Sloped Ceiling Adapter	10
			HZ Haze		15
			GS Champagne Gold Specular		20
			WT Wheat		25
			PW Pewter		30
			FF Finish Flange (As suffix to color)		



FIVE YEAR Warranty

\*Consult factory for other reflector finishes.

**OM8250PAR38-CS**

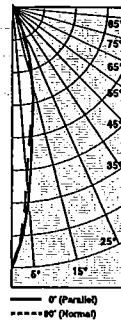
**Photometric Data**

**Clear Specular Reflector - Spot**

Report Number: 21655  
 Lamp: (1) 250W PAR38/SP  
 Total Lumens: 3370  
 Fixture Efficiency: = 88%  
 IES File: F21655.IES  
 S/MH Ratio = 0.3, 0.3  
 Beam Angle: 16.75

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	609.1	1-7
10	327.6	2-2
12	204.2	2-10
14	139.3	3-5
16	101.1	3-12

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	
65	0	0	
55	3	3	47
45	21	16	235
35	182	190	
25	1482	1222	
15	5536	5484	
5	13910	12411	
0	18425	18425	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

RC	Effective Floor Cavity Reflectance 0.20		
	80	70	50
RW	50	30	50
0	105	105	97
1	98	97	93
2	94	92	89
3	91	86	86
4	86	83	83
5	83	80	81
6	81	77	79
7	78	73	77
8	76	71	75
9	72	69	71
10	70	68	69

**OM8250PAR38-CS**

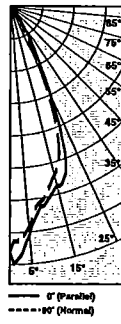
**Photometric Data**

**Clear Specular Reflector - Flood**

Report Number: 21654  
 Lamp: (1) 250W PAR38/FL  
 Total Lumens: 3370  
 Fixture Efficiency: = 95.3%  
 IES File: F21654.IES  
 S/MH Ratio = 0.8, 0.7  
 Beam Angle: 45.51

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	222.6	4-7
10	119.7	6-3
12	74.6	7-12
14	50.9	9-8
16	36.9	11-4

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	
65	0	0	
55	8	5	102
45	58	41	630
35	458	378	
25	2598	2189	
15	5085	4794	
5	6300	6098	
0	6734	6734	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

RC	Effective Floor Cavity Reflectance 0.20		
	80	70	50
RW	50	30	50
0	112	112	106
1	107	105	103
2	100	96	95
3	94	91	86
4	90	84	82
5	84	81	80
6	81	76	79
7	77	72	76
8	73	68	71
9	70	66	68
10	68	63	67

**OM8250PAR38BB-CS**

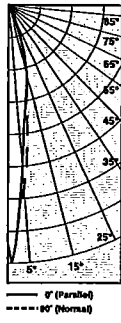
**Photometric Data**

**Clear Specular Reflector with Black Baffle - Spot**

Report Number: 21656  
 Lamp: (1) 250W PAR38/SP  
 Total Lumens: 3370  
 Fixture Efficiency: = 84.2%  
 IES File: F21656.IES  
 S/MH Ratio = 0.3, 0.3  
 Beam Angle: 18.15

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	527.7	1-9
10	283	2-5
12	176.9	3-0
14	120.7	3-8
16	87.6	4-4

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	
65	2	2	43
55	7	5	94
45	28	18	293
35	139	99	
25	1082	906	
15	4948	4800	
5	11257	12475	
0	15963	15963	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

RC	Effective Floor Cavity Reflectance 0.20		
	80	70	50
RW	50	30	50
0	100	100	93
1	94	93	90
2	91	88	86
3	86	83	82
4	82	80	81
5	80	77	78
6	77	73	76
7	75	70	72
8	71	68	70
9	69	66	68
10	68	65	67

**OM8250PAR38BB-CS**

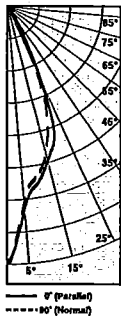
**Photometric Data**

**Clear Specular Reflector with Black Baffle - Flood**

Report Number: 21657  
 Lamp: (1) 250W PAR38/FL  
 Total Lumens: 3370  
 Fixture Efficiency: = 87.1%  
 IES File: F21657.IES  
 S/MH Ratio = 0.6, 0.6  
 Beam Angle: 40.58

LIGHTING PERFORMANCE DATA		
CEILING HEIGHT* (FT.)	INITIAL FOOTCANDLES	BEAM DIAMETER (FT.-IN.)
8	247.7	4-1
10	133.2	5-7
12	83.0	7-0
14	56.7	8-6
16	41.1	9-12

**DISTRIBUTION CURVE**



DEGREES	CANDELA		FOOT-LAMBERTS
	AT 0°	AT 90°	
90	0	0	
85	0	0	
75	0	0	
65	3	2	53
55	10	7	133
45	54	41	605
35	399	319	
25	2346	1934	
15	4634	4403	
5	5896	5735	
0	7493	7493	

**COEFFICIENTS OF UTILIZATION ZONAL CAVITY METHOD**

RC	Effective Floor Cavity Reflectance 0.20		
	80	70	50
RW	50	30	50
0	104	104	96
1	96	95	92
2	92	89	88
3	86	82	83
4	81	78	80
5	78	73	76
6	75	69	72
7	70	67	69
8	68	64	67
9	65	60	64
10	61	57	60

\*Readings at working plane, 2'6" above floor. Beam Angle and Diameter Cutoff at 50% of max. Candlepower Coefficients used at effective reflectances of: 70% Ceiling, 50% Walls, 20% Floor

To convert values for optional reflector colors, multiply by:  
 Gold .90 — Bronze .82 — Pewter .87

Additional photometric test files are available @ [omegalighting.com](http://omegalighting.com)



**OMEGA LIGHTING:**  
 776 South Green St., Tupelo, MS 38804  
 Phone 662.842.7212 FAX 662.841.5501

**CANADIAN DIVISION:**  
 189 Bullock Drive, Markham, Ontario, Canada L3P 1W4  
 Phone 905.294.9570 FAX 800.268.0003

## DESCRIPTION

The ALTO series of lampholders offers the beauty and functional design that sophisticated spaces require. The ALTO family includes lampholders in a range of sizes that accept a number of lamp types and sizes. For Halo and Lazer-by-Halo track systems. The light weight and small size of this lampholder family makes them ideal for use in museums, galleries, malls, exhibits and similar areas where high interior light is needed.

## SPECIFICATION FEATURES

### A...Electrical Quick Lock Adapter

Polycarbonate casing. Attaches electrically and mechanically anywhere along Power-Trac. Visual polarity line assures proper grounding. Two position conductor allows use in single circuit and either circuit of two circuit track.

### B...Yoke

Yoke allows lampholder to rotate 338° horizontally and provides 0° to 90° vertical pivot for maximum aiming adjustability.

### C...Adjustment Knob

Adjustment knob locks lampholder into position.

### D...Housing

Spun aluminum with baked enamel finish.

### E...Face Plate

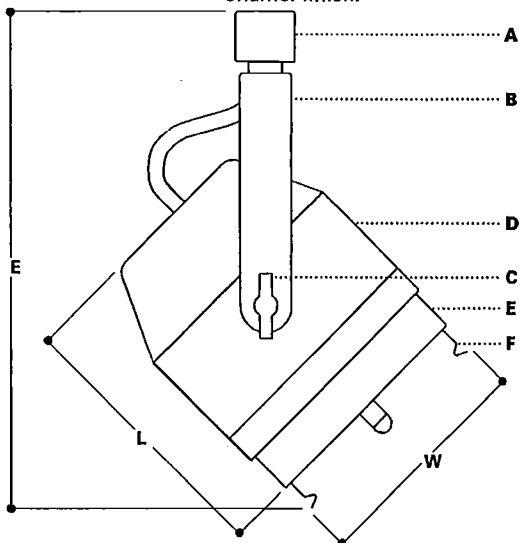
Deep Face plate provides high visual cutoff to lamp. Face plate twists off for easy relamping.

### F...Accessory Clips

Accessory clips accommodate lenses and louvers.

### Labels

UL listed and CSA certified for use with Halo and Lazer-by-Halo track and track systems.

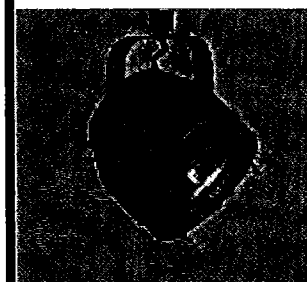


(L3750 Shown in Illustration)

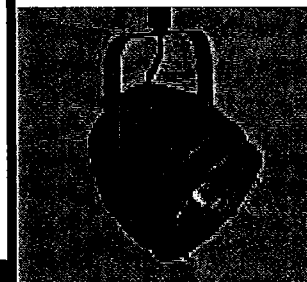
Catalog #	L3750	Type	
Project	50 AVONDALE SCHL		PS9
Comments			
Prepared by		Date	



L3750



L3754



L3756

## ORDERING INFORMATION

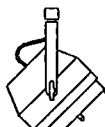
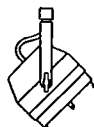
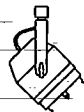
SAMPLE NUMBER: L3750P

Lampholders	Finishes	Accessories
L3750	P	

L3750  
L3754  
L3756

P=Satin White  
MB=Matte Black

(See Below)



### L3750

For use with: 250W PAR38  
L = 6 5/8" [168mm]  
W = 6 1/4" [159mm]  
E = 11 1/2" [267mm]

### Accessories

L1968 Barn Doors  
L200 Series Filters  
L214 UV Filter  
L275 Cube Cell Louver

### L3754

For use with: 300W PAR66  
Q500W PAR56  
L = 6 5/8" [168mm]  
W = 8 1/4" [210mm]  
E = 12 1/4" [279mm]

### Accessories

L1970 Barn Doors  
L300 Series Filters  
L314 UV Filter  
L277 Louver

### L3756

For use with: 600W PAR64  
L = 8" [203mm]  
W = 9 1/2" [241mm]  
E = 14 3/4" [395mm]

### Accessories

L1975 Barn Doors  
L279 Louver

ALTO  
HIGH INTENSITY  
DISPLAY  
LAMP HOLDERS  
Power-Trac®

ADV023217  
Supersedes ADV990389

## DESCRIPTION

Halo-2-Power-Trac-system provides two separate 20 AMP circuits. Each circuit can be independently switched. Provides maximum flexibility, with a miniature profile. Suitable for a wide range of commercial, merchandising and residential applications. Electrical capacity is 20 AMPS per circuit when properly balanced. Installing lampholders is simple. An adjustable contact allows selection of the circuit position. Lift or lower the contact until it touches the plastic stop of the assembly. For circuit #1 move contact to the down position. For circuit #2 move contact to the up position. Halo 2-Circuit Track accepts both Halo and Lazer-by-Halo lampholders.

Catalog #	L642 P	Type	
Project	SO AVONDALE SCHL	Date	PS9
Comments			
Prepared by			

## SPECIFICATION FEATURES

### A. Structural

Extruded aluminum .060" [1.5mm] nominal wall thickness. Halo-2 Power-Trac is 11/16" (17.5mm) deep by 1 3/8" (35mm) wide. Same as Halo Miniature Trac.

### B. Line Conductors

Solid copper buss bars [cross section equivalent to #12 AWG wire, encased in rigid extruded PVC insulators.

### C. Insulating Liner

Rigid extruded polyvinyl insulators.

### D. Ground Conductor

Exclusive independent

grounding buss conductor. Maintains an independent positive ground #12 AWG path between lampholder, Trac channel and building's ground system.

### E. Neutral Conductor

Cross section equivalent of #12 AWG wire.

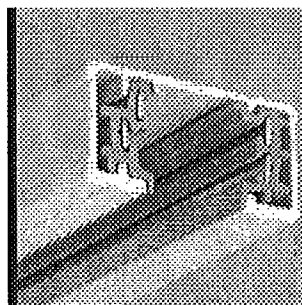
### F. Polarity Indicator (Neutral)

Visual polarity groove indicates proper electrical installation of lampholder adapter. All Halo-2 Power-Trac is shipped from the factory with a "LEFT" dead end installed. The L941 Live End Connector is designed to attach to the right hand side of the track.

Locate small polarity indicator on the connector and align with polarity groove on track.

### Listing

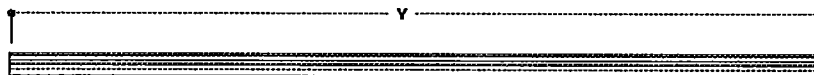
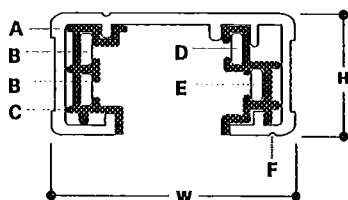
Halo-2 Trac is UL listed and CSA certified for use with Halo and Lazer-by-Halo lampholders.



## L641, L642, L643

MINIATURE  
TWO CIRCUIT  
TRAC SYSTEM

Power-Trac



## ORDERING INFORMATION

SAMPLE NUMBER: 641MB

Trac	Finishes	Accessories
L641=4' L642=8' L643=12'	P=Satin White MB=Matte Black SL=Silver	(See Below)

L641			L642		L643	
L641	L642	L643	Connectors	Accessories		
L = 4: Actual length 42 5/8" [1083mm] W = 1 3/8" [35mm] H = 11/16" [17.5mm]	L = 8: Actual length 90 5/8" [2302mm] W = 1 3/8" [35mm] H = 11/16" [17.5mm]	L = 12: Actual length 138 5/8" [3521mm] W = 1 3/8" [35mm] H = 11/16" [17.5mm]	L900 Outlet Box Cover L941 Live End connector L942 Flexible Connector L943 Straight/"L" Connector L945 "T" Connector L946 "X" Connector L949 Mini Joiner L947 Conduit Connector L989 Conduit Continuation Kit L980 Live End Conduit Adapter	L951 Wire Way Cover for Pendant Assembly Kit L983 T-Bar Attachment Clip L992 Pendant Kit assembly L18 18" Steel Stem L36 36" Steel Stem L48 48" Steel Stem L994 Pendant Adapter DE641 Dead End		
<b>Color codes</b> P = White MB = Black SL = Silver	<b>Color codes</b> P = White MB = Black SL = Silver	<b>Color codes</b> P = White MB = Black SL = Silver				

ADV042180  
Supersedes ADV021435 & ADV990381  
9/04  
TAB: Track Systems  
Sheet 4

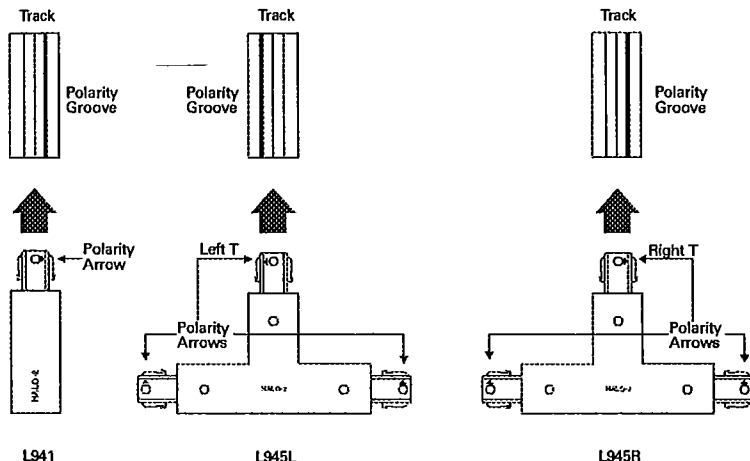
Note: Specifications and Dimensions subject to change without notice.  
Visit our web site at [www.cooperlighting.com](http://www.cooperlighting.com)

*TYPE PS9*

**DESCRIPTION**

**Polarity Indicators**

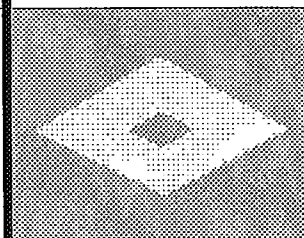
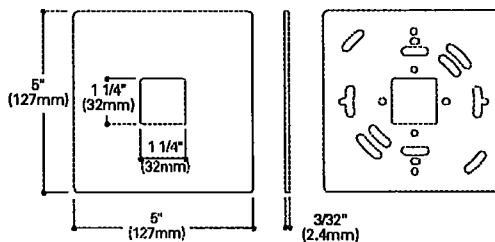
Neutral is indicated on two circuit power track by the groove placed along the flange of the track. The connectors show neutral polarity by the arrow on the end of the connector. The left handed T connector, L945L has an arrow facing left when the crossbar of the T is at the bottom, and "Halo-2" is right-reading. The L945R, a right handed T connector has the arrow facing right when the crossbar of the T is at the bottom, and "Halo-2" is right-reading.



**L641, L642, L643  
CONNECTORS  
AND  
ACCESSORIES  
Sheet A**

**L900 Outlet Box Cover**

Can be used at any electrical feed connection point (Live, Straight, L, T or X). Drill guides on back for virtually all standard outlet boxes. Size: 5" sq. Screws Included.  
Color codes: P (White), MB (Black)



**L900**

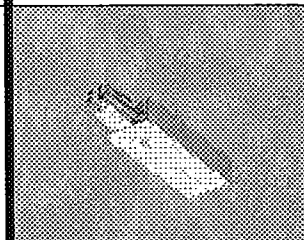
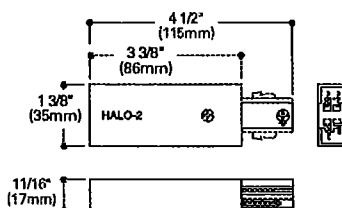
**ORDERING INFORMATION**

Connector	Finish
<b>L900</b>	

**L941 Live End Connector**

To start a run. Right hand polarity. (Left hand polarity live end connector available. Consult factory).

Color codes: P (White), MB (Black)



**L941**

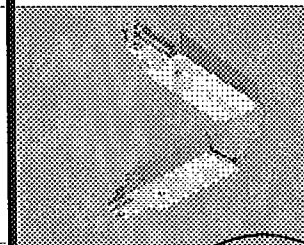
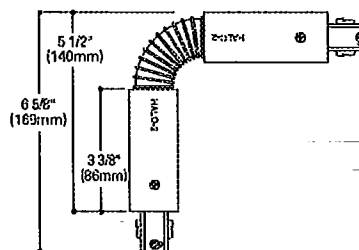
**ORDERING INFORMATION**

Connector	Finish
<b>L941</b>	<b>P</b>

**L942 Flex Joiner**

To connect two track sections at any angle up to 90° in either plane or wall to ceiling or pitched ceiling applications.

Color codes: P (White), MB (Black)



**L942**

**ORDERING INFORMATION**

Connector	Finish
<b>L942</b>	

Note: Specifications and Dimensions subject to change without notice.

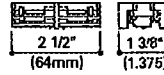
Visit our web site at [www.cooperlighting.com](http://www.cooperlighting.com)

**DESCRIPTION**

**L949 Mini Joiner**

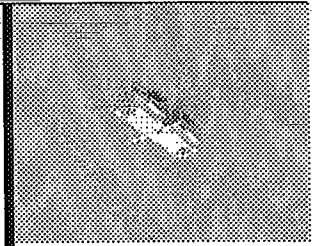
To join two straight track sections end-to-end.  
Not a feed point.

Color codes: P (White), MB (Black)



**ORDERING INFORMATION**

Connector	Finish
<b>L949</b>	<b>P</b>

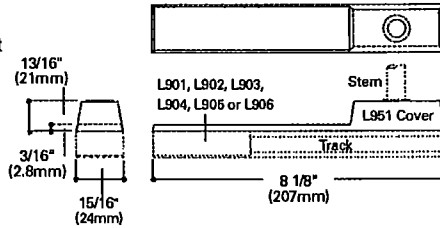


**L949**

**L951 Wire Way Cover for Pendant Assembly Kit**

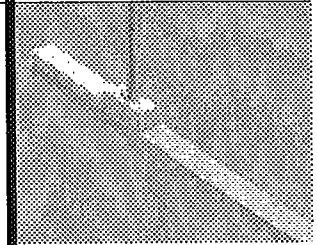
For track to be wired through stem (one for each live end used). Shown with end feed and pendant stem kit—order separately

Color codes: P (White), MB (Black)



**ORDERING INFORMATION**

Connector	Finish
<b>L951</b>	



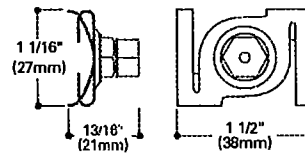
**951**

**L983 T-Bar Attachment Clip**

Allows track to be attached to inverted tee ceiling. Order as follows: 2 kits for 4' Trac; 3 kits for 8' Trac and 4 kits for 12' Trac.

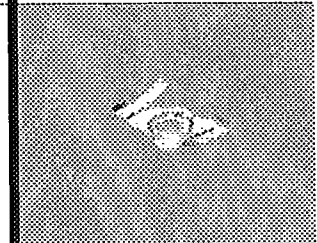
**L986 Mini-T Bar Clip**

For mounting Trac on suspended ceilings with mini-grid (9/16" wide) system.



**ORDERING INFORMATION**

Connector	Finish
<b>L98_</b>	

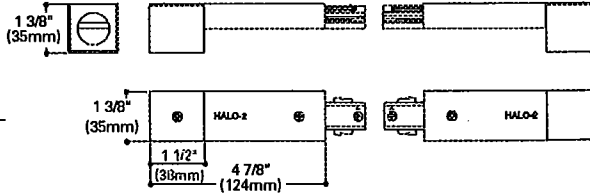


**L983**

**L989 Conduit Continuation Kit**

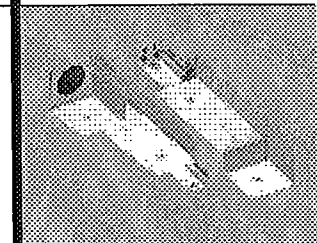
Includes one left and one right feed. To continue a run around obstructions with 1/2" trade size surface conduit.

Color codes: P (White), MB (Black)



**ORDERING INFORMATION**

Connector	Finish
<b>L989</b>	



**L989**

Note: Specifications and Dimensions subject to change without notice.  
Visit our web site at [www.cooperlighting.com](http://www.cooperlighting.com)

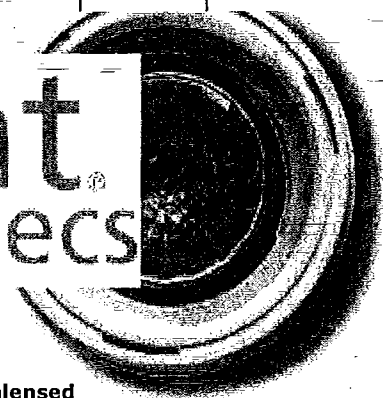
1 type PS10

South Avondale School



- fiber optics
- track & spots
- light strips
- downlights
- site map
- photometrics
- what's new
- tech-guides
- spec-sheets
- contacts
- history

# puklight specs



- PUKLIGHT®
- Applications
- Accessories
- Tech Info
- Spec & Finishes
- Photometrics
- Order Guide

### DOWNLIGHTS

- Aura®
- Basso®
- Z Series
- Java
- Nalad
- UFO
- Luna
- Glass Star
- DL 1 - DL 2
- DL 4X - DL 16X
- DL2RZP

New! - DL5ZP Mirage™

DL21Z & DL24Z

1/2" Z" Housing

Photometrics

IES Photometrics

Housings/Transformers

Housing Install Guides

Trims & Housings

Fuses/Lamps/Wiring

Product Index

Spec Sheets

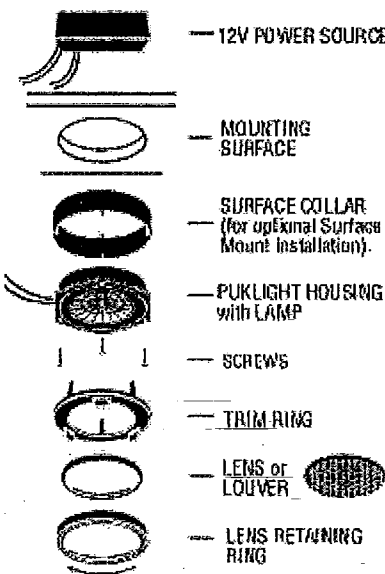
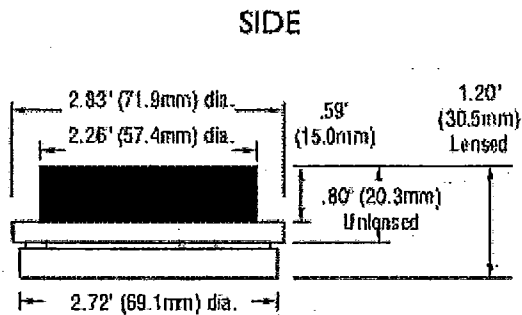
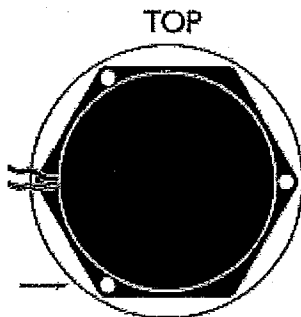
Warranty

FAQs

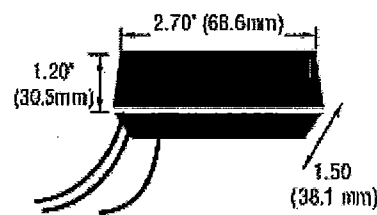
### DOWNLOADS

Puklight Install Guide

Puklight Spec Sheet Lensed - Unlensed



### TRANSFORMER



3 SETS  
1 TRANSFORMER, 3  
FIXTURES

1 SET  
1 TRANSFORMER, 5  
FIXTURES

### FINISHES

Lensed







Matte White  
(Surface Mount)



Matte Black  
(Recessed)

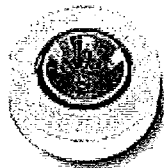


Satin Brass  
(Surface Mount)

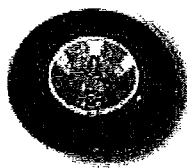


Satin Chrome  
(Recessed)

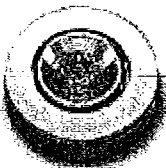
**Unlensed**



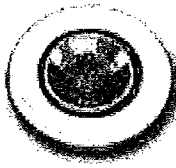
Matte White  
(Surface Mount)



Matte Black  
(Recessed)



Satin Brass  
(Surface Mount)

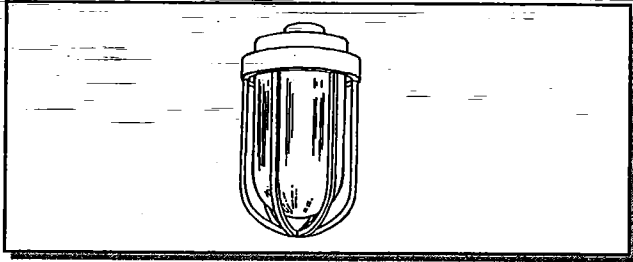


Satin Chrome  
(Recessed)

[Back to top](#)



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**150 Watt Max  
Incandescent Vapolets**  
Rugged die cast aluminum fixtures.  
UL listed for damp or wet locations

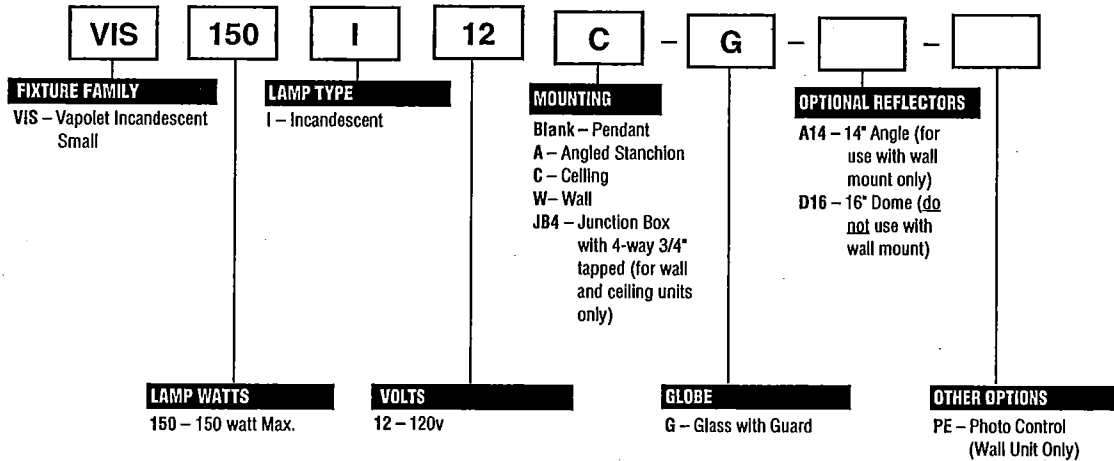
**CONSTRUCTION/FINISH**

- Prismatic tempered glass globe and guard.
- All hoods provided with set screw for permanent attachment of diffusers and guard.
- Hoods and guards are die cast aluminum finished in bronze polyester enamel.
- Mounting choices of ceiling, wall, pendant or stanchion.

**ELECTRICAL**

- UL listed for damp or wet locations.
- Units pre-wired with heavy-duty porcelain medium base socket for lamps with maximum 150 watts (not included)
- Ceiling and wall hoods fit 4" octagonal box or 4 way J box. Pendant hoods tapped 3/4" standard. 1/2" reducers included. 1-1/4" diameter stanchion hood mounts to wall hood.

**CATALOG NUMBER**



**JOB INFORMATION**

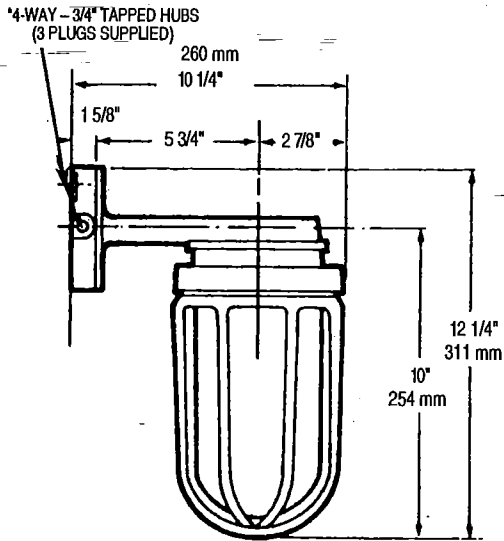
**1542-PF**

**Job Name: SOUTH AVONDALE SCHOOL**  
**Type: Y**

# INCANDESCENT VAPOLETS

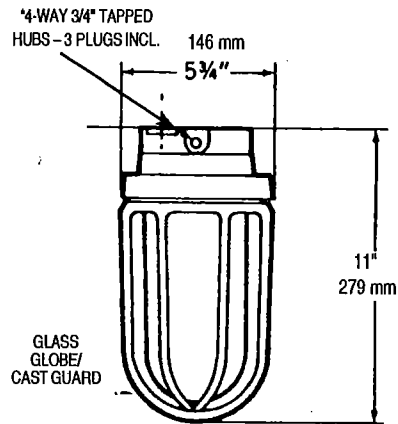


## WALL MOUNTED



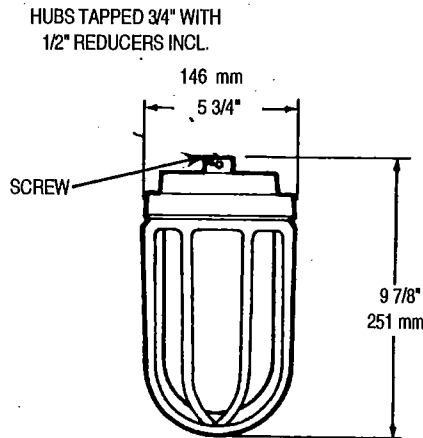
GLASS GLOBE/CAST GUARD

## CEILING MOUNTED



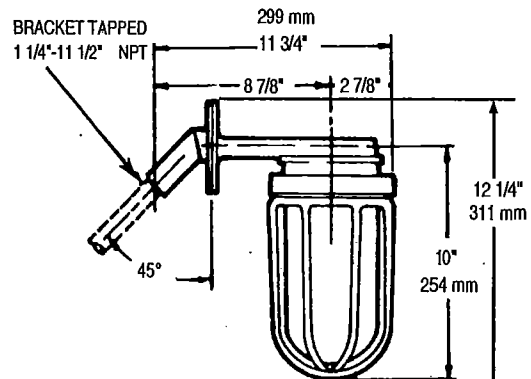
\*MAY BE MOUNTED DIRECTLY TO 4" OCTAGONAL BOX (3 1/2" CTRS.) OR TO 4-WAY CAST JUNCTION BOX AS ILLUSTRATED.

## PENDANT MOUNTED

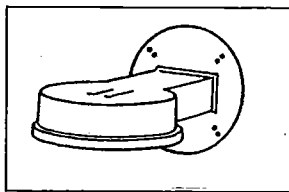


GLASS GLOBE/CAST GUARD

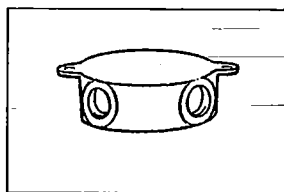
## STANCHION MOUNTED



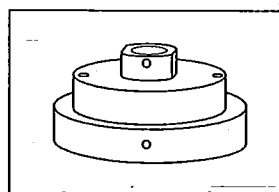
GLASS GLOBE/CAST GUARD



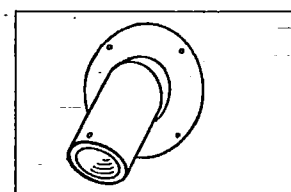
WALL HOOD



JUNCTION BOX



PENDANT HOOD (TAPPED 3/4")  
CEILING HOOD (FITS "J" BOX)



STANCHION BRACKET

1542-PF

DAY-BRITE LIGHTING  
776 South Green Street • Tupelo, Mississippi 38804 • PH: (662) 842-7212 • FAX: (662) 841-5501  
CANADIAN DIVISION  
189 Bullock Drive • Markham, Ontario L3P 1W4 • PH: (905) 294-9570 • FAX: (905) 294-9811

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Day-Brite | Capri | Omega  
Genlyte Thomas Group

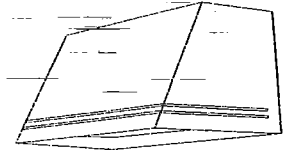
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: AA

# 100 LINE

## 101 PERFORMANCE SCONCE



The Gardco 101 Trapezoidal Wedge high performance sconce offers an excellent alternative to unsightly wall mounted fixtures. These architecturally refined luminaires are designed to integrate naturally to wall surfaces. The 101 luminaires are available with three (3) different distribution patterns - a wide throw, a medium throw and a forward throw. Each luminaire is designed to accept HID sources up to 175MH, and Compact Fluorescent sources up to 42 watt. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.

### ORDERING

101 Luminaires installed in the normal downlight position with no up tilt meet IESNA Full Cutoff criteria

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
101	MT	242TRF	277	BRP	Hook Lamps

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

### PREFIX

101	Trapezoidal Wedge	Refer to configuration chart below for available combinations
101EM	Emergency Sconce	
101EMC	Emergency Sconce Cold Temperature	
101EMR	Remote Emergency Sconce	

### DISTRIBUTION

FT	Forward Throw Not Available with Fluorescent Lamps
WT	Wide Throw Not Available with Fluorescent Lamps
MT	Medium Throw

### WATTAGE AND VOLTAGE

LAMP/VOLTAGE CHART - 101

Voltage:	120	208	240	277	347	480
	<i>E17</i>					
50MH	•			•		
70MH	•			•		
100MH	•	•	•	•	•	•
150MH	•	•	•	•	•	•
175MH	•	•	•	•	•	•
35HPS	•					
50HPS	•					
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•	•	•
150HPS	•	•	•	•	•	•
50CMHE'		UNIV				
70CMHE'		UNIV				
100CMHE'		UNIV				
<i>Fluorescent</i>						
26QF'		UNIV		•		
226QF'		UNIV		•		
32TRF'		UNIV		•		
42TRF'		UNIV		•		
232TRF'		UNIV		•		
242TRF'		UNIV		•		

CONFIGURATION CHART - 101EM or 101EMC

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF			•	•			•		
42TRF			•	•			•		

CONFIGURATION CHART - 101EMR

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF			•	•			•	•	
42TRF			•	•			•	•	
242TRF			•	•			•	•	

Combinations marked with a dot are available for ordering.  
 MH - Metal Halide CMHE - Ceramic Metal Halide with Electronic Ballast  
 HPS - High Pressure Sodium QF - Quad Fluorescent  
 TRF - Triple Tube Fluorescent

1. Fluorescent and CMHE luminaires feature electronic ballasts that accept 120V through 277V, 50hz to 260hz, input. Specify "UNIV" voltage for 120V through 277V.

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Belge Paint
OC	Optional Color Paint Specify RAL designation ex: OC-RAL7024
SC	Special Color Paint Specify: Must supply color chip

### OPTIONS

F	Fusing 120V through 277V only
PCB	Button Type Photocontrol n/a w/480V
QS	Quartz Standby HID only, N/A with CMHE Ballasts or in 480V. 100w Quartz maximum.
Q924	Quartz Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
Q12V	Quartz 12V Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
SL	Solite® Diffusing Lens
UT	5° Uptilt

WLU	Wet Location Door for Inverted Mount N/A with WG option
WS	Wall Mounted Box for Surface Conduit Rear entry permitted
WS/UT	WS Option w/5° Uptilt Rear entry permitted
WG	Wire Guard Not available with WLU option
POLY	Polycarbonate Sag Lens 100w HID maximum

### EMR Luminaires Only:

B30*	Bodine Remote Emergency Pack Full Light Output in emergency mode
B84CG*	Bodine Emergency Battery Pack
B94C-CAN*	Bodine Remote Emergency Pack - Canada

\*Emergency Battery Packs for EMR types MUST be ordered with luminaires and supplied by Gardco.

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79115-124706

# 100 LINE

## 101 PERFORMANCE SCONCE

### SPECIFICATIONS

**GENERAL:** Each Gardco 101 luminaire is a wall mounted cutoff luminaire for high intensity discharge or compact fluorescent lamps. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion resistant housing. The housing, back plate and door frame are diecast aluminum. A choice of three (3) optical systems is available. Luminaires are suitable for wet locations (damp locations if inverted).

**HOUSING:** Single-piece soft trapezoidal housings are diecast aluminum. A memory retentive gasket seals the housing with the doorframe to exclude moisture, dust, insects and pollutants from the optical system. A black, diecast ribbed backplate dissipates heat for longer lamp and ballast life.

**DOOR FRAME:** A single-piece diecast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners. The heat and impact resistant 1/8" (.32cm) tempered glass lens and one-piece gasket are mechanically secured to the door frame with four (4) galvanized steel retainers.

**OPTICAL SYSTEMS:** Reflectors are composed of specular extruded and faceted components, electropolished, anodized and sealed. Reflector segments are set in arc tube image duplicating patterns to achieve the wide throw, forward throw or medium throw downlight distributions.

**ELECTRICAL: Standard Luminaires:** Each high power factor HID core and coil ballast is the separate component type, capable of providing reliable lamp starting down to -20°F/-29°C. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

Standard fluorescent units have a starting temperature of 0°F/-18°C. Standard fluorescent ballasts are high power factor electronic solid state.

**EM and EMC Luminaires:** In the event of power interruption, integral battery pack will power (1) 42W or (2) 26W compact fluorescent lamps at reduced light levels for a minimum of 90 minutes. Maintenance free battery is rated for ambient temperatures down to 32°F/0°C (EM) or 0°F/-18°C (EMC). Indicator light is visible through the lens. A test switch is accessible through the door assembly. EM and EMC units do not bear CUL label.

**EMR Luminaires:** A 7.5/2.29m, 12 wire, quick disconnect assembly is provided for wiring through conduit (by others) to a Bodine B30, B84CG or B94C-CAN fluorescent emergency battery pack. The fluorescent emergency battery pack MUST be supplied by Gardco. The B30, B84CG or B94C-CAN option is required to be on the order to the factory.

In the event of power interruption, the B30 remote battery pack will power (1) 42W or (2) 26W compact fluorescent lamps at full light levels; the remote battery pack (B84CG or B94C-CAN) will power (1) 42W or (1) 26W compact fluorescent lamp at reduced light levels; for a minimum of 90 minutes (B30 or B84CG) or 30 minutes (B94C-CAN).

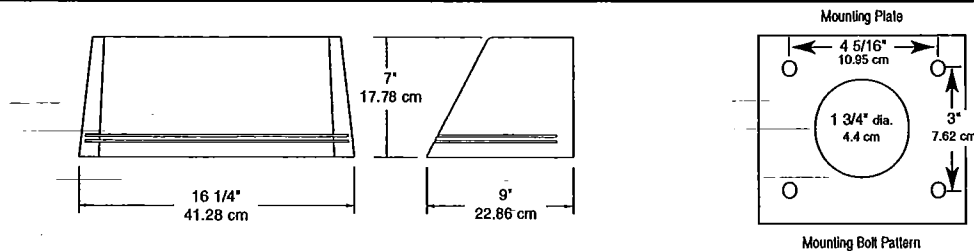
Maintenance free battery is rated for ambient temperatures down to 32°F/0°C. Minimum luminaire starting temperature is 0°F/-18°C. Indicator light is visible through the lens. A test switch is accessible through the door assembly. NOTE: B30 and B84CG do not bear CUL label.

**LAMPHOLDER:** Pulse rated medium base sockets are glazed porcelain with nickel plated screw shell. Fluorescent sockets are high temperature PBT with brass contacts.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), natural aluminum (NP) and beige (BGP). Consult factory for specs on custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) labels, except as noted. Lens down application is Wet Location and lens up is Damp Location, except when using the optional inverted Wet Location components.

### DIMENSIONS



Note: Mounting plate center is located in the center of the luminaire width and 3.5" (8.89cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

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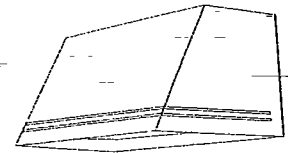
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: AB

# 100 LINE

## 101 PERFORMANCE SCONCE



The Gardco 101 Trapezoidal Wedge high performance sconce offers an excellent alternative to unsightly wall mounted fixtures. These architecturally refined luminaires are designed to integrate naturally to wall surfaces. The 101 luminaires are available with three (3) different distribution patterns - a wide throw, a medium throw and a forward throw. Each luminaire is designed to accept HID sources up to 175MH, and Compact Fluorescent sources up to 42 watt. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.

### ORDERING

101 Luminaires installed in the normal downlight position with no up tilt meet IESNA Full Cutoff criteria

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
101	FT	175MH	277	BRP	F

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

W/Lamp

### PREFIX

101	Trapezoidal Wedge	Refer to configuration chart below for available combinations
101EM	Emergency Sconce	
101EMC	Emergency Sconce Cold Temperature	
101EMR	Remote Emergency Sconce	

### DISTRIBUTION

FT	Forward Throw Not Available with Fluorescent Lamps
WT	Wide Throw Not Available with Fluorescent Lamps
MT	Medium Throw

### WATTAGE AND VOLTAGE

#### LAMP/VOLTAGE CHART - 101

E17	Voltage:					
	120	208	240	277	347	480
50MH	•	•	•	•	•	•
70MH	•	•	•	•	•	•
100MH	•	•	•	•	•	•
150MH	•	•	•	•	•	•
175MH	•	•	•	•	•	•
35HPS	•	•	•	•	•	•
50HPS	•	•	•	•	•	•
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•	•	•
150HPS	•	•	•	•	•	•
50CMHE'		UNIV				
70CMHE'		UNIV				
100CMHE'		UNIV				
Fluorescent						
26QF'		UNIV		•		
226QF'		UNIV		•		
32TRF'		UNIV		•		
42TRF'		UNIV		•		
232TRF'		UNIV		•		
242TRF'		UNIV		•		

#### CONFIGURATION CHART - 101EM or 101EMC

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF			•	•			•		
42TRF			•	•			•		

#### CONFIGURATION CHART - 101EMR

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF			•	•			•	•	
42TRF			•	•			•	•	
242TRF			•	•			•	•	

Combinations marked with a dot are available for ordering.  
 MH - Metal Halide CMHE - Ceramic Metal Halide with Electronic Ballast  
 HPS - High Pressure Sodium QF - Quad Fluorescent  
 TRF - Triple Tube Fluorescent

1. Fluorescent and CMHE luminaires feature electronic ballasts that accept 120V through 277V, 50hz to 260hz, input. Specify "UNIV" voltage for 120V through 277V.

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Beige Paint
OC	Optional Color Paint Specify RAL designation ex: OC-RAL7024
SC	Special Color Paint Specify. Must supply color chip

### OPTIONS

F	Fusing -120V through 277V only
PCB	Button Type Photocontrol n/a w/480V
QS	Quartz Standby HID only; N/A with CMHE Ballasts or in 480V. 100w Quartz maximum.
Q924	Quartz Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
Q12V	Quartz 12V Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
SL	Solite® Diffusing Lens
UT	5° Uptilt

WLU	Wet Location Door for Inverted Mount N/A with WG option
WS	Wall Mounted Box for Surface Conduit Rear entry permitted
WS/UT	WS Option w/5° Uptilt Rear entry permitted
WG	Wire Guard Not available with WLU option
POLY	Polycarbonate Sag Lens 100w HID maximum

#### EMR Luminaires Only:

B30*	Bodine Remote Emergency Pack Full Light Output in emergency mode
B84CG*	Bodine Emergency Battery Pack
B94C-CAN*	Bodine Remote Emergency Pack - Canada

\*Emergency Battery Packs for EMR types MUST be ordered with luminaires and supplied by Gardco.

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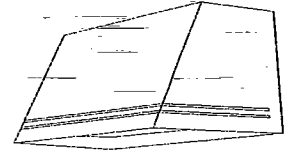
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: AB1

# 100 LINE

## 101 PERFORMANCE SCONCE



The Gardco 101 Trapezoidal Wedge high performance sconce offers an excellent alternative to unsightly wall mounted fixtures. These architecturally refined luminaires are designed to integrate naturally to wall surfaces. The 101 luminaires are available with three (3) different distribution patterns - a wide throw, a medium throw and a forward throw. Each luminaire is designed to accept HID sources up to 175MH, and Compact Fluorescent sources up to 42 watt. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.

### ORDERING

101 Luminaires installed in the normal downlight position with no up tilt meet IESNA Full Cutoff criteria

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
101	FT	175MH	277	BRP	F-QTR

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

W/Lamps

### PREFIX

101	Trapezoidal Wedge	Refer to configuration chart below for available combinations
101EM	Emergency Sconce	
101EMC	Emergency Sconce Cold Temperature	
101EMR	Remote Emergency Sconce	

### DISTRIBUTION

FT	Forward Throw	Not Available with Fluorescent Lamps
WT	Wide Throw	Not Available with Fluorescent Lamps
MT	Medium Throw	

### WATTAGE AND VOLTAGE

LAMP/VOLTAGE CHART - 101

E1Z	Voltage:					
	120	208	240	277	347	480
50MH	•	•	•	•	•	•
70MH	•	•	•	•	•	•
100MH	•	•	•	•	•	•
150MH	•	•	•	•	•	•
175MH	•	•	•	•	•	•
35HPS	•	•	•	•	•	•
50HPS	•	•	•	•	•	•
70HPS	•	•	•	•	•	•
100HPS	•	•	•	•	•	•
150HPS	•	•	•	•	•	•
50CMHE <sup>1</sup>		UNIV				
70CMHE <sup>1</sup>		UNIV				
100CMHE <sup>1</sup>		UNIV				
Fluorescent						
26QF <sup>1</sup>		UNIV				
226QF <sup>1</sup>		UNIV				
32TRF <sup>1</sup>		UNIV				
42TRF <sup>1</sup>		UNIV				
232TRF <sup>1</sup>		UNIV				
242TRF <sup>1</sup>		UNIV				

CONFIGURATION CHART - 101EM or 101EMC

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF	•	•	•	•	•	•	•	•	•
42TRF	•	•	•	•	•	•	•	•	•

CONFIGURATION CHART - 101EMR

Fluorescent	Distribution			Voltage					
	FT	WT	MT	120	208	240	277	347	480
226QF	•	•	•	•	•	•	•	•	•
42TRF	•	•	•	•	•	•	•	•	•
242TRF	•	•	•	•	•	•	•	•	•

Combinations marked with a dot are available for ordering.  
 MH - Metal Halide CMHE - Ceramic Metal Halide with Electronic Ballast  
 HPS - High Pressure Sodium QF - Quad Fluorescent  
 TRF - Triple Tube Fluorescent

1. Fluorescent and CMHE luminaires feature electronic ballasts that accept 120V through 277V, 50hz to 260hz, input. Specify "UNIV" voltage for 120V through 277V.

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
BGP	Beige Paint
OC	Optional Color Paint Specify RAL designation ex: OC-RAL7024
SC	Special Color Paint Specify. Must supply color chip

### OPTIONS

F	Fusing 120V through 277V only
PCB	Button Type Photocontrol n/a w/480V
QS	Quartz Standby HID only, N/A with CMHE Ballasts or In 480V. 100w Quartz maximum.
Q924	Quartz Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
Q12V	Quartz 12V Emergency WT Optic only. 150w HID maximum. 100w Quartz maximum
SL	Sollite® Diffusing Lens
UT	5° Uplilt

WLU	Wet Location Door for Inverted Mount N/A with WG option
WS	Wall Mounted Box for Surface Conduit Rear entry permitted
WS/UT	WS Option w/5° Uplilt Rear entry permitted
WG	Wire Guard Not available with WLU option
POLY	Polycarbonate Sag Lens 100w HID maximum

#### EMR Luminaires Only:

B30*	Bodine Remote Emergency Pack Full Light Output in emergency mode
B84CG*	Bodine Emergency Battery Pack
B94C-CAN*	Bodine Remote Emergency Pack - Canada

\*Emergency Battery Packs for EMR types MUST be ordered... with luminaires and supplied by Gardco.

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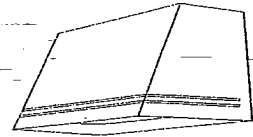
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: AC

# 140 LINE

## 141 PERFORMANCE SUPER SCONCE



The Gardco 141 trapezoidal high performance Super Sconce offers an excellent alternative to unsightly wall mounted fixtures. This architecturally refined luminaire is designed to naturally integrate to wall surfaces. The 141 luminaire is available with two (2) different downlight distributions - a Forward Throw and a Wide Throw. Each luminaire is designed to accept H.I.D. sources up to 400W. Housings are sealed throughout, completely excluding moisture, dust, insects and contaminants.

### ORDERING

141 Luminaires installed in the normal downlight position with no up tilt meet IESNA Full Cutoff criteria

PREFIX	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
141	FT	250MH	277	BRP	F

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

*w/Lamp*

### PREFIX

141 Trapezoidal Wedge

### DISTRIBUTION

FT Forward Throw

WT Wide Throw

### WATTAGE

250MH  
400 MH<sup>1</sup>

250PSMH  
320PSMH  
350PSMH<sup>1</sup>  
400PSMH<sup>1</sup>

MH - Metal Halide  
PSMH - Pulse Start Metal Halide  
HPS - High Pressure Sodium

1. Use reduced jacket E28 lamps only.

250HPS  
400HPS

### VOLTAGE

120  
208  
240  
277  
347  
480

### FINISH

BRP Bronze Paint  
BLP Black Paint  
WP White Paint  
NP Natural Aluminum Paint  
BGP Beige Paint  
OC Optional Color Paint  
*Specify RAL designation as shown  
ex: OC-RAL7024*  
SC Special Color Paint  
*Specify. Must supply color chip*

### OPTIONS

F Fusing  
PCB Button Type Photocontrol *n/a with 347V or 480V*  
QS Quartz Standby *Quartz lamp maximum wattage is 150w*  
SL Solite<sup>®</sup> Diffusing Lens  
UT 5° Uptilt  
WS Wall Mounted Box for Surface Conduit  
WS/UT Wall Mounted Box for Surface Conduit with 5° Uptilt  
WG Wire Guard

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www.sitlighting.com



79115-96/0306



# 140 LINE

## 141 PERFORMANCE SUPER SCONCE

### SPECIFICATIONS

**GENERAL:** Each Gardco 141 Line luminaire is a wall mounted cutoff luminaire for high intensity discharge lamps/ballasts. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion-resistant housing. The housing, backplate and door frame are diecast aluminum. A choice of two (2) optical systems is available. Luminaires are suitable for wet locations (damp locations if inverted).

**HOUSING:** Single-piece soft trapezoidal housings are diecast aluminum. The housing wall thickness is be .156"(.40cm). A memory retentive gasket seals the housing with the door frame to exclude moisture, dust, insects and pollutants from the optical system. A black, diecast ribbed backplate provides cooling to dissipate heat for longer lamp and ballast life.

**DOOR FRAME:** A single-piece diecast aluminum door frame integrates to the housing form. The door frame utilizes integral cast hinges secured to the housing with two (2) captive stainless steel fasteners. The heat and impact resistant 1/8" (.32cm) tempered glass lens is sealed to the frame using EPDM gasketing and is mechanically secured to the door frame with eight (8) galvanized steel retainers.

**OPTICAL SYSTEMS:** Reflectors are composed of specular extruded and faceted Alzak<sup>®</sup> components, electropolished, anodized and surface sealed. Reflector segments are set in arc tube image duplicating patterns to achieve the wide throw or forward throw downlight distributions.

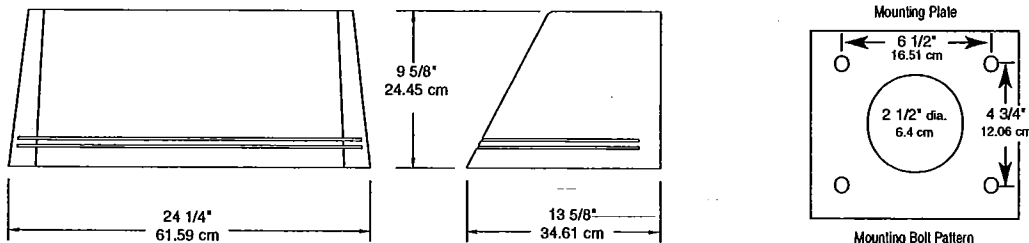
**ELECTRICAL:** Each high power factor ballast is the separate component type, capable of providing reliable lamp starting down to -20°F/29°C. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 150°C or higher.

**LAMPHOLDER:** Pulse rated mogul base sockets are glazed porcelain with nickel plated screw shell.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), natural aluminum (NP) and beige (BGP). Consult factory for specs on optional and custom colors.

**LABELS:** All luminaires bear either UL or CUL (where applicable) Wet Location labels. Lens down application is Wet Location and lens up is Damp Location.

### DIMENSIONS



Note: Mounting plate center is located in the center of the luminaire width and 4.63" (11.76cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall.

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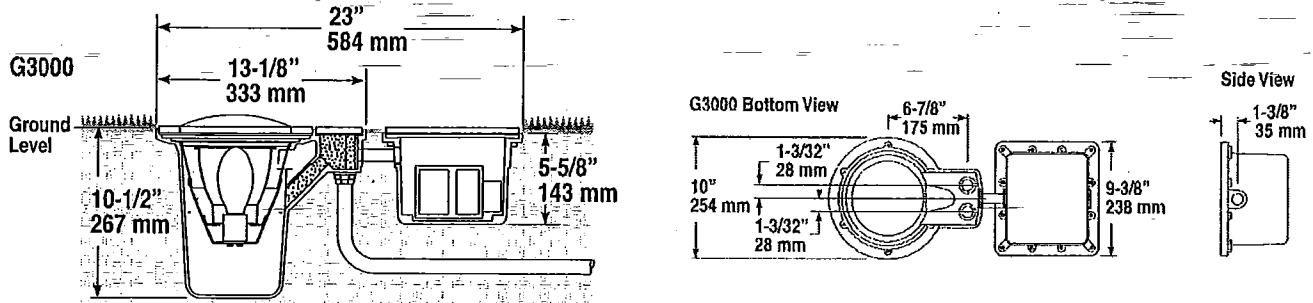
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(512) 753-1000  
FAX: (512) 753-7855  
www.slteighting.com



FIXTURE TYPE: BB1  
 PROJECT NAME: SOUTH AVONDALE SCHOOL

**ELECTRICAL SPECIFICATIONS**

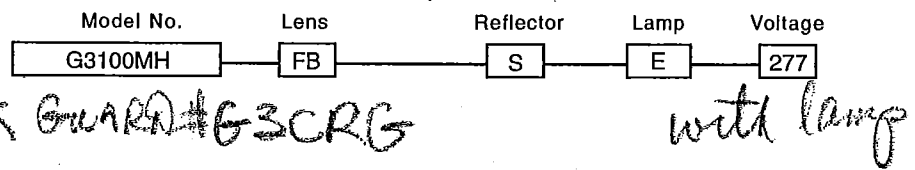


**ORDERING LOGIC - G3000 INGROUND**

CR=Rockguard w/Convex Lens	F=Flood	E=E17	120=120
FR=Rockguard w/Flat Lens	S=Spot	F=PLC	208=208
CB=Lens Ring w/Convex Lens	N=PAR or R Lamps	L=PLT	240=240
FB=Lens Ring w/Flat Lens		P=PAR	277=277
		R=R40	

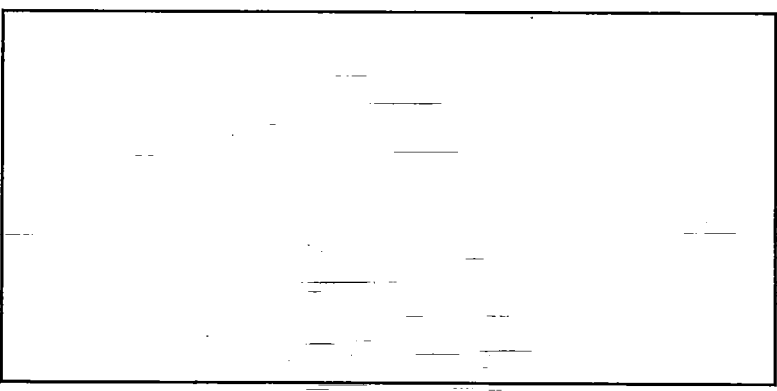
Wattage/Lamp	Model No.	Lens	Reflector	Lamp	Voltage
35W Metal Halide	G3035MH	( )	(N)	(P)	(120,277)
50W Metal Halide	G3050MH	( )	(F,S)	(E)	( )
70W Metal Halide	G3070MH	( )	( )	(P,E,R)	( )
100W Metal Halide	G3100MH	( )	( )	(P,E,R)	( )
175W Metal Halide	G3175MH	( )	( )	(P,E,R)	( )
35W High Pressure Sodium	G3035HPS	( )	(F,S)	(E)	(120,277)
50W High Pressure Sodium	G3050HPS	( )	(F,S)	(E)	( )
70W High Pressure Sodium	G3070HPS	( )	( )	(P,E)	( )
100W High Pressure Sodium	G3100HPS	( )	(F,S)	(E)	( )
150W High Pressure Sodium	G3150HPS	( )	(F,S)	(E)	( )
50W Mercury Vapor	G3050MV	( )	(F,S)	(E)	(120,277)
75W Mercury Vapor	G3075MV	( )	(F,S)	(E)	(120,277)
100W Mercury Vapor	G3100MV	( )	( )	(E,P)	( )
175W Mercury Vapor	G3175MV	( )	( )	(E,R)	( )
13W Fluorescent PLC G24Q-1	G3013FL	( )	(F,S)	(F)	(120,277)
26W Fluorescent PLT GX24Q-3	G3026PL	( )	(F,S)	(L)	(120,277)
28W Fluorescent PLC GX32D-3	G3028FL	( )	(F,S)	(F)	(120,277)
32W Fluorescent PLT GX24Q-3	G3032PL	( )	(F,S)	(L)	(120,277)
42W Fluorescent PLT GX24Q-4	G3042PL	( )	(F,S)	(L)	(120,277)

NOTE: Lamp not included.

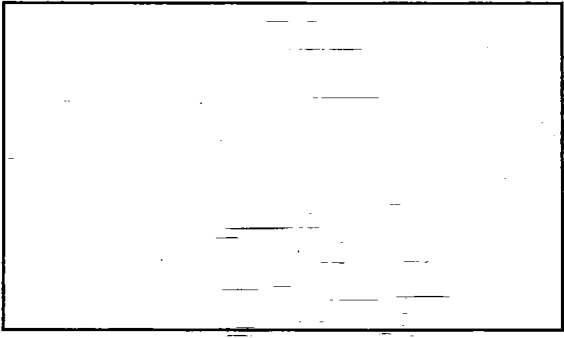


**PROJECT NOTES**

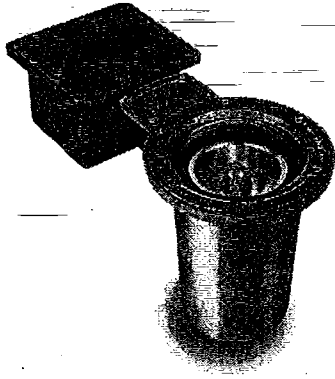
**Bronzelite®**



**APPROVAL**



## BRONZELITE G3000 INGROUND FIXTURE SPECIFICATION SHEET



The G3000 grade-mounted luminaire provides excellent landscape illumination using up to 175 watt H.I.D. or 42 watt compact fluorescent lamps. The fixture housing and ballast enclosure are constructed of heavy cast bronze and are fully gasketed for a positive, watertight seal.

model G3000

### SPECIFICATIONS

**HOUSING:** Cast bronze with integral pre-wired junction box. Two 3/4" N.P.T. conduit entrances are provided in the bottom of the junction box.

**LENS:** High-impact tempered glass.  
**(FB)** Flat lens is 2,100 pound live-load (walk-over) rated.  
**(CB)** Convex lens is recommended for applications where leaves or other surface debris may accumulate.

**LENS GASKET:** High temperature silicone.

**REFLECTORS:** Reflectors for E17 vertical lamps and fluorescent lamps are specular spun aluminum. Reflectors for E17 horizontal lamps are a combination of Hammertone® and specular formed aluminum.

**SOCKETS:** Pulse-rated, heavy-duty, glazed porcelain for H.I.D. lamps. High temperature plastic for fluorescent.

**WIRING:** High temperature wiring.

**AIMING:** 360° horizontal rotation and 25° vertical adjustment.

**BALLAST MODULE:** H.I.D.'s use QUAD volt core and coil, high power factor. The heavy-duty cast bronze ballast housing is supplied with a gasketed cover and tamper resistant screws. Fluorescents use electronic ballasts.

**WARRANTY:** Three year limited warranty.

**CERTIFICATION:** UL Listed to U.S. and Canadian safety standards for wet locations.

### ACCESSORIES (Must Be Ordered Separately and Field Installed)



**G3CRG:** Cast bronze rock guard

**G3CR:** Cast bronze lens ring

**G3GL1:** Aluminum internal louver.

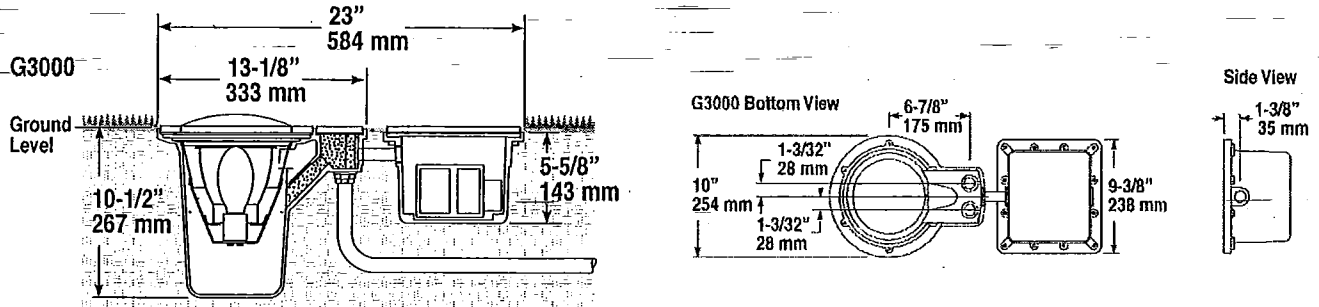


**G3WW1:** Cast bronze wall washer shield

FIXTURE TYPE: BB 2

PROJECT NAME: SOUTH AVONDALE SCHOOL

**ELECTRICAL SPECIFICATIONS**

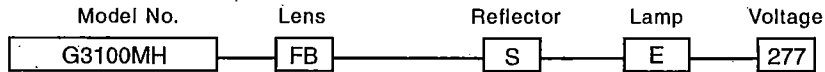


**ORDERING LOGIC - G3000 INGROUND**

- CR=Rockguard w/Convex Lens      F=Flood      E=E17      120=120
- FR=Rockguard w/Flat Lens      S=Spot      F=PLC      208=208
- CB=Lens Ring w/Convex Lens      N=PAR or R Lamps      L=PLT      240=240
- FB=Lens Ring w/Flat Lens      P=PAR      R=R40      277=277

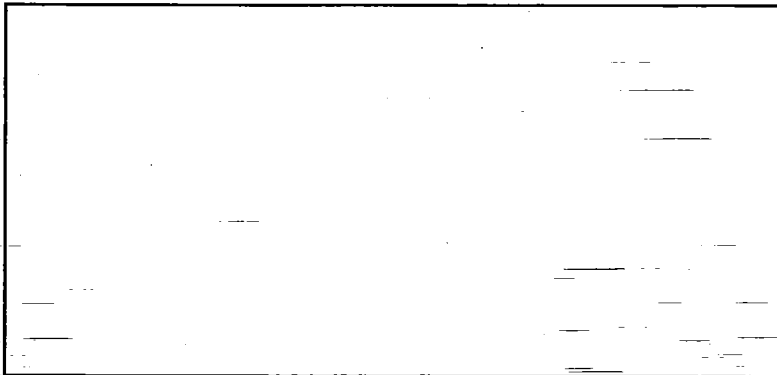
Wattage/Lamp	Model No.	Lens	Reflector	Lamp	Voltage
35W Metal Halide	G3035MH	( )	(N)	(P)	(120,277)
50W Metal Halide	G3050MH	( )	(F,S)	(E)	( )
70W Metal Halide	G3070MH	( )	( )	(P,E,R)	( )
100W Metal Halide	G3100MH	( )	( )	(P,E,R)	( )
175W Metal Halide	G3175MH	( )	( )	(P,E,R)	( )
35W High Pressure Sodium	G3035HPS	( )	(F,S)	(E)	(120,277)
50W High Pressure Sodium	G3050HPS	( )	(F,S)	(E)	( )
70W High Pressure Sodium	G3070HPS	( )	( )	(P,E)	( )
100W High Pressure Sodium	G3100HPS	( )	(F,S)	(E)	( )
150W High Pressure Sodium	G3150HPS	( )	(F,S)	(E)	( )
50W Mercury Vapor	G3050MV	( )	(F,S)	(E)	(120,277)
75W Mercury Vapor	G3075MV	( )	(F,S)	(E)	(120,277)
100W Mercury Vapor	G3100MV	( )	( )	(E,P)	( )
175W Mercury Vapor	G3175MV	( )	( )	(E,R)	( )
13W Fluorescent PLC GX24Q-1	G3013FL	( )	(F,S)	(F)	(120,277)
26W Fluorescent PLT GX24Q-3	G3026PL	( )	(F,S)	(L)	(120,277)
28W Fluorescent PLC GX32D-3	G3028FL	( )	(F,S)	(F)	(120,277)
32W Fluorescent PLT GX24Q-3	G3032PL	( )	(F,S)	(L)	(120,277)
42W Fluorescent PLT GX24Q-4	G3042PL	( )	(F,S)	(L)	(120,277)

NOTE: Lamp not included.

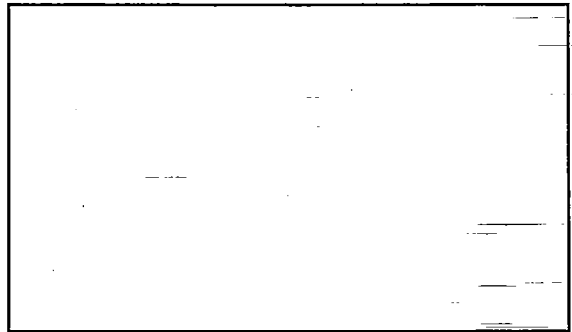


PROJECT NOTES *Rock GUARD # G3CRG with Lamp*

**Bronzelite®**



**APPROVAL**

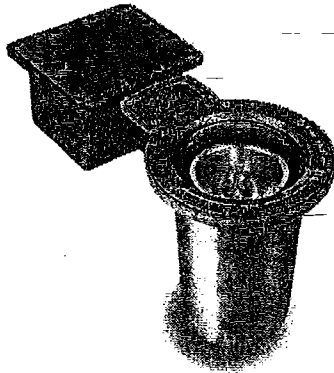


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FIXTURE TYPE: BB 2

PROJECT NAME: SOUTH AVONDALE SCHOOL

## BRONZELITE G3000 INGROUND FIXTURE SPECIFICATION SHEET



The G3000 grade-mounted luminaire provides excellent landscape illumination using up to 175 watt-H.I.D. or 42 watt compact fluorescent lamps. The fixture housing and ballast enclosure are constructed of heavy cast bronze and are fully gasketed for a positive, watertight seal.

model G3000

### SPECIFICATIONS

**HOUSING:** Cast bronze with integral pre-wired junction box. Two 3/4" N.P.T. conduit entrances are provided in the bottom of the junction box.

**LENS:** High-impact tempered glass.  
(FB) Flat lens is 2,100 pound live-load (walk-over) rated.  
(CB) Convex lens is recommended for applications where leaves or other surface debris may accumulate.

**LENS GASKET:** High temperature silicone.

**REFLECTORS:** Reflectors for E17 vertical lamps and fluorescent lamps are specular spun aluminum. Reflectors for E17 horizontal lamps are a combination of Hammertone® and specular formed aluminum.

**SOCKETS:** Pulse-rated, heavy-duty, glazed porcelain for H.I.D. lamps. High temperature plastic for fluorescent.

**WIRING:** High temperature wiring.

**AIMING:** 360° horizontal rotation and 25° vertical adjustment.

**BALLAST MODULE:** H.I.D.'s use QUAD volt core and coil, high power factor. The heavy-duty cast bronze ballast housing is supplied with a gasketed cover and tamper resistant screws. Fluorescents use electronic ballasts.

**WARRANTY:** Three year limited warranty.

**CERTIFICATION:** UL Listed to U.S. and Canadian safety standards for wet locations.

### ACCESSORIES (Must Be Ordered Separately and Field Installed)



**G3CRG:** Cast bronze rock guard

**G3CR:** Cast bronze lens ring

**G3GL1:** Aluminum internal louver.



**G3WW1:** Cast bronze wall washer shield

Note: Bronzelite reserves the right to modify the above details to reflect changes in the cost of materials &/or production &/or design without prior notice.  
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G3000-Rev2

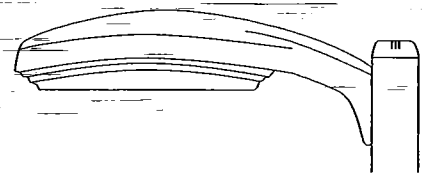
**Bronzelite®**

Notes:

Job: south ~~ADA~~ dale school  
Type: CC

# GULLWING

## G13 AREA LUMINAIRE



**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types II, III, and IV distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

### ORDERING

Flat glass lens luminaires meet IESNA Full Cutoff criteria. Sag Lens luminaires meet IESNA Cutoff criteria.

PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G13	1	4XL	175MH	277	BRP	F

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PTF4

### PREFIX

G13 13" Gullwing Luminaire

### CONFIGURATION

1	Single Assembly	3@120	Triple at 120°
2	Twin Assembly	4	Quad Assembly
2@90	Twin Assembly at 90°	W	Wall Mount, Recessed J-Box
3	Triple at 90°	WS	Wall Mount, Surface Conduit

### DISTRIBUTION

2XL	Type II, Horizontal Lamp
3XL	Type III, Horizontal Lamp
4XL	Type IV, Horizontal Lamp
MTS	Medium Throw with Solite Lens <i>Fluorescent only</i>

### WATTAGE

50HPS	50MH	<i>MTS Optics Only</i>
70HPS	70MH	(2)60CF 120V through 277V only, 50/60Hz. Starting temperature is -22° F/30° C
100HPS	100MH	(3)42TRF 120V through 277V and 347V only, 50/60Hz. Starting temperature is 0° F/18° C
150HPS	150MH	
175HPS	175MH	

MH Metal Halide  
HPS High Pressure Sodium  
CF Compact Fluorescent  
TRF Triple Tube Fluorescent

- 120 and 277V only.
- All G13 HID optics require medium base lamps.

### VOLTAGE

120  
208  
240  
277  
347  
480

### FINISH

BRP	Bronze Paint	OC	Optional Color Paint Specify RAL designation as shown ex: OC-RAL7024
BLP	Black Paint	SC	Special Color Paint Specify. Must supply color chip
WP	White Paint		
NP	Natural Aluminum Paint		

### OPTIONS

F	Fusing In Head
LF	In-Line/In-Pole Fusing
PC	Photocontrol and Receptacle <i>-NA with 480V.</i>
PCR	Photocontrol Receptacle only
POLY	Polycarbonate Sag Lens <i>100w max</i>
HS	Internal Houseside Shield
QS	Quartz Standby <i>100w max</i>
SG	Sag Glass Lens <i>In lieu of flat glass</i>

PTF2	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PTF3	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PTF4	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon
SPA	Square Pole Adaptor <i>Required for Straight square poles.</i>
TR1*	Single Transition
TR2*	Twin Transition <i>**Mounts to a 2-3/8" Top Tenon. Specify a pole with 3.00" OD for a smooth transition</i>
MF	Mast Arm Fitter <i>Slips over a standard 2-3/8" davil arm</i>

STANCHION HGT TBA with Lamp

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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Genlyte Group

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San Marcos, TX 78666 FAX: (512) 753-7855  
www.sltlighting.com



79115-130/1006

# GULLWING

## G18 AREA LUMINAIRE

### SPECIFICATIONS

**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft<sup>2</sup>/1.1 m<sup>2</sup>.

**LENS ASSEMBLY:** A single-piece diecast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core EPDM gasket to prevent intrusion by moisture, dust, and insects.

**OPTICAL SYSTEMS:** The segmented optical systems are manufactured from homogenous sheet aluminum which has been

electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types I (1), II (2XL), III (3XL), IV (4XL), and V (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

The lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented mogul base sockets to accept high output horizontal metal halide lamps are supplied standard.

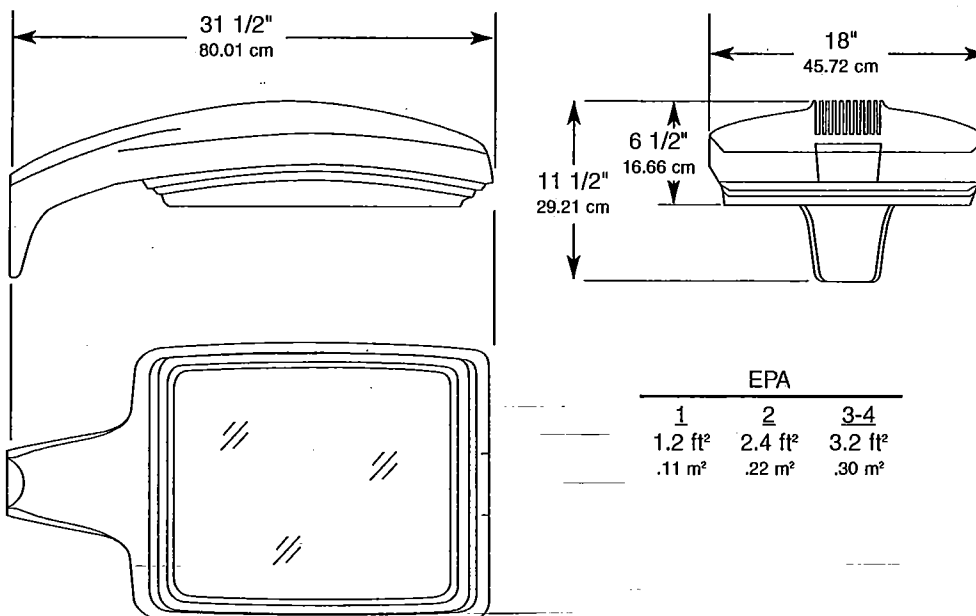
Fluorescent luminaires use a Medium Throw reflector with a Solite® glass lens (MTS).

**ELECTRICAL:** All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F / -29°C. Standard fluorescent ballasts are solid state.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) Wet Location labels.

### DIMENSIONS



Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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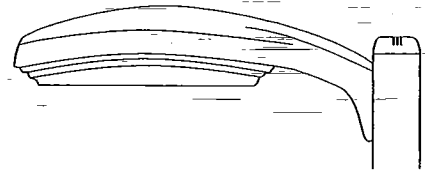
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: CC1

# GULLWING

## G18 AREA LUMINAIRES



**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

### ORDERING

Flat glass lens luminaires meet IESNA Full Cutoff criteria. Sag Lens luminaires meet IESNA Cutoff criteria.

PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	1	4XL	250MH	277	BRP	LF

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

W/A/CC1

### PREFIX

G18 18" Gullwing Luminaire

### CONFIGURATION

1	Single Assembly	3@120	Triple at 120° <i>Not available with PTF Option</i>
2	Twin Assembly	4	Quad Assembly
2@90	Twin Assembly at 90°	W	Wall Mount, Recessed J-Box
3	Triple at 90°	WS	Wall Mount, Surface Conduit

### DISTRIBUTION

1	Type I, Horizontal Lamp <i>(N/A above 400w)</i>
2XL	Type II, Horizontal Lamp
3XL	Type III, Horizontal Lamp
4XL	Type IV, Horizontal Lamp
Q	Type V, Horizontal Lamp <i>(N/A above 400w)</i>
MTS	Medium Throw with Solite Lens (Fluorescent only)

### WATTAGE

100MH <sup>3</sup>	250PSMH <sup>4</sup>	150HPS	<i>MTS Optics Only</i>
150MH <sup>3</sup>	320PSMH <sup>5</sup>	250HPS	(2)60CF
175MH	350PSMH	400HPS	(2)85CF
250MH	400PSMH <sup>6,8</sup>	600HPS	(2)120CF
400MH <sup>1</sup>	750PSMH <sup>2,7</sup>	750HPS <sup>2</sup>	
1000MH <sup>2,8</sup>	875PSMH <sup>2</sup>		
	1000PSMH <sup>2,8</sup>		

G18 with Fluorescent Is 120V THROUGH 277V only. Not available with 347V or 480V

### VOLTAGE

120  
208  
240  
277  
347  
480

- Requires ED28 or BT28 reduced jacketed lamp
- Furnished with sag glass lens only
- Venture mogul base lamps required
- M138 or M153
- M132 or M154
- M135 or M155
- M149 only. Requires MS750/PSBU-HOR/BT37 lamp.

MH Metal Halide  
PSMH Pulse Start Metal Halide  
HPS High Pressure Sodium

Notes 8 and 9:

For 1000 Metal Halide, use:

Brand	Product Code	Catalog Number
Venture	53702	MS1000W/HOR/BT37/3K
G.E.	18205	MVR1000/U/BT37
Venture	15332	MH1000W/U/BT37

For 1000 Pulse Start, use:

Brand	Product Code	Catalog Number
G.E.	10389	MVR1000/U/BT37/PA
Venture	49111	MS1000W/HOR/T25/PS

WARNING: Use of other lamps voids warranty

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint <i>Specify RAL designation as shown ex: OC-FAL7024</i>
SC	Special Color Paint <i>Specify. Must supply color chip.</i>

### OPTIONS

F	Fusing <i>In Head</i> <i>N/A with 750w and 1000w</i>	RPA2	4" and 5" Round Pole Adapter <i>Required for 4"-5" OD round poles</i>
LF	In-Line/In-Pole Fusing	PTF2*	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PC	Photocontrol and Receptacle <i>N/A with 480V</i>	PTF3*	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PCR	Photocontrol Receptacle only	PTF4*	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon <i>*PTF n/a with 120° mounting configurations</i>
POLY	Polycarbonate Sag Lens <i>(250w max)</i>	TR1**	Single Transition
HS	Internal Houseside Shield	TR2**	Twin Transition <i>**Mounts to a 2-3/8" Top Tenon. Specify a pole with 4.50" OD for a smooth transition</i>
QS	Quartz Standby <i>(400w max)</i>	MF	Mast Arm Fitter <i>Slips over a standard 2-3/8" davit arm</i>
SG	Sag Glass Lens <i>In lieu of flat glass</i> <i>Supplied standard with 750w and 1000w</i>		
SQPTF	Square Pole Top Fitter		
RPA1	3" Round Pole Adapter <i>Required for 3" OD round or tapered round poles where top OD is less than 4"</i>		

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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79115-85/1006



# GULLWING

## G13 AREA LUMINAIRES

### SPECIFICATIONS

**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types II, III, and IV distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only .8 ft<sup>2</sup>/0.07m<sup>2</sup>.

**LENS ASSEMBLY:** A single-piece diecast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with six retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core EPDM gasket to prevent intrusion by moisture, dust, and insects.

**OPTICAL SYSTEMS:** The segmented optical systems are manufactured from homogenous sheet aluminum which has been electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types II (2XL), III (3XL), and IV (4XL). The reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube. The lampholder is glazed porcelain with a nickel plated screw shell. Units feature porcelain medium base lampholders.

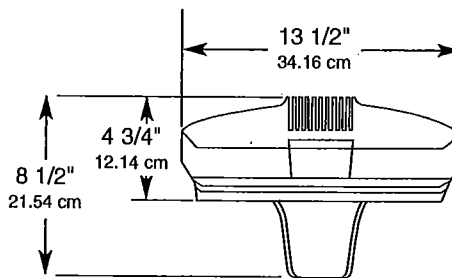
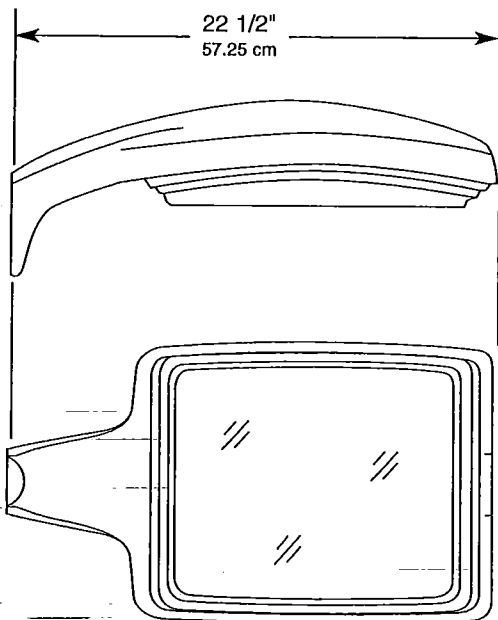
Fluorescent luminaires use a Medium Throw reflector with a Solite® glass lens (MTS).

**ELECTRICAL:** All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each HID high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F/-29°C. Standard fluorescent ballasts are solid state.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) Wet Location labels.

### DIMENSIONS



EPA		
1	2	3-4
.8 ft <sup>2</sup>	1.6 ft <sup>2</sup>	2.2 ft <sup>2</sup>
.07 m <sup>2</sup>	.15 m <sup>2</sup>	.20 m <sup>2</sup>

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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Genlyte Group

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www.sitelighting.com



GARDCO  
LIGHTING

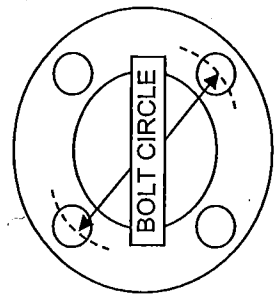
79115-130/1006

PART NO.	QTY	MTG. HGT.	DIA. "A"	WALL THK. "B"	BOLT CIR. "C"	ANCHOR BOLT SIZE
		16'	5"	0.125	7.75"	.75" X 28"

SIDE DRILLED  
 5" DIAMETER  
 .125 WALL THICKNESS  
 6063 - T6 ALUMINUM TUBING.

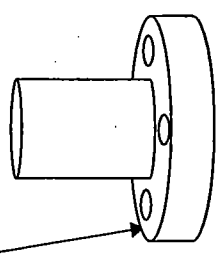
*TYPE C01  
 BRONZE FIN.*

7.75" BOLT CIRCLE  
 .75 X 24" X 4" ANCHOR BOLTS  
 WITH DOUBLE NUTS AND WASHERS.  
 2.75" BOLT PROJECTION.



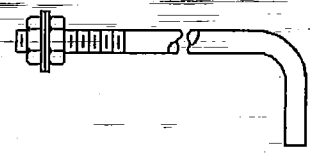
MTG. HGT.

HANDHOLE  
 W/COVER



356-T4 ALUMINUM ALLOY  
 CAST BASE WITH  
 TAMPER RESISTANT  
 COVERS.

ANCHOR BOLT



- (1) SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM 6063 T6 ALUMINUM EXTRUSION.
- (2) BASE CASTING IS 356 T6 CAST ALUMINUM. THE POLE SHAFT TELESCOPES INTO THE BASE CASTING AND IS CIRCUMFERENTIALLY WELDED TOP AND BOTTOM.
- (3) ANCHOR BOLTS ARE FABRICATED FROM STRUCTURAL QUALITY HOT ROLLED CARBON STEEL BAR, HAVING MINIMUM YIELD STRENGTH OF 50,000 P.S.I. BOLTS HAVE AN "L" BEND ON THE END. THE THREADS PLUS 3 INCHES ARE GALVANIZED. ANCHOR BOLTS ARE SUPPLIED WITH TWO NUTS AND TWO WASHERS ATTACHED.
- (4) POLE FINISH IS A POLYESTER PC

**GENERAL STRUCTURES, INC.**  
 23171 GROESBECK HWY  
 WARREN, MI 48089

SCALE: NONE	APPROVED BY:	DRAWN BY: RGW
DATE: JULY 10, 2000		REVISED: AUGUST 4, 2005
PROJECT:		
JOB NO.		DRAWING NUMBER
		<b>CPA-4-5012-16-DB</b>

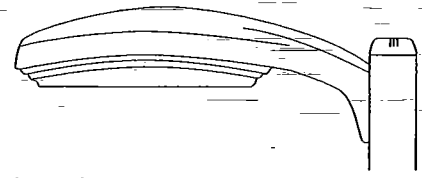
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: CC3

# GULLWING

## G18 AREA LUMINAIRES



**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V-distributions. The door frame is single-piece diecast aluminum and retains an optically-clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

### ORDERING

Flat glass lens luminaires meet IESNA Full Cutoff criteria. Sag Lens luminaires meet IESNA Cutoff criteria.

PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	1	3XL	250MH	277	BRP	LF

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

*W/Lamp*

### PREFIX

G18 18" Gullwing Luminaire

### CONFIGURATION

1	Single Assembly	3@120	Triple at 120° <i>Not available with PTF Option</i>
2	Twin Assembly	4	Quad Assembly
2@90	Twin Assembly at 90°	W	Wall Mount, Recessed J-Box
3	Triple at 90°	WS	Wall Mount, Surface Conduit

### DISTRIBUTION

1	Type I, Horizontal Lamp ( <i>N/A above 400w</i> )
2XL	Type II, Horizontal Lamp
3XL	Type III, Horizontal Lamp
4XL	Type IV, Horizontal Lamp
Q	Type V, Horizontal Lamp ( <i>N/A above 400w</i> )
MTS	Medium Throw with Solite Lens (Fluorescent only)

### WATTAGE

100MH <sup>3</sup>	250PSMH <sup>4</sup>	150HPS	<i>MTS Optics Only</i>
150MH <sup>3</sup>	320PSMH <sup>5</sup>	250HPS	(2)60CF
175MH	350PSMH	400HPS	(2)85CF
250MH	400PSMH <sup>1,6</sup>	600HPS	(2)120CF
400MH <sup>1</sup>	750PSMH <sup>2,7</sup>	750HPS <sup>2</sup>	
1000MH <sup>2,8</sup>	875PSMH <sup>2</sup>		
	1000PSMH <sup>2,9</sup>		

G18 with Fluorescent Is 120V THROUGH 277V only. Not available with 347V or 480V

### VOLTAGE

120  
208  
240  
277  
347  
480

- Requires ED26 or BT28 reduced jacketed lamp
- Furnished with sag glass lens only
- Venture mogul base lamps required
- M138 or M153
- M132 or M154
- M135 or M155
- M149 only. Requires MS750/PS/BU-HOR/BT37 lamp.

MH Metal Halide  
PSMH Pulse Start Metal Halide  
HPS High Pressure Sodium

Notes 8 and 9:

For 1000 Metal Halide, use:

Brand	Product Code	Catalog Number
Venture	53702	MS1000W/HOR/BT37/3K
G.E.	18205	MVR1000/U/BT37
Venture	15332	MH1000W/U/BT37

For 1000 Pulse Start, use:

Brand	Product Code	Catalog Number
G.E.	10389	MVR1000/U/BT37/PA
Venture	49111	MS1000W/HOR/T25/PS

**WARNING: Use of other lamps voids warranty**

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint <i>Specify RAL designation as shown ex: OC-RAL7024</i>
SC	Special Color Paint <i>Specify. Must supply color chip.</i>

### OPTIONS

F	Fusing In Head <i>N/A with 750w and 1000w</i>	RPA2	4" and 5" Round Pole Adapter <i>Required for 4"-5" OD round poles</i>
LF	In-Line/In-Pole Fusing	PTF2*	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PC	Photocontrol and Receptacle <i>N/A with 480V</i>	PTF3*	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PCR	Photocontrol Receptacle only	PTF4*	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon <i>* PTF n/a with 120° mounting configurations</i>
POLY	Polycarbonate Sag Lens ( <i>250w max</i> )	TR1**	Single Transition
HS	Internal Houseside Shield	TR2**	Twin Transition <i>**Mounts to a 2-3/8" Top Tenon. Specify a pole with 4.50" OD for a smooth transition</i>
QS	Quartz Standby ( <i>400w max</i> )	MF	Mast Arm Fitter <i>Slips over a standard 2-3/8" davit arm</i>
SG	Sag Glass Lens <i>in lieu of flat glass Supplied standard with 750w and 1000w</i>		
SQPTF	Square Pole Top Fitter		
RPA1	3" Round Pole Adapter <i>Required for 3" OD round or tapered round poles where top OD is less than 4"</i>		

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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79115-85/1006

# GULLWING

## G18 AREA LUMINAIRES

### SPECIFICATIONS

**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft<sup>2</sup>/11 m<sup>2</sup>.

**LENS ASSEMBLY:** A single-piece diecast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core EPDM gasket to prevent intrusion by moisture, dust, and insects.

**OPTICAL SYSTEMS:** The segmented optical systems are manufactured from homogenous sheet aluminum which has been

electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types I (1), II (2XL), III (3XL), IV (4XL), and V (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

The lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented mogul base sockets to accept high output horizontal metal halide lamps are supplied standard.

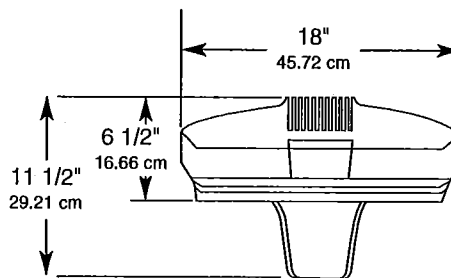
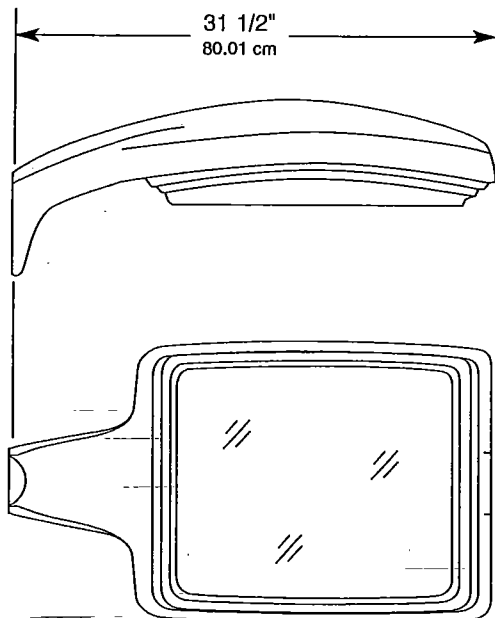
Fluorescent luminaires use a Medium Throw reflector with a Solite® glass lens (MTS).

**ELECTRICAL:** All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F / -29°C. Standard fluorescent ballasts are solid state.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) Wet Location labels.

### DIMENSIONS



EPA		
1	2	3-4
1.2 ft <sup>2</sup>	2.4 ft <sup>2</sup>	3.2 ft <sup>2</sup>
.11 m <sup>2</sup>	.22 m <sup>2</sup>	.30 m <sup>2</sup>

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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FAX: (512) 753-7855  
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SIDE DRILLED

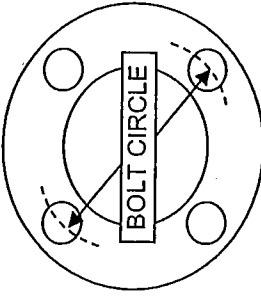
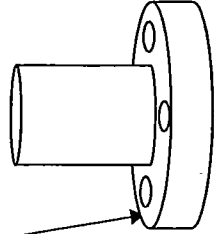
5" DIAMETER  
.125 WALL THICKNESS  
6063 - T6 ALUMINUM TUBING.

000

MTG.  
HGT.

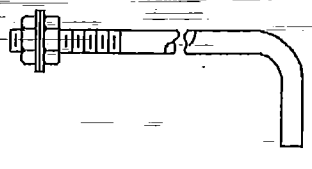
HANDHOLE  
W/COVER

356-T4 ALUMINUM ALLOY  
CAST BASE WITH  
TAMPER RESISTANT  
COVERS.



TYPE CC3  
BRONZE PTA.

7.75" BOLT CIRCLE  
.75 X 24" X 4" ANCHOR BOLTS  
WITH DOUBLE NUTS AND WASHERS.  
2.75" BOLT PROJECTION.



ANCHOR BOLT

PART NO.	QTY.	MTG. HGT.	DIA. "A"	WALL THK. "B"	BOLT CIR. "C"	ANCHOR BOLT SIZE
		16'	5"	0.125	7.75"	.75" X 28"

- (1) SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM 6063 T6 ALUMINUM EXTRUSION.
- (2) BASE CASTING IS 356 T6 CAST ALUMINUM. THE POLE SHAFT TELESCOPES INTO THE BASE CASTING AND IS CIRCUMFERENTIALLY WELDED TOP AND BOTTOM.
- (3) ANCHOR BOLTS ARE FABRICATED FROM STRUCTURAL QUALITY HOT ROLLED CARBON STEEL BAR, HAVING MINIMUM YIELD STRENGTH OF 50,000 P.S.I. BOLTS HAVE AN "L" BEND ON THE END. THE THREADS PLUS 3 INCHES ARE GALVANIZED. ANCHOR BOLTS ARE SUPPLIED WITH TWO NUTS AND TWO WASHERS ATTACHED.
- (4) POLE FINISH IS A POLYESTER PC

**GENERAL STRUCTURES, INC.**  
23171 GROESBECK HWY  
WARREN, MI 48089

SCALE: NONE	APPROVED BY:	DRAWN BY: RGW
DATE: JULY 10, 2000		REVISED: AUGUST 4, 2005
PROJECT:		
JOB NO.	DRAWING NUMBER	
	CPA-4-5012-16-DB	

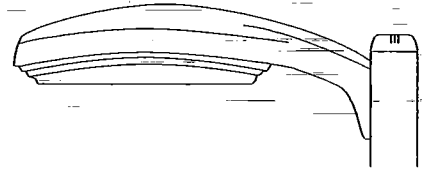
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: CC32

# GULLWING

## G18 AREA LUMINAIRES



**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically-clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

### ORDERING

Flat glass lens luminaires meet IESNA Full Cutoff criteria. Sag Lens luminaires meet IESNA Cutoff criteria.

PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	2	3XL	250MH	277	BRP	LF

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

### PREFIX

G18 18" Gullwing Luminaire

### CONFIGURATION

1	Single Assembly	3@120	Triple at 120° Not available with PTF Option
2	Twin Assembly	4	Quad Assembly
2@90	Twin Assembly at 90°	W	Wall Mount, Recessed J-Box
3	Triple at 90°	WS	Wall Mount, Surface Conduit

### DISTRIBUTION

1	Type I, Horizontal Lamp (N/A above 400w)
2XL	Type II, Horizontal Lamp
3XL	Type III, Horizontal Lamp
4XL	Type IV, Horizontal Lamp
Q	Type V, Horizontal Lamp (N/A above 400w)
MTS	Medium Throw with Solite Lens (Fluorescent only)

### WATTAGE

100MH <sup>3</sup>	250PSMH <sup>4</sup>	150HPS	MTS Optics Only
150MH <sup>3</sup>	320PSMH <sup>5</sup>	250HPS	(2)60CF
175MH	350PSMH	400HPS	(2)85CF
250MH	400PSMH <sup>1,6</sup>	600HPS	(2)120CF
400MH <sup>1</sup>	750PSMH <sup>2,7</sup>	750HPS <sup>2</sup>	
1000MH <sup>2,8</sup>	875PSMH <sup>2</sup>		
	1000PSMH <sup>2,9</sup>		

G18 with Fluorescent Is 120 THROUGH 277V only. Not available with 347V or 480V

### VOLTAGE

120  
208  
240  
277  
347  
480

- Requires ED28 or BT28 reduced jacketed lamp
- Furnished with sag glass lens only
- Venture mogul base lamps required
- M138 or M153
- M132 or M154
- M135 or M155
- M149 only. Requires MS750/PS/BU-HOR/BT37 lamp.

MH Metal Halide  
PSMH Pulse Start Metal Halide  
HPS High Pressure Sodium

Notes 8 and 9:

For 1000 Metal Halide, use:

Brand	Product Code	Catalog Number
Venture	53702	MS1000W/HOR/BT37/3K
G.E.	18205	MVR1000/U/BT37
Venture	15332	MH1000W/U/BT37

For 1000 Pulse Start, use:

Brand	Product Code	Catalog Number
G.E.	10389	MVR1000/U/BT37/PA
Venture	49111	MS1000W/HOR/T25/PS

WARNING: Use of other lamps voids warranty

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint Specify RAL designation as shown ex: OC-RAL7024
SC	Special Color Paint Specify. Must supply color chip.

### OPTIONS

F	Fusing In Head N/A with 750w and 1000w	RPA2	4" and 5" Round Pole Adapter Required for 4"-5" OD round poles
LF	In-Line/In-Pole Fusing	PTF2*	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PC	Photocontrol and Receptacle N/A with 480V	PTF3*	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PCR	Photocontrol Receptacle only	PTF4*	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon * PTF n/a with 120° mounting configurations
POLY	Polycarbonate Sag Lens (250w max)	TR1**	Single Transition
HS	Internal Houseside Shield	TR2**	Twin Transition **Mounts to a 2-3/8" Top Tenon. Specify a pole with 4.50" OD for a smooth transition
QS	Quartz Standby (400w max)	MF	Mast Arm Fitter Slips over a standard 2-3/8" davit arm
SG	Sag Glass Lens In lieu of flat glass Supplied standard with 750w and 1000w		
SQPTF	Square Pole Top Fitter		
RPA1	3" Round Pole Adapter Required for 3" OD round or tapered round poles where top OD is less than 4"		

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Gentyle Group

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FAX: (512) 753-7855  
www.sitelighting.com



79115-85/1006

# GULLWING

## G18 AREA LUMINAIRES

### SPECIFICATIONS

**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft<sup>2</sup>/11 m<sup>2</sup>.

**LENS ASSEMBLY:** A single-piece diecast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core EPDM gasket to prevent intrusion by moisture, dust, and insects.

**OPTICAL SYSTEMS:** The segmented optical systems are manufactured from homogenous sheet aluminum which has been

electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types I (1), II (2XL), III (3XL), IV (4XL), and V (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

The lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented mogul base sockets to accept high output horizontal metal halide lamps are supplied standard.

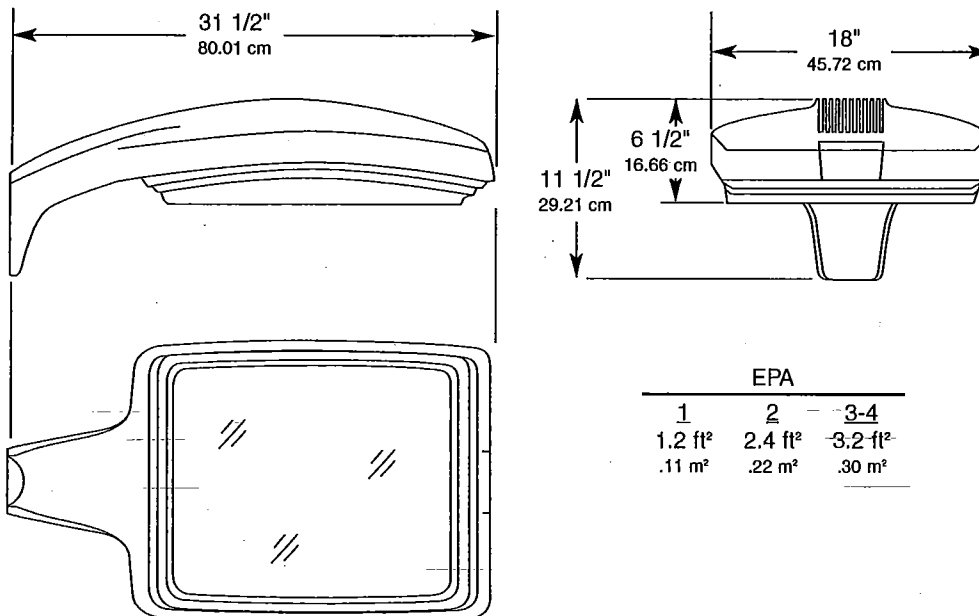
Fluorescent luminaires use a Medium Throw reflector with a Solite® glass lens (MTS).

**ELECTRICAL:** All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F / -29°C. Standard fluorescent ballasts are solid state.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidyl isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) Wet Location labels.

### DIMENSIONS



Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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FAX: (512) 753-7855  
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79115-85/0306

PART NO.	QTY	MTG. HGT.	DIA. "A"	WALL THK. "B"	BOLT CIR. "C"	ANCHOR BOLT SIZE
		16'	5"	0.125	7.75"	.75" X 28"

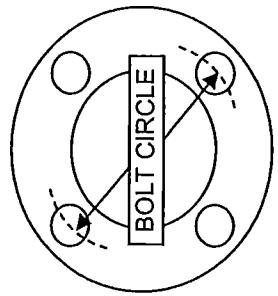
*TYPE CC 32  
BRONZE PTD*

SIDE DRILLED  
*2 WAY at 180°*

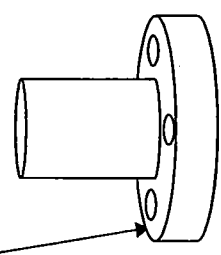
5" DIAMETER  
.125 WALL THICKNESS  
6063 - T6 ALUMINUM TUBING.

000

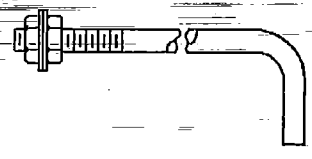
MTG.  
HGT.



356-T4 ALUMINUM ALLOY  
CAST BASE WITH  
TAMPER RESISTANT  
COVERS.



HANDHOLE  
W/COVER



ANCHOR BOLT

7.75" BOLT CIRCLE  
.75 X 24" X 4" ANCHOR BOLTS  
WITH DOUBLE NUTS AND WASHERS.  
2.75" BOLT PROJECTION.

- (1) SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM 6063 T6 ALUMINUM EXTRUSION.
- (2) BASE CASTING IS 356 T6 CAST ALUMINUM. THE POLE SHAFT TELESCOPES INTO THE BASE CASTING AND IS CIRCUMFERENTIALLY WELDED TOP AND BOTTOM.
- (3) ANCHOR BOLTS ARE FABRICATED FROM STRUCTURAL QUALITY HOT ROLLED CARBON STEEL BAR, HAVING MINIMUM YIELD STRENGTH OF 50,000 P.S.I. BOLTS HAVE AN "L" BEND ON THE END. THE THREADS PLUS 3 INCHES ARE GALVANIZED. ANCHOR BOLTS ARE SUPPLIED WITH TWO NUTS AND TWO WASHERS ATTACHED.
- (4) POLES TO HAVE A POLYESTER POWDER COAT FINISH.

**GENERAL STRUCTURES, INC.**  
23171 GROESBECK HWY.  
WARREN, MI 48089

SCALE: NONE	APPROVED BY:	DRAWN BY: RGW
DATE: JULY 10, 2000	REVISED: AUGUST 4, 2005	
PROJECT:		
JOB NO.	DRAWING NUMBER CPA-4-5012-16- <i>EB</i>	



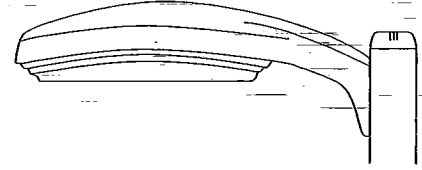
Notes:

Job: SOUTH AVONDALE SCHOOL

Type: CC32C

# GULLWING

## G18 AREA LUMINAIRES



**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V-distributions. The door frame is single-piece diecast aluminum and retains an optically-clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

### ORDERING

Flat glass lens luminaires meet IESNA Full Cutoff criteria. Sag Lens luminaires meet IESNA Cutoff criteria.

PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	2	3XL	250MH	277	BRP	LF

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

*w/ Lamps*

### PREFIX

G18 18" Gullwing Luminaire

### CONFIGURATION

1	Single Assembly	3@120	Triple at 120° <i>Not available with PTF Option</i>
2	Twin Assembly	4	Quad Assembly
2@90	Twin Assembly at 90°	W	Wall Mount, Recessed J-Box
3	Triple at 90°	WS	Wall Mount, Surface Conduit

### DISTRIBUTION

1	Type I, Horizontal Lamp <i>(N/A above 400w)</i>
2XL	Type II, Horizontal Lamp
3XL	Type III, Horizontal Lamp
4XL	Type IV, Horizontal Lamp
Q	Type V, Horizontal Lamp <i>(N/A above 400w)</i>
MTS	Medium Throw with Solite Lens (Fluorescent only)

### WATTAGE

100MH <sup>3</sup>	250PSMH <sup>4</sup>	150HPS	<i>MTS Optics Only</i>
150MH <sup>3</sup>	320PSMH <sup>5</sup>	250HPS	(2)60CF
175MH	350PSMH	400HPS	(2)85CF
250MH	400PSMH <sup>1,6</sup>	600HPS	(2)120CF
400MH <sup>1</sup>	750PSMH <sup>2,7</sup>	750HPS <sup>2</sup>	
1000MH <sup>2,8</sup>	875PSMH <sup>2</sup>		G18 with Fluorescent Is 120V THROUGH 277V only. Not available with 347V or 480V
	1000PSMH <sup>2,9</sup>		

- Requires ED28 or BT28 reduced jacketed lamp
- Furnished with sag glass lens only
- Venture mogul base lamps required
- M138 or M153
- M132 or M154
- M135 or M155
- M149 only. Requires MS750/PS/BU-HOR/BT37 lamp.

Notes 8 and 9:

For 1000 Metal Halide, use:

Brand	Product Code	Catalog Number
Venture	53702	MS1000W/HOR/BT37/3K
G.E.	18205	MVR1000/U/BT37
Venture	15332	MH1000W/U/BT37

For 1000 Pulse Start, use:

Brand	Product Code	Catalog Number
G.E.	10389	MVR1000/U/BT37/PA
Venture	49111	MS1000W/HOR/T25/PS

WARNING: Use of other lamps voids warranty

### VOLTAGE

120  
208  
240  
277  
347  
480

MH Metal Halide  
PSMH Pulse Start Metal Halide  
HPS High Pressure Sodium

### FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint <i>Specify RAL designation as shown ex: OC-RAL7024</i>
SC	Special Color Paint <i>Specify. Must supply color chip.</i>

### OPTIONS

F	Fusing In Head <i>N/A with 750w and 1000w</i>	RPA2	4" and 5" Round Pole Adapter <i>Required for 4"-5" OD round poles</i>
LF	In-Line/In-Pole Fusing	PTF2*	Pole Top Fitter - 2 3/8" - 3" Dia. Tenon
PC	Photocontrol and Receptacle <i>N/A with 480V</i>	PTF3*	Pole Top Fitter - 3" - 3 1/2" Dia. Tenon
PCR	Photocontrol Receptacle only	PTF4*	Pole Top Fitter - 3 1/2" - 4" Dia. Tenon <i>* PTF n/a with 120° mounting configurations</i>
POLY	Polycarbonate Sag Lens (250w max)	TR1**	Single Transition
HS	Internal Houseside Shield	TR2**	Twin Transition <i>**Mounts to a 2-3/8" Top Tenon. Specify a pole with 4.50" OD for a smooth transition</i>
QS	Quartz Standby (400w max)	MF	Mast Arm Fitter <i>Slips over a standard 2-3/8" davit arm</i>
SG	Sag Glass Lens <i>In lieu of flat glass Supplied standard with 750w and 1000w</i>		
SQPTF	Square Pole Top Fitter		
RPA1	3" Round Pole Adapter <i>Required for 3" OD round or tapered round poles where top OD is less than 4"</i>		

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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Genlyte Group

Gardco Lighting  
1611 Clovis Barker Road,  
San Marcos, TX 78666

(800) 227-0758  
(512) 753-1000  
FAX: (512) 753-7855  
www.sitelighting.com



# GULLWING

## G18 AREA LUMINAIRES

### SPECIFICATIONS

**GENERAL DESCRIPTION:** The Gardco Gullwing is an area luminaire defined by its sleek profile and rugged construction. The housing is one-piece, diecast aluminum and mounts directly to a pole or wall without the need of a separate support arm. The multifaceted arc-image duplicating optical systems provide IES Types I, II, III, IV and V distributions. The door frame is single-piece diecast aluminum and retains an optically clear tempered flat glass lens. The luminaire is completely sealed and gasketed preventing intrusion from moisture, dust and insects. The Gullwing luminaires are finished with a fade and abrasion resistant TGIC powdercoat.

**HOUSING:** A one-piece diecast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form reduces the effective projected area of the luminaire to only 1.2 ft<sup>2</sup>/1.1 m<sup>2</sup>.

**LENS ASSEMBLY:** A single-piece diecast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow-core EPDM gasket to prevent intrusion by moisture, dust, and insects.

**OPTICAL SYSTEMS:** The segmented optical systems are manufactured from homogenous sheet aluminum which has been

electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types I (1), II (2XL), III (3XL), IV (4XL), and V (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

The lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented mogul base sockets to accept high output horizontal metal halide lamps are supplied standard.

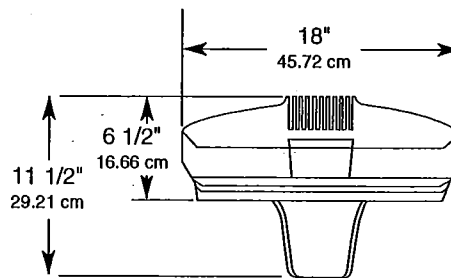
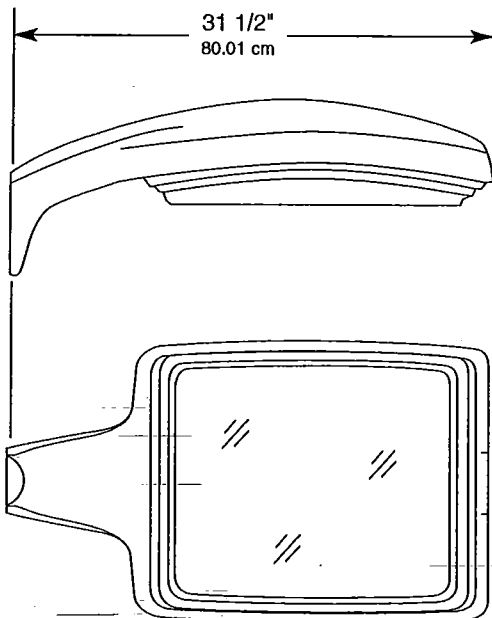
Fluorescent luminaires use a Medium Throw reflector with a Solite® glass lens (MTS).

**ELECTRICAL:** All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F / -29°C. Standard fluorescent ballasts are solid state.

**FINISH:** Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

**LABELS:** All fixtures bear UL or CUL (where applicable) Wet Location labels.

### DIMENSIONS



EPA		
1	2	3-4
1.2 ft <sup>2</sup>	2.4 ft <sup>2</sup>	3.2 ft <sup>2</sup>
.11 m <sup>2</sup>	.22 m <sup>2</sup>	.30 m <sup>2</sup>

Gardco Lighting reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. The Gullwing design is protected by U.S. patent number DES.391.659. The XL optical system is protected by U.S. patent number 5690422.

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Genlyte Group

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 San Marcos, TX 78666 FAX: (512) 753-7855  
[www.sitelighting.com](http://www.sitelighting.com)



79115-85/0306

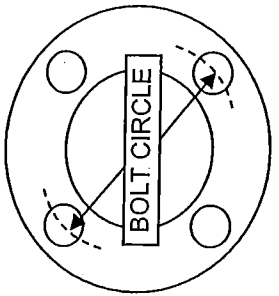
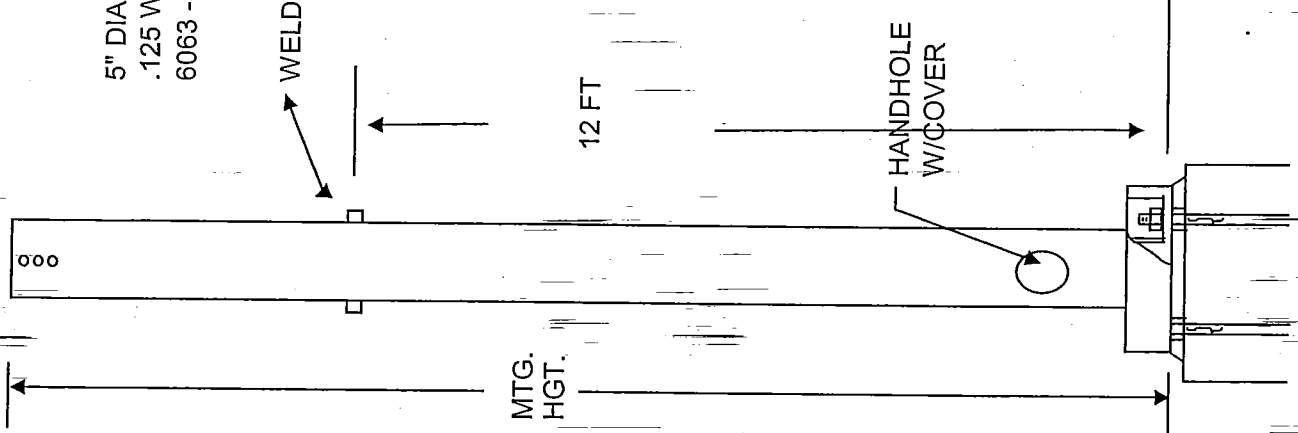
PART NO.	QTY	MTG. HGT.	DIA. "A"	WALL THK. "B"	BOLT CIR. "C"	ANCHOR BOLT SIZE
		16'	5"	0.125	7.75"	.75" X 28"

SIDE DRILLED 2 way at 180°

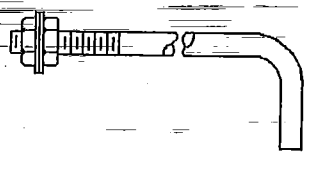
5" DIAMETER  
.125 WALL THICKNESS  
6063 - T6 ALUMINUM TUBING.

TYPE CC 32C

WELDED COUPLING 90° TO HEADS

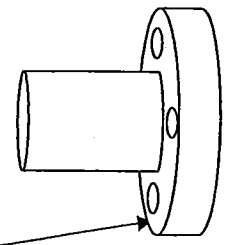


7.75" BOLT CIRCLE  
.75 X 24" X 4" ANCHOR BOLTS  
WITH DOUBLE NUTS AND WASHERS.  
2.75" BOLT PROJECTION.



ANCHOR BOLT

356-T4 ALUMINUM ALLOY  
CAST BASE WITH  
TAMPER RESISTANT  
COVERS.



HANDHOLE  
W/COVER

- (1) SHAFTS ARE ONE SECTION DESIGN FABRICATED FROM 6063 T6 ALUMINUM EXTRUSION.
- (2) BASE CASTING IS 356 T6 CAST ALUMINUM. THE POLE SHAFT TELESCOPES INTO THE BASE CASTING AND IS CIRCUMFERENTIALLY WELDED TOP AND BOTTOM.
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- (4) POLES TO HAVE A POLYESTER POWDER COAT FINISH.

**GENERAL STRUCTURES, INC.**  
23171 GROESBECK HWY.  
WARREN, MI 48089

SCALE: NONE  
DATE: JULY 10, 2000  
PROJECT:

APPROVED BY:  
DRAWN BY: RGW  
REVISED: AUGUST 4, 2005

JOB NO.

DRAWING NUMBER  
CPA-4-5012-16-(2)WC

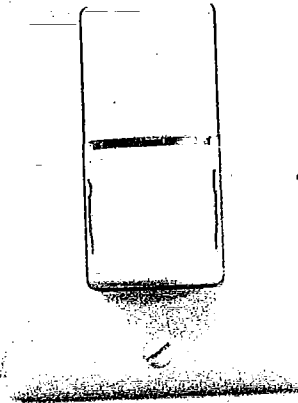
-105



# WS-200 Automatic Wall Switch

180° coverage,  
maximum of 900 ft<sup>2</sup>

Built-in light level sensor



Dual 120/277-VAC  
operation

Terminal style wiring for  
easy installation

Compatible with all  
electronic ballasts

PROJECT

LOCATION/TYPE

## Product Overview

### Description

The WS-200 automatic wall switch sensors replace existing wall switches and fit behind standard decorator wall plates. They turn lighting on and off based on occupancy and ambient light levels.

### Operation

The WS-200 utilizes advanced passive infrared technology to detect occupancy. Detection occurs when the WS senses the difference between infrared energy from a human body in motion and the background space. Lighting automatically turns on when occupancy is detected. After a user-specified length of time when no occupancy is detected, lighting automatically switches off. The sensors can also be used with multiple switches for multi-level lighting.

### Light Level Sensor

The WS-200 features a built-in light level sensor. This feature holds lighting systems off when natural light levels are above the pre-set level. Once lights are switched on, the sensor will not switch them off even if daylight levels increase. Using the light level feature is optional and the setting is adjustable by the user.

### Applications

The WS-200 has the flexibility to work in a variety of applications including offices, conference rooms, break rooms, and utility rooms. Energy savings for these areas can be as high as 60% since lighting will no longer remain on once the room is vacant. With a competitive price, low installation cost, and high energy savings, paybacks are usually well under two years.

## Features

- ASIC technology reduces components and enhances reliability
- Pulse Count Processing eliminates false offs without reducing sensitivity
- Detection Signature Analysis eliminates false triggers; provides immunity to RFI and EMI
- Zero-crossing circuitry reduces stress on the relay and results in increased sensor life
- Digital time delay adjustment from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Integrated light level sensor holds lights off when natural light levels are above the pre-set level
- Custom, 2-level Fresnel lens enhances detection at the desktop level
- Screw terminal wiring system eliminates the need for wire nuts, making installation quicker
- Patented voltage drop protection
- For safety, there is no leakage to load in the off mode and sensor is safety grounded
- LED indicates occupancy detection



OCCUPANCY SENSORS

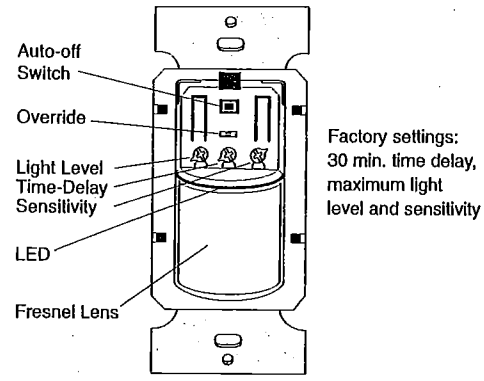
Automatic Wall Switches

# Specifications

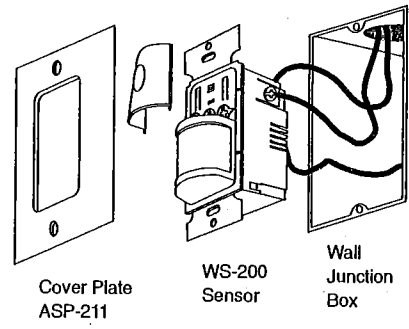
- 120/277 VAC
- Coverage of 180 degrees, maximum 900 ft<sup>2</sup>; 300 ft<sup>2</sup> for desktop activity
- Time delay adjustable from 30 seconds up to 30 minutes
- Adjustable unit sensitivity from 20% to 100%
- Adjustable light level setting of 2 to 200 footcandles (21.5 to 2,153 lux)
- Compatible with all electronic ballasts and PL lamp ballasts
- Dimensions: 2.6" x 1.7" x 2" (66.0mm x 43.1mm x 50.8mm) L x W x D
- UL and CUL listed; Five year warranty

# Controls & Installation

## Product Controls

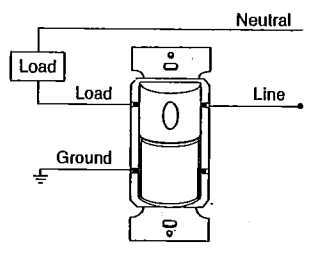


## Installation

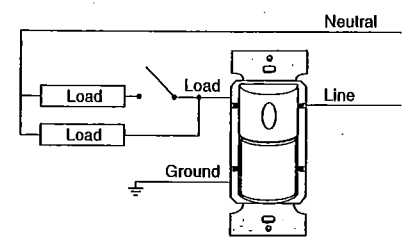


## Wiring

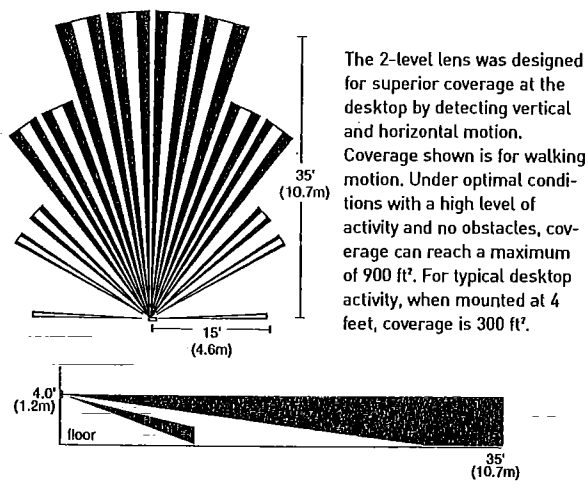
### Single Level Lighting



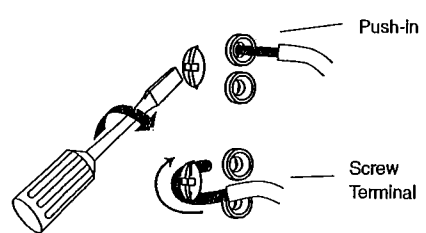
### Manual Bi-level Lighting



## Coverage & Wire Connection



## Wire Connections



Wiring the sensor is quick and simple with the WS's terminal wiring screws.

## Ordering Information

Catalog No.	Color	Voltage	Load Requirement	Coverage
<input checked="" type="checkbox"/> WS-200-W	White	120 VAC; 60 Hz or 277 VAC; 60 Hz	0-800 Watt Ballast or 0-1200 Watt Ballast	180°, up to 900 ft <sup>2</sup> [83.6 m <sup>2</sup> ]
<input type="checkbox"/> WS-200-A	Lt. Almond			
<input type="checkbox"/> WS-200-I	Ivory			
<input type="checkbox"/> WS-200-G	Grey			
<input type="checkbox"/> WS-200-B	Black			

Pub. No. 13904

One ASP-211 single-gang cover plate included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option (specify color). \*Models for 220-240 VAC [WS-230] and 347 VAC [WS-347] are available.



# DT-200 Dual Technology Occupancy Sensor

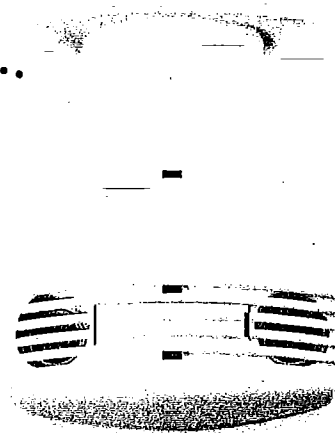
Combines passive infrared and ultrasonic technologies

Built-in light level sensor

SmartSet™ automatically selects optimal settings for each space

Accepts low voltage switch input for manual-on operation

Walk-through mode increases savings potential



PROJECT
LOCATION/TYPE

## Product Overview

### Description

Watt Stopper/Legrand's DT-200 Dual Technology occupancy sensors combine passive infrared (PIR) and ultrasonic technologies into one unit to achieve precise coverage.

### Operation

The DT-200 turns lighting on when both PIR and ultrasonic technologies detect occupancy. It can also work with a low voltage switch for manual-ON operation. PIR technology senses the difference between infrared energy from a human body in motion and the background space. Ultrasonic technology uses the Doppler Principle and high frequency (40 kHz) ultrasound to sense motion within the space. Once lighting is on, detection by either technology holds lighting on. When no occupancy is detected for the length of the time delay, lighting turns off. The DT can also be set so that only one technology is needed to trigger lighting on or both technologies are needed to hold lighting on. The sensors are low voltage and utilize a Watt Stopper power pack.

### SmartSet

Using SmartSet™ technology, the DT-200 sensors require no adjustment at installation. SmartSet monitors the controlled space to identify usage patterns. Using this information, it automatically adjusts the time delay and sensitivity for optimal performance and energy efficiency. The sensor assigns short delays (as low as 5 minutes) for times when the space is usually vacant, and longer delays (up to 30 minutes) for busier times.

### Application

Watt Stopper dual technology sensors have the flexibility to work in a variety of applications. Mounted at 10 feet, the sensors can cover up to 2000 square feet of walking motion and 1000 square feet of desktop motion. The sensors are designed to control lighting in difficult applications, such as classrooms, where one technology alone could encounter false triggers. In addition to classrooms, the DT-200 works well in warehouses, large offices, open office spaces, and computer rooms.

## Features

- Advanced control logic based on RISC microcontroller provides:
- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- SmartSet automatically adjusts sensitivity and time delay settings to fit occupant patterns
- Walk-through mode turns lights off 3 minutes after the area is initially occupied - ideal for brief visits such as mail delivery
- Available with built-in light level sensor featuring simple, one-step setup
- Sensors work with low voltage momentary switches to provide manual control
- LEDs indicate occupancy detection
- 8 occupancy logic options give users the ability to customize control to meet application needs
- Available with isolated relay for integration with BAS or HVAC
- Swivel mounting bracket for convenient corner mounting to wall or ceiling

WATT STOPPER LEGRAND OCCUPANCY SENSORS

# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account  
 multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
5600-3638-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
---	---	---	--

\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input checked="" type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.





# MERCANTILE SELF DIRECT Ohio Chillers / Thermal Storage Incentive Application

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572

Is this application:  **NEW** (original) or  **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input checked="" type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Other:		
How did you hear about the program? (check one)		
<input type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input checked="" type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of application	<input type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input type="checkbox"/> Tax ID number for payee	<input type="checkbox"/> Customer/vendor agree to Terms and Conditions
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Customer Information					
Customer/Business	Cincinnati Public Schools	Contact	Don Elbe		
Phone	614-580-3352	Account Number	5600-3638-01		
Street Address (Where incentive should be mailed)		2651 Burnett Ave			
City	Cincinnati	State	OH	Zip Code	45219
Installation Street Address	636 Prospect Place				
City	Cincinnati	State	OH	Zip Code	45229
E-mail Address					

\*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.

Vendor Information					
Vendor	Plug Smart	Contact	Lucas Dixon		
Phone	614-580-3352	Fax	1-800-518-5576		
Street Address		1275 Kinnear Road Suite 229			
City	Columbus	State	OH	Zip Code	43212
E-mail Address					

If Duke Energy has questions about this application, who should we contact?  Customer  Vendor

Payment Information		
Who should receive incentive payment?	<input checked="" type="checkbox"/> Customer	<input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of incentive directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000758
	Vendor Tax ID #	26-2368277

Terms and Conditions			
I have read and hereby agree to the Terms & Conditions and Program Requirements.			
Customer Signature		Vendor Signature	
Date	11-23-11	Date	11/23/2011
Title	Utility Plant Control	Title	Project Manager

Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

See Page 4 of form for required efficiency levels and equipment eligibility

Air Cooled Chillers									
Make/Model # Scroll/Screw Type	# of Units	AHRI Tons/Unit	Full-load kW/ton*	Incentive \$/ton	IPLV kW/ton*	Incentive \$/ton	Building Type	Date Installed & Operable (mm/yy)	Total Incentive
Trane RTAC155	2	155	10.1	\$4.00	.858	\$12.07	School	8/19/2008	\$4,981.70
* Chiller performance and IPLV must be tested under AHRI conditions - submit documentation of compliance									

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

See Page 4 of form for required efficiency levels and equipment eligibility

Water Cooled Chillers										
Description	Make/Model #	# of Units	AHRI Tons/Unit	Full-load kW/ton*	Incentive \$/ton	IPLV kW/ton*	Incentive \$/ton	Building Type	Date Installed & Operable (mm/yy)	Total Incentive
<input type="checkbox"/> Screw/Scroll Chiller <input type="checkbox"/> Centrifugal Chiller										
<input type="checkbox"/> Screw/Scroll Chiller <input type="checkbox"/> Centrifugal Chiller										
<input type="checkbox"/> Screw/Scroll Chiller <input type="checkbox"/> Centrifugal Chiller										
* Chiller performance and IPLV must be tested under AHRI conditions - submit documentation of compliance										

## Thermal Storage Incentives

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

Thermal Storage System Specifications*	
Manufacturer of Thermal Storage Equipment	
Type of Thermal Storage	<input type="checkbox"/> Chilled Water <input type="checkbox"/> Ice Bank <input type="checkbox"/> Ice Harvester
Model Number	
Controls Manufacturer	
Control Strategy	<input type="checkbox"/> Demand Limiting <input type="checkbox"/> Maximum Cooling Shift
Number of Thermal Storage Units	
Partial or Full Storage	<input type="checkbox"/> Partial Storage <input type="checkbox"/> Full Storage
Demand Shifted (kW)XX	
Storage Capacity (Ton Hours)	
Storage Capacity (Gallons If Applicable)	
Peak Cooling Load (Tons)	
Cooled Area (sq. ft.)	
Hours of Operations M-F	
Hours of Operations Sat	
Hours of Operations Sun	
Date Installed and Operable (mm/yy)	
Thermal Storage chiller Plant Description (Manufacturer, Tonnage, Ice Making kW/ton)	
Condenser Type	<input type="checkbox"/> Air Cooled <input type="checkbox"/> Water Cooled
Premium cost for Thermal Storage (Dollars)	
Annual Electrical Operating Cost with Storage (Dollars)	
Annual Savings as a result of Thermal Storage (Dollars)	
Simple Payback including Incentive (Years)	
<b>Total Incentive (\$190/kW shifted)</b>	
<b>Conventional System Specifications (For Comparison Purposes)</b>	
Chiller Plant Description (Manufacturer, type, tonnage, AHRI kW/ton)	
Chiller Demand (kW)	
Annual Electrical Operating Cost with Conventional Cooling	

\*Thermal Storage Units with a >1MW load shift are not eligible for incentives under the Prescriptive Program but can be considered for custom incentives. The Custom application and process document are located on the Self Direct websites.

\*\* Average demand shifted during the peak demand timeframe of 10:00am to 6:00pm for summer months of May through September.

## Equipment Requirements

### Chillers Incentive Table & AHRI Rated Efficiency Requirements\*

<b>AIR COOLED CHILLERS – All Sizes</b>			
<b>Total Incentive = Base + Additional</b>			
<b>Scroll/Screw Type Chillers</b>			
Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
<b>1.230 - 9.80</b>	<b>\$4.00</b>	<b>1.130 - 10.60</b>	
<b>1.230 - 9.80</b>	<b>\$4.00</b>	<b>1.010 - 11.90</b>	<b>\$5.83</b>
<b>1.230 - 9.80</b>	<b>\$4.00</b>	<b>0.890 - 13.50</b>	<b>\$12.07</b>
<b>1.230 - 9.80</b>	<b>\$4.00</b>	<b>0.810 - 14.80</b>	<b>\$15.75</b>
1.142 – 10.50	\$12.50	1.046 – 11.50	
1.142 – 10.50	\$12.50	0.925 – 13.00	\$6.00
1.142 – 10.50	\$12.50	0.879 – 13.70	\$8.35
1.142 – 10.50	\$12.50	0.674 – 17.80	\$18.60
1.046 – 11.50	\$15.00	0.961 – 12.50	
1.046 – 11.50	\$15.00	0.847 – 14.20	\$5.70
1.046 – 11.50	\$15.00	0.795 – 15.10	\$8.30
1.046 – 11.50	\$15.00	0.618 – 19.40	\$17.15
<b>WATER COOLED CHILLERS – &lt; 150 tons</b>			
<b>Total Incentive = Base + Additional</b>			
<b>Screw/Scroll Type Chiller</b>			
Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
0.790 – 15.20	\$2.50	0.620 – 19.40	
0.790 – 15.20	\$2.50	0.590 – 20.30	\$1.50
0.790 – 15.20	\$2.50	0.550 – 21.80	\$3.50
0.790 – 15.20	\$2.50	0.510 – 23.50	\$5.50
0.790 – 15.20	\$2.50	0.470 – 25.50	\$7.50
0.710 – 16.90	\$7.50	0.630 – 19.00	
0.710 – 16.90	\$7.50	0.560 – 21.40	\$3.50
0.710 – 16.90	\$7.50	0.530 – 22.60	\$5.00
0.710 – 16.90	\$7.50	0.500 – 24.00	\$6.50
0.710 – 16.90	\$7.50	0.460 – 26.10	\$8.50
0.710 – 16.90	\$7.50	0.430 – 27.90	\$10.00
0.630 – 19.00	\$10.00	0.560 – 21.40	
0.630 – 19.00	\$10.00	0.500 – 24.00	\$3.00
0.630 – 19.00	\$10.00	0.470 – 25.50	\$4.50
0.630 – 19.00	\$10.00	0.440 – 27.30	\$6.00
0.630 – 19.00	\$10.00	0.410 – 29.30	\$7.50
0.630 – 19.00	\$10.00	0.380 – 31.60	\$9.00
<b>Centrifugal Type Chiller</b>			
0.700 – 17.10	\$2.50	0.570 – 21.10	
0.700 – 17.10	\$2.50	0.530 – 22.60	\$2.00
0.700 – 17.10	\$2.50	0.500 – 24.00	\$3.50
0.700 – 17.10	\$2.50	0.420 – 28.60	\$7.50
0.630 – 19.00	\$7.50	0.600 – 20.00	
0.630 – 19.00	\$7.50	0.510 – 23.50	\$4.50
0.630 – 19.00	\$7.50	0.480 – 25.00	\$6.00
0.630 – 19.00	\$7.50	0.450 – 26.70	\$7.50
0.630 – 19.00	\$7.50	0.380 – 31.60	\$11.00
0.560 – 21.40	\$10.00	0.530 – 22.60	
0.560 – 21.40	\$10.00	0.460 – 26.10	\$3.50
0.560 – 21.40	\$10.00	0.430 – 27.90	\$5.00
0.560 – 21.40	\$10.00	0.400 – 30.00	\$6.50
0.560 – 21.40	\$10.00	0.340 – 35.30	\$9.50

\*AHRI Standard 550/590

2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.

**WATER COOLED CHILLERS – 150-300 tons**  
**Total Incentive = Base + Additional**

**Screw/Scroll Type Chiller**

Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
0.720 – 16.70	\$2.50	0.570 – 21.10	
0.720 – 16.70	\$2.50	0.540 – 22.20	\$1.50
0.720 – 16.70	\$2.50	0.500 – 24.00	\$3.50
0.720 – 16.70	\$2.50	0.470 – 25.50	\$5.00
0.720 – 16.70	\$2.50	0.430 – 27.90	\$7.00
0.650 – 18.50	\$7.50	0.570 – 21.10	
0.650 – 18.50	\$7.50	0.510 – 23.50	\$3.00
0.650 – 18.50	\$7.50	0.480 – 25.00	\$4.50
0.650 – 18.50	\$7.50	0.450 – 26.70	\$6.00
0.650 – 18.50	\$7.50	0.420 – 28.60	\$7.50
0.650 – 18.50	\$7.50	0.390 – 30.80	\$9.00
0.570 – 21.10	\$10.00	0.510 – 23.50	
0.570 – 21.10	\$10.00	0.450 – 26.70	\$3.00
0.570 – 21.10	\$10.00	0.430 – 27.90	\$4.00
0.570 – 21.10	\$10.00	0.400 – 30.00	\$5.50
0.570 – 21.10	\$10.00	0.370 – 32.40	\$7.00
0.570 – 21.10	\$10.00	0.340 – 35.30	\$8.50

**Centrifugal Type Chiller**

0.630 – 19.00	\$2.50	0.510 – 23.50	
0.630 – 19.00	\$2.50	0.480 – 25.00	\$1.50
0.630 – 19.00	\$2.50	0.450 – 26.70	\$3.00
0.630 – 19.00	\$2.50	0.380 – 31.60	\$6.50
0.570 – 21.10	\$7.50	0.540 – 22.20	
0.570 – 21.10	\$7.50	0.460 – 26.10	\$4.00
0.570 – 21.10	\$7.50	0.430 – 27.90	\$5.50
0.570 – 21.10	\$7.50	0.400 – 30.00	\$7.00
0.570 – 21.10	\$7.50	0.340 – 35.30	\$10.00
0.510 – 23.50	\$10.00	0.480 – 25.00	
0.510 – 23.50	\$10.00	0.410 – 29.30	\$3.50
0.510 – 23.50	\$10.00	0.390 – 30.80	\$4.50
0.510 – 23.50	\$10.00	0.360 – 33.30	\$6.00
0.510 – 23.50	\$10.00	0.300 – 40.00	\$9.00

\*AHRI Standard 550/590

2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.

**WATER COOLED CHILLERS – >300 tons**  
**Total Incentive = Base + Additional**

**Screw/Scroll Type Chiller**

Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
0.640 – 18.75	\$2.50	0.510 – 23.50	
0.640 – 18.75	\$2.50	0.480 – 25.00	\$1.50
0.640 – 18.75	\$2.50	0.450 – 26.70	\$3.00
0.640 – 18.75	\$2.50	0.420 – 28.60	\$4.50
0.640 – 18.75	\$2.50	0.380 – 31.60	\$6.50
0.580 – 20.70	\$7.50	0.510 – 23.50	
0.580 – 20.70	\$7.50	0.450 – 26.70	\$3.00
0.580 – 20.70	\$7.50	0.430 – 27.90	\$4.00
0.580 – 20.70	\$7.50	0.400 – 30.00	\$5.50
0.580 – 20.70	\$7.50	0.370 – 32.40	\$7.00
0.580 – 20.70	\$7.50	0.350 – 34.30	\$8.00
0.510 – 23.50	\$10.00	0.460 – 26.10	
0.510 – 23.50	\$10.00	0.400 – 30.00	\$3.00
0.510 – 23.50	\$10.00	0.380 – 31.60	\$4.00
0.510 – 23.50	\$10.00	0.360 – 33.30	\$5.00
0.510 – 23.50	\$10.00	0.330 – 36.40	\$6.50
0.510 – 23.50	\$10.00	0.310 – 38.70	\$7.50

**Centrifugal Type Chiller**

0.580 – 20.70	\$2.50	0.470 – 25.50	
0.580 – 20.70	\$2.50	0.440 – 27.30	\$1.50
0.580 – 20.70	\$2.50	0.410 – 29.30	\$3.00
0.580 – 20.70	\$2.50	0.350 – 34.30	\$6.00
0.520 – 23.10	\$7.50	0.490 – 24.50	
0.520 – 23.10	\$7.50	0.420 – 28.60	\$3.50
0.520 – 23.10	\$7.50	0.390 – 30.80	\$5.00
0.520 – 23.10	\$7.50	0.370 – 32.40	\$6.00
0.520 – 23.10	\$7.50	0.310 – 38.70	\$9.00
0.460 – 26.10	\$10.00	0.440 – 27.30	
0.460 – 26.10	\$10.00	0.370 – 32.40	\$3.50
0.460 – 26.10	\$10.00	0.350 – 34.30	\$4.50
0.460 – 26.10	\$10.00	0.330 – 36.40	\$5.50
0.460 – 26.10	\$10.00	0.280 – 42.90	\$8.00

\*AHRI Standard 550/590

2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.

**Thermal Storage Incentives**

	Incentive
THERMAL STORAGE UNIT	\$95/kW shifted

## Program Requirements

### Equipment Eligibility

- Duke Energy will use the AHRI database for verifying equipment efficiencies for all the chillers. If the equipment or matched set is not in the AHRI database, the manufacturer's technical fact sheets must be provided showing the efficiency level tested under AHRI conditions as described in AHRI standard 550/590. Equipment capacity (size) and efficiency must be based on AHRI design conditions. Full load efficiency rating (FL) and Integrated Part load Value (IPLV) must be provided for all chillers.
- Incentives for chillers will be paid based on the AHRI tons per unit.
- EER/COP and IPLV values shall include all connected loads, such as compressors, condenser fans, and control kW. Chiller components, such as motors and VFDs, are incented as part of the chiller package and are not independently eligible for prescriptive incentives during a chiller replacement
- Chiller incentives are only available for HVAC space cooling applications. All equipment installed must serve as a primary source of cooling for the facility. Industrial process cooling may qualify for a custom incentive.
- Chillers purchased and installed for backup or redundant systems are not eligible.
- Thermal Storage Units with a >1MW load shift are not eligible for incentives under the Prescriptive Program but can be considered for custom incentives.
- All equipment must be new to be eligible for incentives. Used equipment is **not** eligible for incentives.

### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

### Terms and Conditions

*I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. I understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and its affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties), and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.*

## Incentive Application Instructions

### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at [www.duke-energy.com](http://www.duke-energy.com).
2. Review program and equipment requirements on the incentive application.
3. Purchase and install eligible energy-efficient equipment.
4. Complete and submit application for equipment that was installed after 1/1/2008.
5. **The following items must be included to verify projects. If they are not included, it will delay payment of incentive.**
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. **Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.**
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to **assign payment of the incentive directly to the vendor**, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
6. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
8. Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.
8. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.



## Mercantile Self Direct Incentive Program Requirements for Vendor Participation

### Program Overview

- Duke Energy offers its eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
- Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
  - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
  - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
- All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
- Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by faxing the Vendor Participation Agreement (VPA) to **513-419-5572** or **emailing to SelfDirect@duke-energy.com**.
- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in its sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.

### Guidelines for Vendor Activities

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.

Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.

- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit [www.duke-energy.com](http://www.duke-energy.com).



## Mercantile Self Direct Rebate Program

Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*	Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	Thermal Storage	<input type="checkbox"/>	<input type="checkbox"/>
Heating Ventilation & Cooling	<input type="checkbox"/>	<input type="checkbox"/>	Pumps/Motors/VFD's	<input type="checkbox"/>	<input type="checkbox"/>
Food Service	<input type="checkbox"/>	<input type="checkbox"/>	Chillers	<input type="checkbox"/>	<input type="checkbox"/>
Water Heating	<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>
Process Equipment (air compressors, injection molding, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Window Film	<input type="checkbox"/>	<input type="checkbox"/>

\* Check all that apply

Vendors who wish to be listed as a Mercantile Self Direct Incentive Program participating Vendor shall complete this form. A signed copy of this form must be on file at Duke Energy in order for the Vendor to receive incentive payments. Fax form to **513-419-5572** or email to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com).

I have read and understand the Mercantile Self Direct Incentive Program Requirements for Vendor Participation, and I agree to comply with all requirements set forth therein. By signing this agreement, I agree to provide my customers with information and documentation that is true and accurate to the best of my knowledge. I hereby represent and warrant that the Tax ID and Vendor Tax Status provided below are true and accurate. I agree that any confidential information concerning my customer, including but not limited to Duke Energy service account information, will be used for the sole purpose of facilitating the customer's participation in the Mercantile Self Direct Incentive Program. Further, I understand that I am responsible for making sure everyone working for me understands the requirements prior to soliciting customer participation.

Vendor Federal Tax ID Number	
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To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a third-party vendor. The third-party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the third-party vendor have signed confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, As you will not be qualified to participate in the incentive program.

Vendor Tax Status	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Partnership	<input type="checkbox"/> Other
-------------------	--------------------------------------	---	--------------------------------------	--------------------------------

Contact me via	<input type="checkbox"/> Phone	<input type="checkbox"/> E-Mail	<input type="checkbox"/> Mail	
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Company Name	
Mailing Address	
City, State, Zip	
Phone/Fax	
Primary E-mail Address	
Secondary E-mail Address	
Vendor Signature	
Title	
Print Name	
Date	

For more information, call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).



# Product Catalog

## **Air-Cooled Series R™ Chillers Model RTAC**

140-500 Nominal Tons (60 Hz)  
120-400 Nominal Tons (50 Hz)





## Performance Data

**Table 9. AHRI and Part Load Performance - 60 Hz - I-P units**

Standard efficiency			
Unit Size	Full Load Tons	Full Load EER	IPLV
<b>140</b>	138.3	9.7	<b>13.6</b>
<b>155</b>	151.8	9.8	<b>14.0</b>
<b>170</b>	166.1	9.9	<b>14.0</b>
<b>185</b>	182.0	9.8	<b>13.9</b>
<b>200</b>	198.9	9.7	<b>13.6</b>
<b>225</b>	218.6	9.7	<b>13.9</b>
<b>250</b>	240.0	9.7	<b>13.7</b>
<b>275</b>	266.2	9.8	<b>14.6</b>
<b>300</b>	298.9	9.7	<b>14.2</b>
<b>350</b>	340.0	9.6	<b>14.3</b>
<b>400</b>	401.2	9.7	<b>14.7</b>
<b>450</b>	441.8	9.6	<b>15.0</b>
<b>500</b>	483.9	9.6	<b>15.0</b>

High efficiency			
Unit Size	Full Load Tons	Full Load EER	IPLV
<b>140</b>	142.0	10.2	<b>13.8</b>
<b>155</b>	157.3	10.4	<b>14.5</b>
<b>170</b>	171.3	10.5	<b>14.5</b>
<b>185</b>	188.1	10.4	<b>14.3</b>
<b>200</b>	206.1	10.3	<b>14.0</b>
<b>225</b>	223.1	10.1	<b>14.1</b>
<b>250</b>	246.3	10.2	<b>14.0</b>
<b>275</b>	275.5	10.5	<b>14.8</b>
<b>300</b>	308.8	10.3	<b>14.4</b>
<b>350</b>	346.5	10.5	<b>15.4</b>
<b>400</b>	415.6	10.2	<b>14.7</b>

1. IPLV values are rated in accordance with AHRI Standard 550/590.
2. EER and IPLV values include compressors, condenser fans, and control kW.

**Table 10. AHRI and Part Load Performance - 50 Hz - I-P units**

Standard Efficiency			
Unit Size	Full Load Tons	Full Load EER	IPLV
<b>140</b>	133.7	9.4	<b>14.4</b>
<b>155</b>	146.3	9.3	<b>14.4</b>
<b>170</b>	159.6	9.3	<b>14.1</b>
<b>185</b>	175.9	9.4	<b>14.5</b>
<b>200</b>	193.4	9.5	<b>14.2</b>
<b>250</b>	230.1	9.4	<b>16.1</b>
<b>275</b>	256.8	9.3	<b>15.7</b>
<b>300</b>	290.7	9.4	<b>15.7</b>
<b>350</b>	322.7	9.3	<b>16.2</b>
<b>375</b>	356.7	9.4	<b>16.4</b>
<b>400</b>	390.1	9.4	<b>16.4</b>

High Efficiency			
Unit Size	Full Load Tons	Full Load EER	IPLV
<b>120</b>	114.4	10.0	<b>14.8</b>
<b>130</b>	127.1	10.2	<b>15.2</b>
<b>140</b>	140.6	10.3	<b>15.1</b>
<b>155</b>	152.9	10.2	<b>15.1</b>
<b>170</b>	166.0	10.1	<b>14.8</b>
<b>185</b>	183.4	10.2	<b>15.2</b>
<b>200</b>	201.8	10.3	<b>14.9</b>
<b>250</b>	238.6	10.0	<b>16.0</b>
<b>275</b>	267.9	10.1	<b>16.1</b>
<b>300</b>	302.5	10.2	<b>16.2</b>
<b>350</b>	335.7	10.0	<b>16.4</b>
<b>375</b>	370.9	10.1	<b>16.6</b>
<b>400</b>	406.9	10.2	<b>16.6</b>

1. IPLV values are rated in accordance with AHRI Standard 550/590.
2. EER and IPLV values include compressors, condenser fans, and control kW.

# Ohio Mercantile Self Direct Program

## Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to [SelfDirect@Duke-Energy.com](mailto:SelfDirect@Duke-Energy.com). You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

- a single Duke Energy Ohio account  
 multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
5600-3638-01			

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of appropriate application(s) are completed	<input type="checkbox"/> Proof of payment.*	<input type="checkbox"/> Manufacturer's Spec sheets	<input type="checkbox"/> Energy model/calculations and detailed inputs for Custom applications
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\* If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
Lighting	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>	MSD Prescriptive Lighting <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> Custom Lighting Worksheet <input type="checkbox"/>
Heating & Cooling	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>	MSD Prescriptive Heating & Cooling <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General and/or EMS Worksheet(s) <input type="checkbox"/>
Chillers & Thermal Storage	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Chillers & Thermal Storage <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Motors & Pumps	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Motors, Pumps & Drives <input checked="" type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom VFD Worksheet <input type="checkbox"/>	
Food Service	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Food Service <input type="checkbox"/>
			MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
Process	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	MSD Prescriptive Process <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>
		MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>	
Energy Management Systems	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>	MSD Custom Part 1 <input type="checkbox"/> MSD Custom EMS Worksheet <input type="checkbox"/>
Behavioral*** & No/Low Cost	MSD Custom Part 1 <input type="checkbox"/> MSD Custom General Worksheet <input type="checkbox"/>		

\*\* Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. **All equipment replacements due to failure or old age will be evaluated via the Custom program.**

\*\*\* Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.



# MERCANTILE SELF DIRECT Ohio Premium Motor/Pump/VFD Incentive Application

Questions? Call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.

Is this application:  **NEW** (original) or  **REVISED** (changes made to original application)

Building Type – Required (check one)		
<input type="checkbox"/> Data Centers	<input type="checkbox"/> Full Service Restaurant	<input type="checkbox"/> Office
<input checked="" type="checkbox"/> Education/K-12	<input type="checkbox"/> Healthcare	<input type="checkbox"/> Public Assembly
<input type="checkbox"/> Education Other	<input type="checkbox"/> Industrial	<input type="checkbox"/> Public Order/Safety
<input type="checkbox"/> Elder Care/Nursing Home	<input type="checkbox"/> Lodging	<input type="checkbox"/> Religious Worship/Church
<input type="checkbox"/> Food Sales/Grocery	<input type="checkbox"/> Retail (Small Box)	<input type="checkbox"/> Service
<input type="checkbox"/> Fast Food Restaurant	<input type="checkbox"/> Retail (Big Box)	<input type="checkbox"/> Warehouse
<input type="checkbox"/> Other:		

How did you hear about the program? (check one)		
<input type="checkbox"/> Duke Energy Representative	<input type="checkbox"/> Web Site	<input type="checkbox"/> Radio
<input checked="" type="checkbox"/> Contractor / Vendor	<input type="checkbox"/> Other _____	

Please check each box to indicate completion of the following program requirements:

<input type="checkbox"/> All sections of application	<input type="checkbox"/> Invoice with make, model number, quantity and equipment manufacturer	<input type="checkbox"/> Tax ID number for payee	<input type="checkbox"/> Customer/vendor agree to Terms and Conditions
--	---	--	--

Customer Information					
Customer/Business	Cincinnati Public Schools	Contact	Don Elbe		
Phone	614-580-3352	Account Number	5600-3638-01		
Street Address (Where incentive should be mailed)		2651 Burnett Ave			
City	Cincinnati	State	OH	Zip Code	45219
Installation Street Address	636 Prospect Place				
City	Cincinnati	State	OH	Zip Code	45229
E-mail Address					

\*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application.

Vendor Information					
Vendor	Plug Smart	Contact	Lucas Dixon		
Phone	614-580-3352	Fax	1-800-518-5576		
Street Address		1275 Kinnear Road Suite 229			
City	Columbus	State	OH	Zip Code	43212
E-mail Address					

If Duke Energy has questions about this application, who should we contact?  Customer  Vendor

Payment Information		
Who should receive incentive payment?	<input checked="" type="checkbox"/> Customer	<input type="checkbox"/> Vendor (Customer must sign below)
I hereby authorize payment of incentive directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000758
	Vendor Tax ID #	26-2368277

Terms and Conditions			
I have read and hereby agree to the Terms & Conditions and Program Requirements.			
Customer Signature	<i>Don Elbe</i>	Vendor Signature	<i>[Signature]</i>
Date	11-23-11	Date	11/23/2011
Title	Utility Mgmt Coord	Title	Project Manager

Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.

**Motor incentives will be removed from the Prescriptive Program effective March 31, 2011. To qualify for the current incentives, motors must be purchased by March 31, 2011 and installed by June 30, 2011. Applications must be received by September 30, 2011.**

**Certain motors will still be eligible for incentives using the custom program. Please refer to the Duke Energy Mercantile Self Direct website for further detail.**

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

Motor											
Motor	Make/Model or Catalog #	Quantity	Type	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1-5 HP	Baldor EM3218T	2	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$5/HP	5HP	89.5%	2800Hrs		8/19/2008	\$50.00
7.5-20 HP	Baldor EM3313T	2	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$4/HP	10HP	91.7%	2800Hrs		8/19/2008	\$80.00
25-100 HP	Baldor EM2535T	1	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2.50/HP	30HP	94.1%	2800Hrs		8/19/2008	\$75.00
125 – 250 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2/HP	HP	%	Hrs			

**\* See page four for required efficiency levels for motors.**

\*Incentive capped at 50% of project cost (equipment and external labor).

- Qualifying motors must be three-phase open drip (ODP) or totally enclosed fan cooled (TEFC) units with nominal speeds of 1200, 1800, or 3600 RPM.
- Efficiencies are to be full-load nominal efficiencies tested in accordance with IEE Standards 112, Method B. Please refer to attached table to determine qualifying efficiencies.
- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor shall be squirrel cage design and conform to NEMA Premium design A, B or C torque characteristics.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Replaced motors shall be disposed of or recycled (not to be resold or rewound).
- Motor(s) and pump(s) must operate a minimum of 2000 hours annually to be eligible.



**Motor incentives will be removed from the Prescriptive Program effective March 31, 2011. To qualify for the current incentives, motors must be purchased by March 31, 2011 and installed by June 30, 2011. Applications must be received by September 30, 2011.**

**Certain motors will still be eligible for incentives using the custom program. Please refer to the Duke Energy Mercantile Self Direct website for further detail.**

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

Motor											
Motor	Make/Model or Catalog #	Quantity	Type	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1-5 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$5/HP	HP	%	Hrs			
7.5-20 HP	Baldor EM2513T	2	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$4/HP	15HP	93%	2800Hrs		8/19/2008	\$120.00
25-100 HP	Baldor EM2543T	1	<input checked="" type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input checked="" type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2.50/HP	50HP	94.1%	2800Hrs		8/19/2008	\$125.00
125 – 250 HP			<input type="checkbox"/> OPEN <input type="checkbox"/> TEFC	<input type="checkbox"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 3600	\$2/HP	HP	%	Hrs			
<b>* See page four for required efficiency levels for motors.</b>											

\*Incentive capped at 50% of project cost (equipment and external labor).

- Qualifying motors must be three-phase open drip (ODP) or totally enclosed fan cooled (TEFC) units with nominal speeds of 1200, 1800, or 3600 RPM.
- Efficiencies are to be full-load nominal efficiencies tested in accordance with IEE Standards 112, Method B. Please refer to attached table to determine qualifying efficiencies.
- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor shall be squirrel cage design and conform to NEMA Premium design A, B or C torque characteristics.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Replaced motors shall be disposed of or recycled (not to be resold or rewound).
- Motor(s) and pump(s) must operate a minimum of 2000 hours annually to be eligible.

The Equipment below is (check one):  New Equipment / New Construction  
 Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

High Efficiency Pumps								
Pump	Make/Model or Catalog #	Quantity	Incentive	Installed Nominal Efficiency* (pump curve)	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$61.00/PUMP	%	Hrs			
2 HP			\$87.50.00/PUMP	%	Hrs			
3 HP			\$87.50/PUMP	%	Hrs			
5 HP			\$85.00./PUMP	%	Hrs			
7.5 HP			\$124.50/PUMP	%	Hrs			
10 HP			\$82.50.00/PUMP	%	Hrs			
15 HP			\$145.00/PUMP	%	Hrs			
20 HP			\$200.00/PUMP	%	Hrs			

**\* See on page four for required efficiency levels for pumps. Pump curves are required.**

\*Incentive capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Pump efficiency is based on the design point on the pump curve. Documentation of the pump curve is required to receive an incentive.
- The pump efficiency at the design point on the pump curve must meet nominal efficiencies as stated in table on page 4.
- Duplicative to the first bullet point.

The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

Variable Frequency Drives (VFDs) – For Process Fluid Pumping Only (Retrofit* Application only)							
Process pumping <u>does not</u> include HVAC or swimming pool fluid pumping systems.							
List Process Pumping Application							
VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
5 HP			\$20.00/HP	Hrs			
7.5 HP			\$20.00/HP	Hrs			
10 HP			\$20.00/HP	Hrs			
15 HP			\$20.00/HP	Hrs			
20 HP			\$20.00/HP	Hrs			
25 HP			\$20.00/HP	Hrs			
30 HP			\$20.00/HP	Hrs			
40 HP			\$20.00/HP	Hrs			
50 HP			\$20.00/HP	Hrs			
<p><b>*Retrofit only – incentives are only available for new VFDs installed on existing fluid process pump systems.</b>  <b>** VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.</b>  <b>***Incentives are capped at 50% of project cost (equipment and external labor).</b></p>							

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- . Duplicative to the first bullet point.

The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

**Variable Frequency Drives (VFDs) – Applied to HVAC Fans Only (Retrofit\* Application only)**

VFD HVAC Applications (please check one):  
 Supply Fan  Cooling Tower Fan  Return Fan  
 Exhaust Fan

VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$50.00/HP	Hrs			
2 HP			\$50.00/HP	Hrs			
3 HP			\$50.00/HP	Hrs			
5 HP			\$50.00/HP	Hrs			
7.5 HP			\$50.00/HP	Hrs			
10 HP			\$50.00/HP	Hrs			
15 HP			\$50.00/HP	Hrs			
20 HP			\$50.00/HP	Hrs			
25 HP			\$50.00/HP	Hrs			
30 HP			\$50.00/HP	Hrs			
40 HP			\$50.00/HP	Hrs			
50 HP			\$50.00/HP	Hrs			

\* Retrofit only – incentives are only available for new VFDs installed on existing HVAC fan systems.  
 \*\*VFDs over 50 HP and VFD's on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program.  
 \*\*\*Incentives are capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- Duplicative to the first bullet point.

The Equipment below is (check one):  Retrofit  
 Replacement of failed equipment or new construction is not eligible for incentives.

Variable Frequency Drives (VFDs) – Applied to HVAC Pumps Only (Retrofit* Application only)							
VFD HVAC Applications (please check one):							
<input type="checkbox"/> Chilled Water Pump		<input type="checkbox"/> Condenser Pump			<input type="checkbox"/> Hot Water Pump		
VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			\$50.00/HP	Hrs			
2 HP			\$50.00/HP	Hrs			
3 HP			\$50.00/HP	Hrs			
5 HP			\$50.00/HP	Hrs			
7.5 HP			\$50.00/HP	Hrs			
10 HP			\$50.00/HP	Hrs			
15 HP			\$50.00/HP	Hrs			
20 HP			\$50.00/HP	Hrs			
25 HP			\$50.00/HP	Hrs			
30 HP			\$50.00/HP	Hrs			
40 HP			\$50.00/HP	Hrs			
50 HP			\$50.00/HP	Hrs			
<p>* Retrofit only – incentives are only available for new VFDs installed on existing HVAC pumps systems.</p> <p>**VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.</p> <p>***Incentives are capped at 50% of project cost (equipment and external labor).</p>							

- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom website for guidance. Incentives will be paid for the installation of **NEW** VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- . Duplicative to the first bullet point.

## Efficiencies for Premium Motor/Pump Measures

Nominal Efficiencies for "NEMA Premium" Induction Motors Rated 600 volts or less (random wound)						
HP	Open Drip Proof			Totally Enclosed Fan-Cooled		
	1200 RPM	1800 RPM	3600 RPM	1200 RPM	1800 RPM	3600 RPM
1	82.5	85.5	77.0	82.5	85.5	77.0
1.5	86.5	86.5	84.0	87.5	86.5	84.0
2	87.5	86.5	85.5	88.5	86.5	85.5
3	88.5	89.5	85.5	89.5	89.5	86.5
5	89.5	89.5	86.5	89.5	89.5	88.5
7.5	90.2	91.0	88.5	91.0	91.7	89.5
10	91.7	91.7	89.5	91.0	91.7	90.2
15	91.7	93.0	90.2	91.7	92.4	91.0
20	92.4	93.0	91.0	91.7	93.0	91.0
25	93.0	93.6	91.7	93.0	93.6	91.7
30	93.6	94.1	91.7	93.0	93.6	91.7
40	94.1	94.1	92.4	94.1	94.1	92.4
50	94.1	94.5	93.0	94.1	94.5	93.0
60	94.5	95.0	93.6	94.5	95.0	93.6
75	94.5	95.0	93.6	94.5	95.4	93.6
100	95.0	95.4	93.6	95.0	95.4	94.1
125	95.0	95.4	94.1	95.0	95.4	95.0
150	95.4	95.8	94.1	95.8	95.8	95.0
200	95.4	95.8	95.0	95.8	96.2	95.4
250	95.4	95.8	95.0	95.8	96.2	95.8

Nominal Efficiencies for Pumps	
HP	Efficiency
1.5	efficiency of 65% or more for system
2	efficiency of 65% or more for system
3	efficiency of 67% or more for system
5	efficiency of 70% or more for system
7.5	efficiency of 73% or more for system
10	efficiency of 75% or more for system
15	efficiency of 77% or more for system
20	efficiency of 77% or more for system

## Program Requirements

### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

### Terms and Conditions

*I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. I understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and its affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.*

## Incentive Application Instructions

### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at [www.duke-energy.com](http://www.duke-energy.com).
2. Review program and equipment requirements on the incentive application. (Page7)
3. Purchase and install eligible energy-efficient equipment.
4. Complete and submit application for equipment that was installed after 1/1/2008.
5. **The following items must be included to verify projects. If they are not included, it will delay payment of incentive.**
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. **Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.**
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to **assign payment of the incentive directly to the vendor**, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
6. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
8. Email the complete, signed application with all required documents to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or fax to 513-419-5572.
8. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.



## Mercantile Self Direct Incentive Program Requirements for Vendor Participation

### Program Overview

- Duke Energy offers its eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
- Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
  - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
  - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
- All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
- Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in its sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.

Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by emailing the Vendor Participation Agreement (VPA) to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com) or faxing to **513-419-5572**.

### Guidelines for Vendor Activities

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.
- Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit [www.duke-energy.com](http://www.duke-energy.com).



## Mercantile Self Direct Rebate Program

Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*	Technology	Responsible for sales and <b>not</b> installs*	Responsible for sales <b>and</b> Installation*
Lighting	<input type="checkbox"/>	<input type="checkbox"/>	Thermal Storage	<input type="checkbox"/>	<input type="checkbox"/>
Heating Ventilation & Cooling	<input type="checkbox"/>	<input type="checkbox"/>	Pumps/Motors/VFDs	<input type="checkbox"/>	<input type="checkbox"/>
Food Service	<input type="checkbox"/>	<input type="checkbox"/>	Chillers	<input type="checkbox"/>	<input type="checkbox"/>
Water Heating	<input type="checkbox"/>	<input type="checkbox"/>	Refrigeration	<input type="checkbox"/>	<input type="checkbox"/>
Process Equipment (air compressors, injection molding, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	Window Film	<input type="checkbox"/>	<input type="checkbox"/>

\* Check all that apply

Vendors who wish to be listed as a Mercantile Self Direct Incentive Program participating Vendor shall complete this form. A signed copy of this form must be on file at Duke Energy in order for the Vendor to receive incentive payments. Fax form to **513-419-5572** or email to [SelfDirect@duke-energy.com](mailto:SelfDirect@duke-energy.com).

I have read and understand the Mercantile Self Direct Incentive Program Requirements for Vendor Participation, and I agree to comply with all requirements set forth therein. By signing this agreement, I agree to provide my customers with information and documentation that is true and accurate to the best of my knowledge. I hereby represent and warrant that the Tax ID and Vendor Tax Status provided below are true and accurate. I agree that any confidential information concerning my customer, including but not limited to Duke Energy service account information, will be used for the sole purpose of facilitating the customer's participation in the Mercantile Self Direct Incentive Program. Further, I understand that I am responsible for making sure everyone working for me understands the requirements prior to soliciting customer participation.

Vendor Federal Tax ID Number	
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To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a third-party vendor. The third-party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the third-party vendor have signed confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, As you will not be qualified to participate in the incentive program.

Vendor Tax Status	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual/Sole Proprietor	<input type="checkbox"/> Partnership	<input type="checkbox"/> Other
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Contact me via	<input type="checkbox"/> Phone	<input type="checkbox"/> E-Mail	<input type="checkbox"/> Mail	
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Company Name	
Mailing Address	
City, State, Zip	
Phone/Fax	
Primary E-mail Address	
Secondary E-mail Address	
Vendor Signature	
Title	
Print Name	
Date	

For more information, call 1-866-380-9580 or visit [www.duke-energy.com](http://www.duke-energy.com).

# ARMSTRONG SUBMITTAL

Series 4030  
4x3x10  
Centerline Disc. End Suction Basemounted Pump

**Project Number:** save821  
**Name:** South Avondale Elementary School  
**Reference:**  
**Location:**  
**Engineer:** KLH  
**Contractor:**

**Representative:** stoermer-anderson inc.  
3818 red bank rd, cincinnati, ohio  
Phone: 513-527-2300, Fax: 513-527-2306  
**Order No:** **Date:**  
**Submitted by:** dan lyons **Date:** 10/17/2006  
**Approved by:** **Date:**

### PUMP DESIGN DATA

Tag Num: CWP-1,2  
Service:  
Location:  
No. of Pumps: 2  
Capacity: 478 usgpm  
Head: 70 ft  
Piping: Single  
Suction Pressure: 0 ft  
Liquid: Water  
Op. Temperature: 70 °F  
Viscosity: 31 ssu  
Sp.Gravity: 1.00  
Suction Size: 4 in  
Discharge Size: 3 in

### MOTOR DESIGN DATA

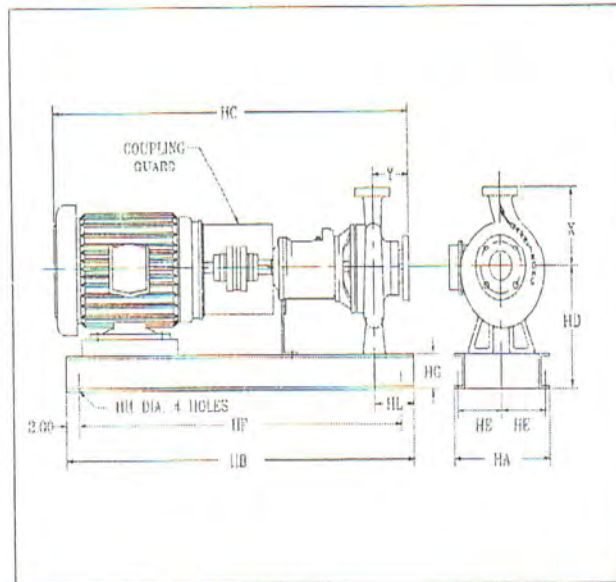
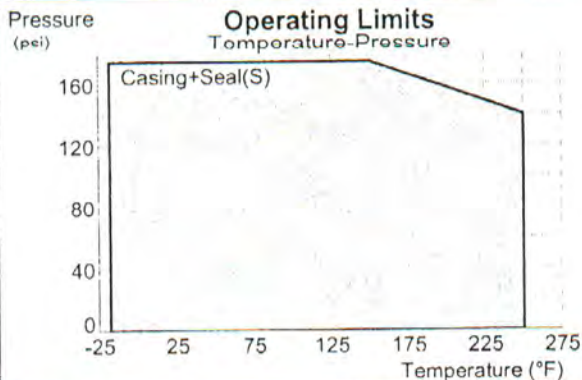
Motor Supplier: Factory Choice  
Motor Size: 15 hp @ 1800 rpm  
Frame Size: 254T  
Enclosure: ODP  
Cycle/Phase/Voltage: 60/3/460  
Motor Eff: NEMA Premium  
Insulation: Class "B" Insulation (266.0 °F)  
Starter Config: DOL  
Full Load/Starting (A) 21.0 / 115.9

### MATERIALS OF CONSTRUCTION

Construction BF (Bronze Fitted)  
ANSI Flange Rating 125 lb. (Cast Iron)  
Connection (Suct/Dis) Flanged/Flanged  
Impeller Bronze (B584-844)  
Casing Cast Iron (A48-30)  
Casing Gasket Confined Non-Asbestos Fiber  
Bearing Frame Cast Iron (A48-30)  
Bearings Anti-Friction Grease Lubricated  
Pump Shaft Carbon Steel  
Shaft Sleeve Stainless Steel

### MECHANICAL SEAL DESIGN DATA

Manufacturer Armstrong  
Manu. Code [21A] 21A  
Seal Type Inside Unbalanced  
Rotating Face Carbon  
Stationary Seat Ceramic  
Secondary Seal EPDM  
Springs Stainless Steel  
Rotating Hardware Stainless Steel



### DIMENSIONAL DATA ( in, lbs, hp ) NOT for CONSTRUCTION

HA	HB	HC	HD	HE	HF	HG	HH	HL	X	Y	M.Wgt	P.Wgt	Wgt.
16	40	38.45	11.25	7.38	36	3	0.75	4.5	11	4	150	151	301



# ARMSTRONG

## SUBMITTAL

Series 4030

5x4x8

Centerline Disc. End Suction Basemounted Pump

Project Number: save821

Name: South Avondale Elementary School

Reference:

Location:

Engineer: KLH

Contractor:

Representative: stoermer-anderson inc.

3818 red bank rd, cincinnati, ohio

Phone: 513-527-2300, Fax: 513-527-2306

Order No:

Date:

Submitted by: dan lyons

Date: 10/17/2006

Approved by:

Date:

## PUMP DESIGN DATA

Tag Num: HWP-1,2  
 Service:  
 Location:  
 No. of Pumps: 2  
 Capacity: 459 usgpm  
 Head: 50 ft  
 Piping: Single  
 Suction Pressure: 0 ft  
 Liquid: Water  
 Op. Temperature: 70 °F  
 Viscosity: 31 ssu  
 Sp.Gravity: 1.00  
 Suction Size: 5 in  
 Discharge Size: 4 in

## MOTOR DESIGN DATA

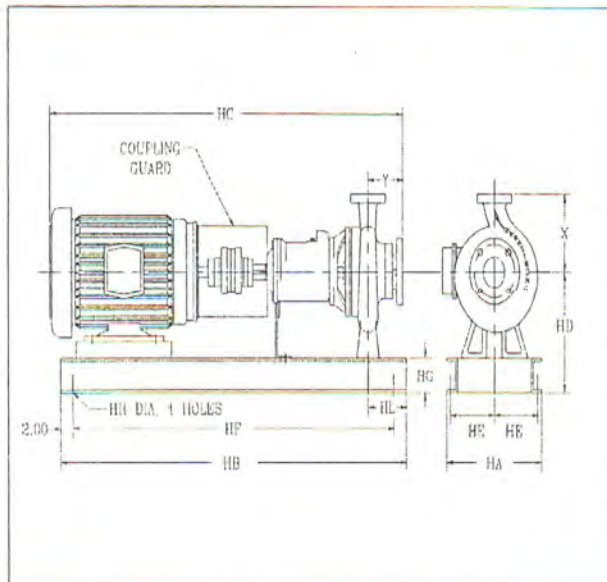
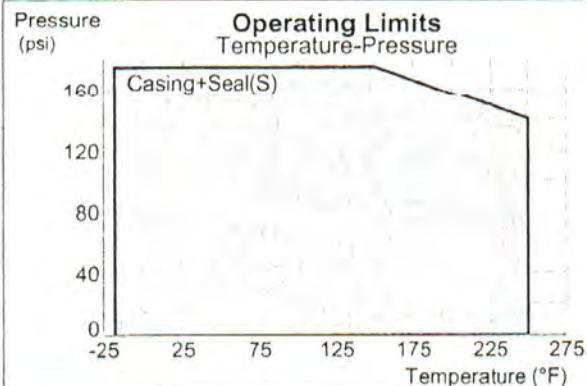
Motor Supplier: Factory Choice  
 Motor Size: 10 hp @ 1800 rpm  
 Frame Size: 215T  
 Enclosure: ODP  
 Cycle/Phase/Voltage: 60/3/460  
 Motor Eff: NEMA Premium  
 Insulation: Class "B" Insulation (266.0 °F)  
 Starter Config: DOL  
 Full Load/Starting (A) 14.0 / 81.1

## MECHANICAL SEAL DESIGN DATA

Manufacturer: Armstrong  
 Manu. Code [21A]: 21A  
 Seal Type: Inside Unbalanced  
 Rotating Face: Carbon  
 Stationary Seat: Ceramic  
 Secondary Seal: EPDM  
 Springs: Stainless Steel  
 Rotating Hardware: Stainless Steel

## MATERIALS OF CONSTRUCTION

Construction: BF (Bronze Fitted)  
 ANSI Flange Rating: 125 lb. (Cast Iron)  
 Connection (Suct/Dis): Lugged/Flanged  
 Impeller: Bronze (B584-844)  
 Casing: Cast Iron (A48-30)  
 Casing Gasket: Confined Non-Asbestos Fiber  
 Bearing Frame: Cast Iron (A48-30)  
 Bearings: Anti-Friction Grease Lubricated  
 Pump Shaft: Carbon Steel  
 Shaft Sleeve: Stainless Steel



## DIMENSIONAL DATA ( in, lbs, hp ) NOT for CONSTRUCTION

HA	HB	HC	HD	HE	HF	HG	HH	HL	X	Y	M.Wgt	P.Wgt	Wgt.
14	33	35.33	11.25	6.38	29	3	0.75	4.5	11	4	100	161	261

# ARMSTRONG

**SUBMITTAL**

Series 4380  
3x3x8

Close Coupled Vertical In-Line Centrifugal Pump

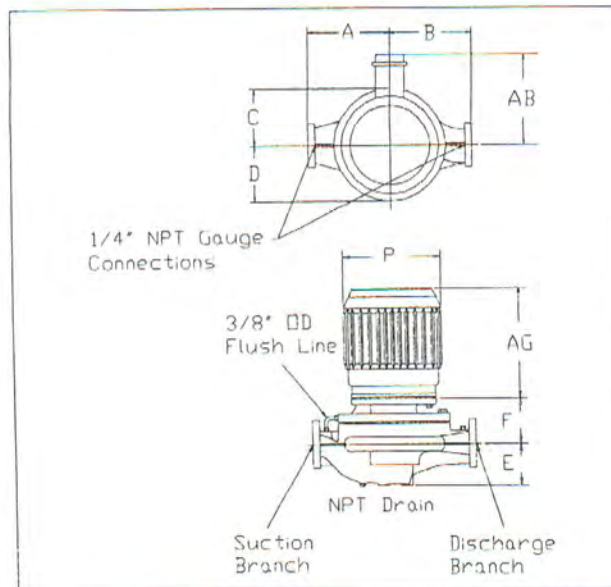
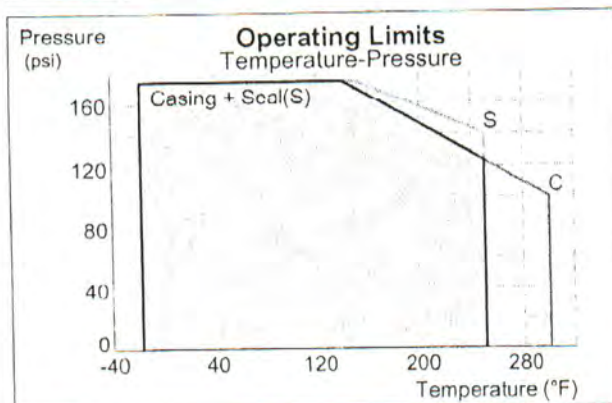
<b>Project Number:</b> save821	<b>Representative:</b> stoermer-anderson inc.
<b>Name:</b> South Avondale Elementary School	3818 red bank rd, cincinnati, ohio
<b>Reference:</b>	Phone: 513-527-2300, Fax: 513-527-2306
<b>Location:</b>	<b>Order No:</b>
<b>Engineer:</b> KLH	<b>Submitted by:</b> dan lyons
<b>Contractor:</b>	<b>Approved by:</b>
	<b>Date:</b> 10/17/2006
	<b>Date:</b>

PUMP DESIGN DATA	
Tag Num:	PCWP-1,2
Service:	
Location:	
No. of Pumps:	2
Capacity:	239 usgpm
Head:	40 ft
Piping:	Single
Suction Pressure:	0 ft
Liquid:	Water
Op. Temperature:	70 °F
Viscosity:	31 ssu
Sp.Gravity:	1.00
Suction Size:	3 in
Discharge Size:	3 in

MOTOR DESIGN DATA	
Motor Supplier:	Factory Choice
Motor Size:	5 hp @ 1800 rpm
Frame Size:	184JM
Enclosure:	ODP
Cycle/Phase/Voltage:	60/3/460
Motor Eff:	Premium
Insulation:	Class "B" Insulation (266.0 °F)
Starter Config:	DOL
Full Load/Starting (A)	7.6 / 46.0

MATERIALS OF CONSTRUCTION	
Construction	BF (Bronze Filled)
ANSI Flange Rating	125 lb. (Cast Iron)
Volute	Cast Iron (A48-30)
Impeller	Bronze (B584-844)
Shaft Sleeve	Bronze (B584-844)
Flush Line	Bronze (B584-844)
Casing Gasket	Confined Non-Asbestos Fiber
Motor Shaft	Carbon Steel

MECHANICAL SEAL DESIGN DATA	
Manufacturer	Armstrong
Manu. Code [21A]	21A
Seal Type	Inside Unbalanced
Rotating Face	Carbon
Stationary Seat	Ceramic
Secondary Seal	EPDM
Springs	Stainless Steel
Rotating Hardware	Stainless Steel



DIMENSIONAL DATA ( in, lbs, hp ) NOT for CONSTRUCTION													
Suct.	Disch.	A	B	C	D	E	Drain	P.Wgt	F	AG	P	AB	M.Wgt
3	3	12	10	6.75	5.75	6.38	0.25	163	3.75	16.38	9.5	7	75



# Twin City Fan & Blower

A Twin City Fan Company

5959 Trenton Lane · Minneapolis, MN 55442-3238  
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com



Customer: Trane Custom  
Job Name: South Avondale Elem Sch  
Job ID: 11732

November 01, 2006  
Page: 1

## Fan Description

Tag	SF-2
Quantity	1
Type	BAE-DW
Size	330
Width	DWDI
Arrangement	3
Class	II
Rotation	CW
Discharge	UBD
Wheel diameter (in.)	33
Drive method	60 Hz belt drive
Percentage width	100%
Percentage diameter	100%

## Fan Performance

CFM	34,310
Operating SP (in.wg)	5.85
Standard SP (in.wg)	5.85
RPM	1412
Tip Speed (fpm)	12,199
Oper. BHP	41.68
Standard BHP	41.68
Outlet area (sq. ft)	11.27
Outlet Velocity (fpm)	3,044
Temperature (°F)	70
Altitude (ft)	0
Density (lb/ft³)	0.075
Max RPM for Class	1644
Static Efficiency	75.69
Mechanical Efficiency	83.16

## Motor Data

HP	50
RPM	1800
Voltage	460V
Phase	3
Hz	60
Enclosure	ODP
Efficiency	Prm.Eff.
Frame	326T
Motor position	X

## Sound

Sound Power Levels in dB re. 10<sup>-12</sup> Watts:

Octave Bands	1	2	3	4	5	6	7	8	LwA
Level at Inlet	95	102	106	102	89	85	80	75	102
Level at Outlet	104	104	104	95	92	88	84	77	100

Estimated sound pressure level in dBA (re: 0.0002 microbar) based on a single\* ducted installation:

Distance in ft	1	3	5
dBA at Inlet	102	92	88
dBA at Outlet	100	90	86

\*To estimate dBA level for ducted inlet and ducted outlet (into and out of the room) type installation, deduct 20 from the LWA value shown.

Using a directivity factor of 1.

Estimated Sound Pressure based on free field, spherical (Q = 1) radiation at the stated distance.

### Definitions:

LwA The overall (single value) fan sound power level, 'A' weighted.

dBA The environment for each fan installation influences its measured sound value, therefore dBA levels cannot be guaranteed. Consult AMCA Publication 303 for further details.  
A fan's dBA is influenced by nearby reflective surfaces.



# Twin City Fan & Blower

A Twin City Fan Company

5959 Trenton Lane · Minneapolis, MN 55442-3238  
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com



Customer: Trane Custom  
Job Name: South Avondale Elem Sch  
Job ID: 11732

November 01, 2006  
Page: 1

## Fan Description

Tag .....	EXH-2
Quantity .....	1
Type .....	EPF
Size .....	445
Width .....	SWSI
Arrangement .....	3
Class .....	1
Rotation .....	CW
Discharge .....	HOR
Wheel diameter (in.) .....	44.5
Drive method ...	60 Hz belt drive
Percentage width .....	100%
Percentage diameter .....	100%

## Fan Performance

CFM .....	34,310
Operating SP (in.wg) .....	2.4
Standard SP (in.wg) .....	2.4
RPM .....	829
Tip Speed (fpm) .....	9,658
Oper. BHP .....	20.26
Standard BHP .....	20.26
Outlet area (sq. ft) .....	N/A
Outlet Velocity (fpm) .....	N/A
Temperature (°F) .....	70
Altitude (ft) .....	0
Density (lb/ft <sup>3</sup> ) .....	0.075
Max RPM for Class .....	944
Static Efficiency .....	63.89
Mechanical Efficiency ....	63.89

## Motor Data

HP .....	30
RPM .....	1800
Voltage .....	460V
Phase .....	3
Hz .....	60
Enclosure .....	ODP
Efficiency .....	Prm.Eff.
Frame .....	286T
Motor position .....	Z

## Sound

Sound Power Levels in dB re. 10<sup>-12</sup> Watts:

Octave Bands	1	2	3	4	5	6	7	8	LwA
Level at Inlet	94	100	96	84	81	76	69	65	91
Level at Outlet	94	95	94	89	87	82	76	70	92

Estimated sound pressure level in dBA (re: 0.0002 microbar) based on a single\* ducted installation:

Distance in ft	1	3	5
dBA at Inlet	91	81	77
dBA at Outlet	92	82	78

\*To estimate dBA level for ducted inlet and ducted outlet (into and out of the room) type installation, deduct 20 from the LWA value shown.

Using a directivity factor of 1.

Estimated Sound Pressure based on free field, spherical (Q = 1) radiation at the stated distance.

### Definitions:

LwA The overall (single value) fan sound power level, 'A' weighted.

dBA The environment for each fan installation influences its measured sound value, therefore dBA levels cannot be guaranteed. Consult AMCA Publication 303 for further details.  
A fan's dBA is influenced by nearby reflective surfaces.



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EM3218T



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### Specifications: EM3218T

SPEC. NUMBER:	36G548S270G1
CATALOG NUMBER:	EM3218T
FL AMPS:	14-13.2/6.6
208V AMPS:	14
BEARING-DRIVE-END:	6206
BEARING-OPP-DRIVE-END:	6205
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	89.5
ENCLOSURE:	OPSB
FRAME:	184T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	J
SPEED [rpm]:	1750
OUTPUT [hp]:	5
PHASE:	3
POWER-FACTOR:	80
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	208-230/460

\* For certified information, contact your local [Baldor office](#).

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## Specifications: EM3313T

SPEC. NUMBER:	37F614T853
CATALOG NUMBER:	EM3313T
FL AMPS:	25/12.5
208V AMPS:	26
BEARING-DRIVE-END:	6307
BEARING-OPP-DRIVE-END:	6206
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	91.7
ENCLOSURE:	OPSB
FRAME:	215T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	H
SPEED [rpm]:	1770
OUTPUT [hp]:	10
PHASE:	3
POWER-FACTOR:	82
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	230/460

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## Specifications: EM2513T

SPEC. NUMBER:	39K057W916
CATALOG NUMBER:	EM2513T
FL AMPS:	35.4/17.7
208V AMPS:	37.4
BEARING-DRIVE-END:	6309
BEARING-OPP-DRIVE-END:	6208
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	93
ENCLOSURE:	OPSB
FRAME:	254T
HERTZ:	60
INSULATION-CLASS:	F
KVA-CODE:	G
SPEED [rpm]:	1765
OUTPUT [hp]:	15
PHASE:	3
POWER-FACTOR:	86
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
VOLTAGE:	230/460

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### Specifications: EM2535T

208V AMPS:	74.1
BEARING-DRIVE-END:	6311
BEARING-OPP-DRIVE-END:	6309
CUSTOMER-PART-NUMBER:	--
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	94.1
ENCLOSURE:	OPSB
FRAME:	286T
GREASE:	POLYREX EM
HERTZ:	60
CATALOG NUMBER:	EM2535T
SPEC. NUMBER:	40G048W942
INSULATION-CLASS:	F
KVA-CODE:	G
MAX. SPACE HEATER TEMP.:	--
SPEED [rpm]:	1770
OUTPUT [hp]:	30
PHASE:	3
POWER-FACTOR:	85
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
SPACE-HEATER-AMPS:	--
SPACE-HEATER-VOLTS:	--
VOLTAGE:	230/460
FL AMPS:	70/35

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[AC Motors](#) | [Premium Efficient](#) | [50 HP](#) | [1400-1800 RPM](#) |

### Specifications: EM2543T

208V AMPS:	121
BEARING-DRIVE-END:	6312
BEARING-OPP-DRIVE-END:	6311
CUSTOMER-PART-NUMBER:	--
DESIGN CODE:	B
DOE-CODE:	010A
FL EFFICIENCY:	94.5
ENCLOSURE:	OPSB
FRAME:	326T
GREASE:	POLYREX EM
HERTZ:	60
CATALOG NUMBER:	EM2543T
SPEC. NUMBER:	42F056W387
INSULATION-CLASS:	F
KVA-CODE:	G
MAX. SPACE HEATER TEMP.:	--
SPEED [rpm]:	1775
OUTPUT [hp]:	50
PHASE:	3
POWER-FACTOR:	87
RATING:	40C AMB-CONT
SERIAL-NUMBER:	--
SERVICE FACTOR:	1.15
SPACE-HEATER-AMPS:	--
SPACE-HEATER-VOLTS:	--
VOLTAGE:	230/460
FL AMPS:	114/57

\* For certified information, contact your local [Baldor office](#).

March 2, 2012



To whom it may concern:

This letter is to confirm that for the renovation to Cincinnati Public school South Avondale (636 Prospect Place), for the custom rebate application, the lighting project was installed with a minimum unit cost listed below.

DESCRIPTION	QUANTITY	PRICE/FIXTURE	AMOUNT
T - Day Brite OM6 70	8	\$73.00	\$584.00
NovelAire ECW 844 Energy Conservation Wheel	2	\$8,000.00	\$16,000.00
A2 - Day Brite 2TGB232	22	\$63.00	\$1,386.00
A31 - Day Brite 2TG8332	117	\$76.00	\$8,892.00
P2 - Day Brite 1SMR232	60	\$130.00	\$7,800.00
K4 - Day Brite 1F232 PP	40	\$80.00	\$3,200.00
S1 - Day Brite S6 32PLT	22	\$35.00	\$770.00
K41 - Day Brite 1F232 PP	1	\$80.00	\$80.00
A3 - Day Brite 2TGB332	99	\$76.00	\$7,524.00
A32 - Day Brite 2TG8332	484	\$76.00	\$36,784.00
F32 - Day Brite 2UGS332	14	\$136.00	\$1,904.00
B3 - Day Brite 2TG8317	16	\$77.00	\$1,232.00
N2 - Day Brite 8UC117	130	\$40.00	\$5,200.00
N3 - Day Brite 8UC125	5	\$40.00	\$200.00
S4 - Day Brite CFR232U	2	\$52.00	\$104.00
D3 - Day Brite 2P3G317	13	\$125.00	\$1,625.00
N4 - Day Brite 8UC132 S	2	\$40.00	\$80.00
PS1 - Finelite S5P123T8	8	\$270.00	\$2,160.00
M4 - Day Brite HBE400PM	6	\$55.00	\$330.00
P - Kenall MLHA12	8	\$142.00	\$1,136.00
PS2 - Lite SKSB844	4	\$600.00	\$2,400.00
PS4 - Finelite S5P	19	\$270.00	\$5,130.00
W2 - Day Brite HBE250MT	12	\$55.00	\$660.00

W - Day Brite HBE250MT	12	\$55.00	\$660.00
W4 - Day Brite HBE400PM	4	\$55.00	\$220.00
H4 - Day Brite 2DPWLG432	33	\$150.00	\$4,950.00
PS5 - Finelite S5WN	4	\$135.00	\$540.00

<b>TOTAL</b>	<b>\$111,551.00</b>
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This is also to confirm that for the renovation to **South Avondale (636 Prospect Place)**, for the prescriptive rebate application, occupancy sensors motors, and a chiller were installed with a minimum unit cost listed below.

DESCRIPTION	Model Number	QUANTITY	Nominal Size (Tons)	PRICE/FIXTURE	AMOUNT
SelfDirect Occupancy Sensor	CM-PDT-10, WV-PDT-16, WSD-PDT-2P	24	-	\$117.89	\$2,829.36
SelfDirect Motor	Baldor EM3218T	2	-	\$830.00	\$1,660.00
SelfDirect Motor	Baldor EM3313T	2	-	\$1,477.00	\$2,954.00
SelfDirect Motor	Baldor EM2535T	1	-	\$3,052.00	\$3,052.00
SelfDirect Motor	Baldor EM2513T	2	-	\$2,091.00	\$4,182.00
SelfDirect Motor	Baldor EM2543T	1	-	\$4,394.00	\$4,394.00
SelfDirect Chiller - Air - Screw	Trane RTAC155	2	70	\$84,000.00	\$168,000.00

<b>TOTAL</b>	<b>\$187071.36</b>
--------------	--------------------

Thank you for your attention to this matter,

*Don Elbe*

Don Elbe  
Utility Management Coordinator

**APPLICATION AND CERTIFICATE FOR PAYMENT**

**TO OWNER:**

Cincinnati Public Schools  
2315 Ives Avenue  
Cincinnati, Ohio 45208

**PROJECT:**

GPS South Avondale Elem  
636 Prospect Place  
Cincinnati, Ohio 45229

**APPLICATION NO:**

PERIOD TO:  
PROJECT NOS:  
CONTRACT DATE:

22  
1/12/08  
Bid Package #7

**FROM CONTRACTOR:**

Beacon Electrical Contractors  
7815 Redsky Drive  
Cincinnati, Ohio 45249  
CONTRACT FOR: South Avondale BP # 7

**VIA ARCHITECT ATA BELLHARZ ARCHITECTS**

Two Garfield Place  
Cincinnati, Ohio 45202

**MELISSA M. LAWSON**  
Notary Public, State of Ohio  
My Commission Expires August 13, 2013

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below, in connection with the Contract.  
Continuation sheet is attached.


- 1. ORIGINAL CONTRACT SUM ..... \$ 1,873,000.00
- 2. Net Change by Change Orders ..... \$ 59,162.00
- 3. CONTRACT SUM TO DATE ..... \$ 1,932,162.00
- 4. TOTAL COMPLETED & STORED TO DATE ..... \$ 1,932,162.00
- 5. RETAINAGE
  - a. 8-50% of Completed Labor ..... \$ 0.00
  - b. 8% of Stored Material ..... \$ 0.00
  - Total Retainage ..... \$ 0.00
- 6. TOTAL EARNED LESS RETAINAGE ..... \$ 1,932,162.00
- 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ..... \$ 1,840,326.00
- 8. CURRENT PAYMENT DUE ..... \$ 91,836.00
- 9. BALANCE TO FINISH, INCLUDING RETAINAGE ..... \$ 0.00

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner	60614.00	-5295.00
Total approved this month	3843.00	0.00
<b>TOTALS</b>	<b>64457.00</b>	<b>-5295.00</b>
<b>NET CHANGES by Change Order</b>	<b>59162.00</b>	

The Contractor certifies that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by the State have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

Contractor  Date 11-25-08

Based upon on-site observations, the firm affirms that the work has progressed to the percentage of completeness indicated on the pay request.

Architect  Date 11/15/09

Construction Manager  Date 1/20/09

Approved:

School District Treasurer \_\_\_\_\_ Date \_\_\_\_\_





ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPRS	THIS PERIOD					
58	Cable Tray	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
59	Voice, Video & Data Cabling	1,425.00	1,425.00	0.00	0.00	1,425.00	100.00%	0.00	0.00
60	Building Rough In/Wiring "Area C"	11,550.00	11,550.00	0.00	0.00	11,550.00	100.00%	0.00	0.00
61	Branch/Feeder Conduit	25,200.00	25,200.00	0.00	0.00	25,200.00	100.00%	0.00	0.00
62	Branch/Feeder Wiring	28,500.00	28,500.00	0.00	0.00	28,500.00	100.00%	0.00	0.00
63	Branch/Feeder Wiring	24,000.00	24,000.00	0.00	0.00	24,000.00	100.00%	0.00	0.00
64	Branch/Feeder Wiring	13,500.00	13,500.00	0.00	0.00	13,500.00	100.00%	0.00	0.00
65	Cable Tray	16,500.00	16,500.00	0.00	0.00	16,500.00	100.00%	0.00	0.00
66	Voice, Video & Data Cabling	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
67	Building Rough In/Wiring "Area D"	1,425.00	1,425.00	0.00	0.00	1,425.00	100.00%	0.00	0.00
68	Branch/Feeder Conduit	11,550.00	11,550.00	0.00	0.00	11,550.00	100.00%	0.00	0.00
69	Branch/Feeder Conduit	25,200.00	25,200.00	0.00	0.00	25,200.00	100.00%	0.00	0.00
70	Branch/Feeder Wiring	38,000.00	38,000.00	0.00	0.00	38,000.00	100.00%	0.00	0.00
71	Branch/Feeder Wiring	32,000.00	32,000.00	0.00	0.00	32,000.00	100.00%	0.00	0.00
72	Cable Tray	18,000.00	18,000.00	0.00	0.00	18,000.00	100.00%	0.00	0.00
73	Cable Tray	22,000.00	22,000.00	0.00	0.00	22,000.00	100.00%	0.00	0.00
74	Voice, Video & Data Cabling	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
75	Building Rough In/Wiring "Area E"	1,900.00	1,900.00	0.00	0.00	1,900.00	100.00%	0.00	0.00
76	Branch/Feeder Conduit	15,400.00	15,400.00	0.00	0.00	15,400.00	100.00%	0.00	0.00
77	Branch/Feeder Conduit	33,600.00	33,600.00	0.00	0.00	33,600.00	100.00%	0.00	0.00
78	Branch/Feeder Wiring	28,500.00	28,500.00	0.00	0.00	28,500.00	100.00%	0.00	0.00
79	Branch/Feeder Wiring	24,000.00	24,000.00	0.00	0.00	24,000.00	100.00%	0.00	0.00
80	Cable Tray	13,500.00	13,500.00	0.00	0.00	13,500.00	100.00%	0.00	0.00
81	Cable Tray	16,500.00	16,500.00	0.00	0.00	16,500.00	100.00%	0.00	0.00
82	Voice, Video & Data Cabling	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
83	Building Rough In/Wiring "Area F"	1,425.00	1,425.00	0.00	0.00	1,425.00	100.00%	0.00	0.00
84	Branch/Feeder Conduit	11,550.00	11,550.00	0.00	0.00	11,550.00	100.00%	0.00	0.00
85	Branch/Feeder Conduit	25,200.00	25,200.00	0.00	0.00	25,200.00	100.00%	0.00	0.00
86	Branch/Feeder Wiring	38,000.00	38,000.00	0.00	0.00	38,000.00	100.00%	0.00	0.00
87	Branch/Feeder Wiring	32,000.00	32,000.00	0.00	0.00	32,000.00	100.00%	0.00	0.00
88	Cable Tray	18,000.00	18,000.00	0.00	0.00	18,000.00	100.00%	0.00	0.00
89	Cable Tray	22,000.00	22,000.00	0.00	0.00	22,000.00	100.00%	0.00	0.00
90	Voice, Video & Data Cabling	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
91	Building Rough In/Wiring "Area G"	1,900.00	1,900.00	0.00	0.00	1,900.00	100.00%	0.00	0.00
92	Branch/Feeder Conduit	15,400.00	15,400.00	0.00	0.00	15,400.00	100.00%	0.00	0.00
93	Branch/Feeder Conduit	33,600.00	33,600.00	0.00	0.00	33,600.00	100.00%	0.00	0.00
94	Branch/Feeder Wiring	28,500.00	28,500.00	0.00	0.00	28,500.00	100.00%	0.00	0.00
95	Branch/Feeder Wiring	24,000.00	24,000.00	0.00	0.00	24,000.00	100.00%	0.00	0.00
96	Cable Tray	13,500.00	13,500.00	0.00	0.00	13,500.00	100.00%	0.00	0.00
97	Cable Tray	16,500.00	16,500.00	0.00	0.00	16,500.00	100.00%	0.00	0.00
98	Voice, Video & Data Cabling	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
99	Building Rough In/Wiring "Area H"	1,425.00	1,425.00	0.00	0.00	1,425.00	100.00%	0.00	0.00
100	Branch/Feeder Conduit	11,550.00	11,550.00	0.00	0.00	11,550.00	100.00%	0.00	0.00
101	Branch/Feeder Conduit	25,200.00	25,200.00	0.00	0.00	25,200.00	100.00%	0.00	0.00
102	Branch/Feeder Wiring	38,000.00	38,000.00	0.00	0.00	38,000.00	100.00%	0.00	0.00
103	Branch/Feeder Wiring	32,000.00	32,000.00	0.00	0.00	32,000.00	100.00%	0.00	0.00
104	Cable Tray	18,000.00	18,000.00	0.00	0.00	18,000.00	100.00%	0.00	0.00
105	Cable Tray	22,000.00	22,000.00	0.00	0.00	22,000.00	100.00%	0.00	0.00
106	Voice, Video & Data Cabling	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
107	Building Rough In/Wiring "Area I"	1,900.00	1,900.00	0.00	0.00	1,900.00	100.00%	0.00	0.00
108	Branch/Feeder Conduit	15,400.00	15,400.00	0.00	0.00	15,400.00	100.00%	0.00	0.00
109	Branch/Feeder Conduit	33,600.00	33,600.00	0.00	0.00	33,600.00	100.00%	0.00	0.00
110	Branch/Feeder Wiring	28,500.00	28,500.00	0.00	0.00	28,500.00	100.00%	0.00	0.00
111	Branch/Feeder Wiring	24,000.00	24,000.00	0.00	0.00	24,000.00	100.00%	0.00	0.00
112	Cable Tray	13,500.00	13,500.00	0.00	0.00	13,500.00	100.00%	0.00	0.00
113	Cable Tray	16,500.00	16,500.00	0.00	0.00	16,500.00	100.00%	0.00	0.00
114	Voice, Video & Data Cabling	750.00	750.00	0.00	0.00	750.00	100.00%	0.00	0.00
115	Building Rough In/Wiring "Area J"	1,425.00	1,425.00	0.00	0.00	1,425.00	100.00%	0.00	0.00
116	Branch/Feeder Conduit	11,550.00	11,550.00	0.00	0.00	11,550.00	100.00%	0.00	0.00
117	Branch/Feeder Conduit	25,200.00	25,200.00	0.00	0.00	25,200.00	100.00%	0.00	0.00
118	Branch/Feeder Wiring	38,000.00	38,000.00	0.00	0.00	38,000.00	100.00%	0.00	0.00
SUB TOTAL		447,500.00	447,500.00	0.00	0.00	447,500.00	100.00%	0.00	0.00
SUB TOTAL		447,500.00	447,500.00	0.00	0.00	447,500.00	100.00%	0.00	0.00

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	APPLICATION NUMBER: 22 Retain Period To: 1/15/2009			
			PREVIOUS APPS.	THIS PERIOD		TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
119	Generator Equipment	450.00	450.00		0.00	450.00	100.00%	0.00	0.00
120	Security System	4,650.00	4,650.00		0.00	4,650.00	100.00%	0.00	0.00
121	Sound Systems	750.00	750.00		0.00	750.00	100.00%	0.00	0.00
122	Clock System	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
123	Video Systems	2,250.00	2,250.00		0.00	2,250.00	100.00%	0.00	0.00
124	Video Systems	7,500.00	7,500.00		0.00	7,500.00	100.00%	0.00	0.00
125	Video Systems	750.00	750.00		0.00	750.00	100.00%	0.00	0.00
126	Video Systems	1,500.00	1,500.00		0.00	1,500.00	100.00%	0.00	0.00
127	Video Systems	2,250.00	2,250.00		0.00	2,250.00	100.00%	0.00	0.00
128	Video Data & Network Equipment	3,750.00	3,750.00		0.00	3,750.00	100.00%	0.00	0.00
129	Video Data & Network Equipment	11,250.00	11,250.00		0.00	11,250.00	100.00%	0.00	0.00
130	Video Data & Network Equipment	18,750.00	18,750.00		0.00	18,750.00	100.00%	0.00	0.00
131	Building Equipment/Finishes "Area C"								
132	Electrical Equipment	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
133	Light Fixtures	17,250.00	17,250.00		0.00	17,250.00	100.00%	0.00	0.00
134	Light Fixtures	3,150.00	3,150.00		0.00	3,150.00	100.00%	0.00	0.00
135	Devices/Equipment	15,000.00	15,000.00		0.00	15,000.00	100.00%	0.00	0.00
136	Devices/Equipment	1,275.00	1,275.00		0.00	1,275.00	100.00%	0.00	0.00
137	Fire Alarm System Equipment	4,650.00	4,650.00		0.00	4,650.00	100.00%	0.00	0.00
138	Fire Alarm System Equipment	1,200.00	1,200.00		0.00	1,200.00	100.00%	0.00	0.00
139	Generator Equipment	2,550.00	2,550.00		0.00	2,550.00	100.00%	0.00	0.00
140	Generator Equipment	450.00	450.00		0.00	450.00	100.00%	0.00	0.00
141	Security System	4,650.00	4,650.00		0.00	4,650.00	100.00%	0.00	0.00
142	Security System	750.00	750.00		0.00	750.00	100.00%	0.00	0.00
143	Sound Systems	7,500.00	7,500.00		0.00	7,500.00	100.00%	0.00	0.00
144	Sound Systems	2,250.00	2,250.00		0.00	2,250.00	100.00%	0.00	0.00
145	Clock System	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
146	Clock System	750.00	750.00		0.00	750.00	100.00%	0.00	0.00
147	Video Systems	1,500.00	1,500.00		0.00	1,500.00	100.00%	0.00	0.00
148	Video Systems	2,250.00	2,250.00		0.00	2,250.00	100.00%	0.00	0.00
149	Voice Data & Network Equipment	3,750.00	3,750.00		0.00	3,750.00	100.00%	0.00	0.00
150	Voice Data & Network Equipment	11,250.00	11,250.00		0.00	11,250.00	100.00%	0.00	0.00
151	Voice Data & Network Equipment	18,750.00	18,750.00		0.00	18,750.00	100.00%	0.00	0.00
152	Building Equipment/Finishes "Area D"								
153	Electrical Equipment	4,000.00	4,000.00		0.00	4,000.00	100.00%	0.00	0.00
154	Light Fixtures	23,000.00	23,000.00		0.00	23,000.00	100.00%	0.00	0.00
155	Light Fixtures	4,200.00	4,200.00		0.00	4,200.00	100.00%	0.00	0.00
156	Devices/Equipment	20,000.00	20,000.00		0.00	20,000.00	100.00%	0.00	0.00
157	Devices/Equipment	1,700.00	1,700.00		0.00	1,700.00	100.00%	0.00	0.00
158	Fire Alarm System Equipment	6,200.00	6,200.00		0.00	6,200.00	100.00%	0.00	0.00
159	Fire Alarm System Equipment	1,600.00	1,600.00		0.00	1,600.00	100.00%	0.00	0.00
160	Generator Equipment	3,400.00	3,400.00		0.00	3,400.00	100.00%	0.00	0.00
161	Generator Equipment	600.00	600.00		0.00	600.00	100.00%	0.00	0.00
162	Security System	6,200.00	6,200.00		0.00	6,200.00	100.00%	0.00	0.00
163	Security System	1,000.00	1,000.00		0.00	1,000.00	100.00%	0.00	0.00
164	Sound Systems	4,000.00	4,000.00		0.00	4,000.00	100.00%	0.00	0.00
165	Sound Systems	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
166	Clock System	10,000.00	10,000.00		0.00	10,000.00	100.00%	0.00	0.00
167	Clock System	1,000.00	1,000.00		0.00	1,000.00	100.00%	0.00	0.00
168	Video Systems	2,000.00	2,000.00		0.00	2,000.00	100.00%	0.00	0.00
169	Video Systems	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
170	Voice Data & Network Equipment	5,000.00	5,000.00		0.00	5,000.00	100.00%	0.00	0.00
171	Voice Data & Network Equipment	15,000.00	15,000.00		0.00	15,000.00	100.00%	0.00	0.00
172	Voice Data & Network Equipment	25,000.00	25,000.00		0.00	25,000.00	100.00%	0.00	0.00
173	Building Equipment/Finishes "Area E"								
174	Electrical Equipment	3,000.00	3,000.00		0.00	3,000.00	100.00%	0.00	0.00
175	Light Fixtures	17,250.00	17,250.00		0.00	17,250.00	100.00%	0.00	0.00
176	Light Fixtures	3,150.00	3,150.00		0.00	3,150.00	100.00%	0.00	0.00
177	Devices/Equipment	15,000.00	15,000.00		0.00	15,000.00	100.00%	0.00	0.00
178	Devices/Equipment	1,275.00	1,275.00		0.00	1,275.00	100.00%	0.00	0.00
179	Fire Alarm System Equipment	4,650.00	4,650.00		0.00	4,650.00	100.00%	0.00	0.00
180	Fire Alarm System Equipment	1,200.00	1,200.00		0.00	1,200.00	100.00%	0.00	0.00
181	Fire Alarm System Equipment	2,550.00	2,550.00		0.00	2,550.00	100.00%	0.00	0.00

CONTINUATION SHEET

ITEM NUMBER	DESCRIPTION OF WORK	LABOR	MATERIAL	SCHEDULED VALUE	PREVIOUS APPS	WORK COMPLETED THIS PERIOD	MATERIALS PRESENTLY STORED	APPLICATION NUMBER: 22 Retain PERIOD TO: 1/30/2008			
								TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
182	Generator Equipment	LABOR		450.00	450.00		0.00	450.00	100.00%	0.00	0.00
183	Security System	MATERIAL		4,650.00	750.00		0.00	4,650.00	100.00%	0.00	0.00
184	Security System	LABOR		750.00	3,000.00		0.00	750.00	100.00%	0.00	0.00
185	Sound Systems	MATERIAL		3,000.00	0.00		0.00	3,000.00	100.00%	0.00	0.00
186	Sound Systems	LABOR		2,250.00	2,250.00		0.00	2,250.00	100.00%	0.00	0.00
187	Sound Systems	MATERIAL		7,500.00	7,500.00		0.00	7,500.00	100.00%	0.00	0.00
188	Clock System	LABOR		750.00	0.00		0.00	750.00	100.00%	0.00	0.00
189	Clock System	MATERIAL		1,500.00	2,250.00		0.00	1,500.00	100.00%	0.00	0.00
190	Video Systems	LABOR		1,500.00	3,750.00		0.00	1,500.00	100.00%	0.00	0.00
191	Video Systems	MATERIAL		2,250.00	3,750.00		0.00	2,250.00	100.00%	0.00	0.00
192	Voice, Data & Network Equipment	LABOR		3,750.00	11,250.00		0.00	3,750.00	100.00%	0.00	0.00
193	Voice, Data & Network Equipment	MATERIAL		11,250.00	18,750.00		0.00	11,250.00	100.00%	0.00	0.00
194	Voice, Data & Network Equipment	LABOR		18,750.00	0.00		0.00	18,750.00	100.00%	0.00	0.00
195	CHANGE ORDER # 1	LABOR		2,547.00	2,547.00		0.00	2,547.00	100.00%	0.00	0.00
196	CHANGE ORDER # 2	MATERIAL		4,252.00	4,252.00		0.00	4,252.00	100.00%	0.00	0.00
197	CHANGE ORDER # 3	LABOR		0.00	0.00		0.00	0.00	100.00%	0.00	0.00
198	CHANGE ORDER # 3	MATERIAL		353.00	353.00		0.00	353.00	100.00%	0.00	0.00
199	CHANGE ORDER # 4	LABOR		992.00	992.00		0.00	992.00	100.00%	0.00	0.00
200	CHANGE ORDER # 4	MATERIAL		4,515.00	4,515.00		0.00	4,515.00	100.00%	0.00	0.00
201	CHANGE ORDER # 5	LABOR		16,038.00	16,038.00		0.00	16,038.00	100.00%	0.00	0.00
202	CHANGE ORDER # 5	MATERIAL		(4,793.00)	(4,793.00)		0.00	(4,793.00)	100.00%	0.00	0.00
203	CHANGE ORDER # 6	LABOR		1,085.00	1,085.00		0.00	1,085.00	100.00%	0.00	0.00
204	CHANGE ORDER # 6	MATERIAL		1,955.00	1,955.00		0.00	1,955.00	100.00%	0.00	0.00
205	CHANGE ORDER # 6	LABOR		3,495.00	3,495.00		0.00	3,495.00	100.00%	0.00	0.00
206	CHANGE ORDER # 7	MATERIAL		(502.00)	(502.00)		0.00	(502.00)	100.00%	0.00	0.00
207	CHANGE ORDER # 8	LABOR		8,148.00	8,148.00		0.00	8,148.00	100.00%	0.00	0.00
208	CHANGE ORDER # 9	MATERIAL		2,314.00	2,314.00		0.00	2,314.00	100.00%	0.00	0.00
209	CHANGE ORDER # 10	LABOR		8,049.00	8,049.00		0.00	8,049.00	100.00%	0.00	0.00
210	CHANGE ORDER # 11	MATERIAL		5,721.00	5,721.00		0.00	5,721.00	100.00%	0.00	0.00
211	CHANGE ORDER # 12	LABOR		583.00	583.00		0.00	583.00	100.00%	0.00	0.00
212	CHANGE ORDER # 13	MATERIAL		2,327.00	2,327.00		0.00	2,327.00	100.00%	0.00	0.00
213	CHANGE ORDER # 14	LABOR		1,584.00	1,584.00		0.00	1,584.00	100.00%	0.00	0.00
214	CHANGE ORDER # 15	MATERIAL		0.00	0.00		0.00	0.00	100.00%	0.00	0.00
215	CHANGE ORDER # 16	LABOR		0.00	0.00		0.00	0.00	100.00%	0.00	0.00
216	CHANGE ORDER # 17	MATERIAL		2,259.00	2,259.00		0.00	2,259.00	100.00%	0.00	0.00
217	CHANGE ORDER # 17	LABOR		0.00	0.00		0.00	0.00	100.00%	0.00	0.00
SUB TOTAL				722,467.00	722,467.00	0.00	0.00	722,467.00	100.00%	0.00	0.00
SUB TOTAL				1,209,695.00	1,209,695.00	0.00	0.00	1,209,695.00	100.00%	0.00	0.00
PROJECT GRAND TOTAL				1,932,162.00	1,932,162.00	0.00	0.00	1,932,162.00	100.00%	0.00	0.00

**Cincinnati Public Schools**

2315 Iowa Avenue  
Cincinnati, Ohio 45206

Beacon Electrical Contractors  
Address: 7815 Redsky Drive, Cincinnati, OH 45249

Date: November 25, 2008  
Application # 22 Retainage

**Contractor Pay Application Summary**

**Project Name: CPS South Avondale Elementary**  
**Bid Package No.: #7 Electrical/Technology**

1	Original Contract Amount	\$	1,873,000.00
2	Net Changes to Date	\$	59,162.00
3	Current Contract Amount	\$	1,932,162.00
4	Labor Completed to Date	\$	722,467.00
5	Material Completed to Date	\$	1,209,695.00
6	Total Work Completed to Date	\$	1,932,162.00
7	Store Material to Date	\$	0.00
8	Less Retained to Date	\$	0.00
9	Total Amount Due	\$	1,932,162.00
10	Less Previous Payments	\$	1,840,326.00
11	Less Amount Retained to Cover Lien	\$	0.00
12	Less Amount Retained for Liquidated Damages	\$	0.00
13	Less Other Amounts Withheld	\$	0.00
14	Current Due	\$	91,836.00
15	Balance to Complete	\$	0.00

**OSFC approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

Ohio School Facilities Commission \_\_\_\_\_

Date \_\_\_\_\_

Comments:


**APPLICATION AND CERTIFICATE FOR PAYMENT**

**TO OWNER:**

Turner Construction  
2315 Iowa Avenue  
Cincinnati, Ohio 45206

**PROJECT:**

South Avondale Elementary  
636 Prospect Place  
Cincinnati, Ohio 45229

**FROM CONTRACTOR:**

Feldkamp Enterprises, Inc.  
3642 Muddy Creek Road  
Cincinnati, Ohio 45238

**VIA ARCHITECT:**

**CONTRACT FOR:**

HVAC & PIPING

**APPLICATION No:**

23

**PERIOD TO:**

11/30/08

**PROJECT NOS:**

09/13/06

**CONTRACT DATE:**

1221-RET

**CONTRACTOR'S APPLICATION FOR PAYMENT**

Application is made for payment as shown below, in connection with the Contract  
Continuation sheet is attached.

1. ORIGINAL CONTRACT SUM.....\$ 1,629,000.00
2. Net Change by Change Orders.....\$ 62,306.03
3. CONTRACT SUM TO DATE.....\$ 1,691,306.03
4. TOTAL COMPLETED & STORED TO DATE.....\$ 1,691,306.03
5. RETAINAGE
  - a. 8-50% of Completed Labor.....\$ -
  - b. 8% of Stored Material.....\$ -
  - Total Retainage.....\$ -
6. TOTAL EARNED LESS RETAINAGE.....\$ 1,691,306.03
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT.....\$ 1,665,096.03
8. CURRENT PAYMENT DUE.....\$ 26,210.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE.....\$ -

Change Order/Contract	ADDITIONS	DEDUCTIONS
Total Changes approved in Previous months by Owner	15632.00	0.00
Total approved this month	47059.03	-385.00
<b>TOTALS</b>	<b>62691.03</b>	<b>-385.00</b>
<b>NET CHANGES by Change Order</b>	<b>62306.03</b>	

The Contractor certified that the work covered by this pay request has been completed in accordance with the Contract Documents and that all progress payments previously paid by Felicity-Franklin have been applied by the Contractor to discharge in full all of Contractor's obligations incurred in connection with the work covered by all prior pay requests.

Contractor *Brett Meyer*

*Charles J. Feldkamp*

11/10/2008



Brett Meyer  
Notary Public, State of Ohio  
My Commission Expires 11/18/2012

Architect *[Signature]*

Date 1/15/09

Construction Manager *[Signature]*

Date 1/26/09

Approved:

School District

Date

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	WORK COMPLETED		MATERIALS STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
			PREVIOUS APPS.	THIS PERIOD					
1	BOND	17,000.00	17,000.00	0.00	0.00	17,000.00	100.00%	0.00	0.00
2	SUBMITTALS	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
3	PUNCH LIST	3,500.00	3,500.00	0.00	0.00	3,500.00	100.00%	0.00	0.00
4	HVAC ALLOWANCE	30,000.00	30,000.00	0.00	0.00	30,000.00	100.00%	0.00	0.00
5	L COORDINATION DRAWINGS	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00%	0.00	0.00
6	M COORDINATION DRAWINGS	50,000.00	50,000.00	0.00	0.00	50,000.00	100.00%	0.00	0.00
7	L MOBILIZATION	2,000.00	2,000.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
8	M MOBILIZATION	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
9	L RAMP WATER BALANCE	13,000.00	13,000.00	0.00	0.00	13,000.00	100.00%	0.00	0.00
10	L LOUVERS	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
11	M LOUVERS	12,000.00	12,000.00	0.00	0.00	12,000.00	100.00%	0.00	0.00
12	AREA A								
13	L HVAC EQUIPMENT	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
14	M HVAC EQUIPMENT	210,000.00	210,000.00	0.00	0.00	210,000.00	100.00%	0.00	0.00
15	M BOILERS	50,000.00	50,000.00	0.00	0.00	50,000.00	100.00%	0.00	0.00
16	L BOILERS	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
17	M HYDRONIC EQUIPMENT	20,000.00	20,000.00	0.00	0.00	20,000.00	100.00%	0.00	0.00
18	L HYDRONIC EQUIPMENT	10,000.00	10,000.00	0.00	0.00	10,000.00	100.00%	0.00	0.00
19	M HW/CW PIPING AREA A	25,000.00	25,000.00	0.00	0.00	25,000.00	100.00%	0.00	0.00
20	L HW/CW PIPING AREA A	45,000.00	45,000.00	0.00	0.00	45,000.00	100.00%	0.00	0.00
21	M INSULATION - PIPE	9,375.00	9,375.00	0.00	0.00	9,375.00	100.00%	0.00	0.00
22	L INSULATION - PIPE	6,875.00	6,875.00	0.00	0.00	6,875.00	100.00%	0.00	0.00
23	M INSULATION - DUCT	9,375.00	9,375.00	0.00	0.00	9,375.00	100.00%	0.00	0.00
24	L INSULATION - DUCT	6,875.00	6,875.00	0.00	0.00	6,875.00	100.00%	0.00	0.00
25	M TEMP CONTROL AREA A	18,750.00	18,750.00	0.00	0.00	18,750.00	100.00%	0.00	0.00
26	L TEMP CONTROL AREA A	18,750.00	18,750.00	0.00	0.00	18,750.00	100.00%	0.00	0.00
27	M GYMNASIUM DUCT	12,000.00	12,000.00	0.00	0.00	12,000.00	100.00%	0.00	0.00
28	L GYMNASIUM DUCT	12,000.00	12,000.00	0.00	0.00	12,000.00	100.00%	0.00	0.00
29	M UNIT A DUCT	50,500.00	50,500.00	0.00	0.00	50,500.00	100.00%	0.00	0.00
30	L UNIT A DUCT	50,500.00	50,500.00	0.00	0.00	50,500.00	100.00%	0.00	0.00
31	M UNIT A FANS	1,000.00	1,000.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
32	L UNIT A FANS	19,000.00	19,000.00	0.00	0.00	19,000.00	100.00%	0.00	0.00
33	M UNIT A VAV BOXES	12,000.00	12,000.00	0.00	0.00	12,000.00	100.00%	0.00	0.00
34	L UNIT A VAV BOXES	6,000.00	6,000.00	0.00	0.00	6,000.00	100.00%	0.00	0.00
35	M BOILER FLUE	2,000.00	2,000.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
36	L BOILER FLUE	8,000.00	8,000.00	0.00	0.00	8,000.00	100.00%	0.00	0.00
37	M KITCHEN HOODS	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
38	L KITCHEN HOODS	14,000.00	14,000.00	0.00	0.00	14,000.00	100.00%	0.00	0.00
39	M UNIT A AIR DEVICES	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
40	L UNIT A AIR DEVICES	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
	AREA B								
41	M HW/CW PIPING AREA B	20,000.00	20,000.00	0.00	0.00	20,000.00	100.00%	0.00	0.00
42	L HW/CW PIPING AREA B	34,000.00	34,000.00	0.00	0.00	34,000.00	100.00%	0.00	0.00
43	M INSULATION - PIPE	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
44	L INSULATION - PIPE	5,500.00	5,500.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
45	M INSULATION - DUCT	7,500.00	7,500.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
46	L INSULATION - DUCT	5,500.00	5,500.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
47	M TEMP CONTROL AREA B	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
48	L TEMP CONTROL AREA B	15,000.00	15,000.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
49	M UNIT B DUCT	14,000.00	14,000.00	0.00	0.00	14,000.00	100.00%	0.00	0.00
50	L UNIT B DUCT	14,000.00	14,000.00	0.00	0.00	14,000.00	100.00%	0.00	0.00
51	M UNIT B FANS	500.00	500.00	0.00	0.00	500.00	100.00%	0.00	0.00
52	L UNIT B FANS	2,000.00	2,000.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
53	M UNIT B VAV BOXES	5,000.00	5,000.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
54	L UNIT B VAV BOXES	3,000.00	3,000.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
55	M UNIT B AIR DEVICES	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00
	L UNIT B AIR DEVICES	1,500.00	1,500.00	0.00	0.00	1,500.00	100.00%	0.00	0.00

ITEM NUMBER	DESCRIPTION OF WORK	SCHEDULED VALUE	PREVIOUS APPS.	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
				THIS PERIOD	PERIOD					
56	AREA C M HW/CW PIPING AREA C	MATERIAL 20,000.00	20,000.00	0.00	0.00	0.00	20,000.00	100.00%	0.00	0.00
57	L HW/CW PIPING AREA C	LABOR 34,000.00	34,000.00	0.00	0.00	0.00	34,000.00	100.00%	0.00	0.00
58	M INSULATION - PIPE	MATERIAL 7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
59	L INSULATION - PIPE	LABOR 5,500.00	5,500.00	0.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
80	M INSULATION - DUCT	MATERIAL 7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
81	L INSULATION - DUCT	LABOR 5,500.00	5,500.00	0.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
82	M TEMP CONTROL AREA C	MATERIAL 15,000.00	15,000.00	0.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
83	L TEMP CONTROL AREA C	LABOR 15,000.00	15,000.00	0.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
64	L UNIT C DUCT	MATERIAL 11,000.00	11,000.00	0.00	0.00	0.00	11,000.00	100.00%	0.00	0.00
65	M UNIT C DUCT	LABOR 11,000.00	11,000.00	0.00	0.00	0.00	11,000.00	100.00%	0.00	0.00
66	L UNIT C FANS	MATERIAL 500.00	500.00	0.00	0.00	0.00	500.00	100.00%	0.00	0.00
67	M UNIT C FANS	LABOR 1,000.00	1,000.00	0.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
68	L UNIT C VAV BOXES	MATERIAL 5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
69	M UNIT C VAV BOXES	LABOR 3,000.00	3,000.00	0.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
70	L UNIT C AIR DEVICES	MATERIAL 1,200.00	1,200.00	0.00	0.00	0.00	1,200.00	100.00%	0.00	0.00
71	M UNIT C AIR DEVICES	LABOR 1,200.00	1,200.00	0.00	0.00	0.00	1,200.00	100.00%	0.00	0.00
72	AREA D L HVAC EQUIPMENT	LABOR 10,000.00	10,000.00	0.00	0.00	0.00	10,000.00	100.00%	0.00	0.00
73	M HVAC EQUIPMENT	MATERIAL 140,000.00	140,000.00	0.00	0.00	0.00	140,000.00	100.00%	0.00	0.00
74	M HW/CW PIPING AREA D	MATERIAL 20,000.00	20,000.00	0.00	0.00	0.00	20,000.00	100.00%	0.00	0.00
75	L HW/CW PIPING AREA D	LABOR 34,500.00	34,500.00	0.00	0.00	0.00	34,500.00	100.00%	0.00	0.00
76	M INSULATION - PIPE	MATERIAL 7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
77	L INSULATION - PIPE	LABOR 5,500.00	5,500.00	0.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
78	M INSULATION - DUCT	MATERIAL 7,500.00	7,500.00	0.00	0.00	0.00	7,500.00	100.00%	0.00	0.00
79	L INSULATION - DUCT	LABOR 5,500.00	5,500.00	0.00	0.00	0.00	5,500.00	100.00%	0.00	0.00
80	M TEMP CONTROL AREA D	MATERIAL 15,000.00	15,000.00	0.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
81	L TEMP CONTROL AREA D	LABOR 15,000.00	15,000.00	0.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
82	L UNIT D DUCT	MATERIAL 27,000.00	27,000.00	0.00	0.00	0.00	27,000.00	100.00%	0.00	0.00
83	M UNIT D DUCT	LABOR 27,000.00	27,000.00	0.00	0.00	0.00	27,000.00	100.00%	0.00	0.00
84	L UNIT D FANS	MATERIAL 500.00	500.00	0.00	0.00	0.00	500.00	100.00%	0.00	0.00
85	M UNIT D FANS	LABOR 2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
86	L UNIT D VAV BOXES	MATERIAL 8,000.00	8,000.00	0.00	0.00	0.00	8,000.00	100.00%	0.00	0.00
87	M UNIT D VAV BOXES	LABOR 5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
88	L UNIT D AIR DEVICES	MATERIAL 2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
89	M UNIT D AIR DEVICES	LABOR 2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	100.00%	0.00	0.00
90	AREA E L HVAC EQUIPMENT	LABOR 5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
91	M HVAC EQUIPMENT	MATERIAL 70,000.00	70,000.00	0.00	0.00	0.00	70,000.00	100.00%	0.00	0.00
92	M HW/CW PIPING AREA E	MATERIAL 15,000.00	15,000.00	0.00	0.00	0.00	15,000.00	100.00%	0.00	0.00
93	L HW/CW PIPING AREA E	LABOR 33,000.00	33,000.00	0.00	0.00	0.00	33,000.00	100.00%	0.00	0.00
94	M INSULATION - PIPE	MATERIAL 5,625.00	5,625.00	0.00	0.00	0.00	5,625.00	100.00%	0.00	0.00
95	L INSULATION - PIPE	LABOR 4,125.00	4,125.00	0.00	0.00	0.00	4,125.00	100.00%	0.00	0.00
96	M INSULATION - DUCT	MATERIAL 5,625.00	5,625.00	0.00	0.00	0.00	5,625.00	100.00%	0.00	0.00
97	L INSULATION - DUCT	LABOR 4,125.00	4,125.00	0.00	0.00	0.00	4,125.00	100.00%	0.00	0.00
98	M TEMP CONTROL AREA E	MATERIAL 11,250.00	11,250.00	0.00	0.00	0.00	11,250.00	100.00%	0.00	0.00
99	L TEMP CONTROL AREA E	LABOR 11,250.00	11,250.00	0.00	0.00	0.00	11,250.00	100.00%	0.00	0.00
100	L UNIT E DUCT	MATERIAL 11,000.00	11,000.00	0.00	0.00	0.00	11,000.00	100.00%	0.00	0.00
101	M UNIT E DUCT	LABOR 11,000.00	11,000.00	0.00	0.00	0.00	11,000.00	100.00%	0.00	0.00
102	L UNIT E FANS	MATERIAL 500.00	500.00	0.00	0.00	0.00	500.00	100.00%	0.00	0.00
103	M UNIT E FANS	LABOR 1,000.00	1,000.00	0.00	0.00	0.00	1,000.00	100.00%	0.00	0.00
104	L UNIT E VAV BOXES	MATERIAL 5,000.00	5,000.00	0.00	0.00	0.00	5,000.00	100.00%	0.00	0.00
105	M UNIT E VAV BOXES	LABOR 3,000.00	3,000.00	0.00	0.00	0.00	3,000.00	100.00%	0.00	0.00
106	L UNIT E AIR DEVICES	MATERIAL 1,300.00	1,300.00	0.00	0.00	0.00	1,300.00	100.00%	0.00	0.00
107	M UNIT E AIR DEVICES	LABOR 1,300.00	1,300.00	0.00	0.00	0.00	1,300.00	100.00%	0.00	0.00
108	GO#1 Schedule Ext	LABOR 0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00
109	GO#2 Boiler Flue	LABOR 7,570.00	7,570.00	0.00	0.00	0.00	7,570.00	100.00%	0.00	0.00
110	CO#3A Change Outside Air	LABOR 3,373.00	3,373.00	0.00	0.00	0.00	3,373.00	100.00%	0.00	0.00
111	CO#3B Refridge Exhaust	LABOR 1,492.00	1,492.00	0.00	0.00	0.00	1,492.00	100.00%	0.00	0.00
112	CO#4A Kihn Exhaust	LABOR 714.00	714.00	0.00	0.00	0.00	714.00	100.00%	0.00	0.00
113	CO#4B Temporary Heat	LABOR 2,483.00	2,483.00	0.00	0.00	0.00	2,483.00	100.00%	0.00	0.00

ITEM NUMBER	DESCRIPTION OF WORK	LABOR	SCHEDULED VALUE	WORK COMPLETED		MATERIALS PRESENTLY STORED	TOTAL COMPLETED & STORED TO DATE	%	BALANCE TO FINISH	RETAINAGE
				PREVIOUS APPS.	THIS PERIOD					
114	CO#8 Insurance Paid - Stolen Copper	LABOR	32,844.00	32,844.00	0.00	0.00	32,844.00	100.00%	0.00	0.00
115	CO#8 Unused Allowance	LABOR	(385.00)	(385.00)	0.00	0.00	(385.00)	100.00%	0.00	0.00
116	CO#7 Insurance Paid - Stolen Copper	LABOR	8,287.50	8,287.50	0.00	0.00	8,287.50	100.00%	0.00	0.00
117	CO#8 Insurance Paid - Stolen Copper	LABOR	5,927.53	5,927.53	0.00	0.00	5,927.53	100.00%	0.00	0.00
TOTALS			1,691,308.03	1,691,308.03	0.00	0.00	1,691,308.03	100.00%	0.00	0.00



**CONSENT OF  
SURETY COMPANY  
TO FINAL PAYMENT**

AIA DOCUMENT G707

OWNER   
ARCHITECT   
CONTRACTOR   
SURETY   
OTHER

PROJECT:  
(name, address) South Avondale School

TO (Owner)

Cincinnati Public School District  
2651 Burnet Ave, 2nd FL Rm 204  
Cincinnati, Oh 45219

ARCHITECT'S PROJECT NO:  
CONTRACT FOR: Plumbing and Hvac

CONTRACT DATE: 09/25/2006

CONTRACTOR:  
Feldkamp Enterprises, Inc.  
3642 Muddy Creek  
Cincinnati OH 45238

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the  
(here insert name and address of Surety Company)

United Fire and Casualty Company 118 Second Ave SE Cedar Rapids IA 52403 , SURETY COMPANY,

on bond of (here insert name and address of Contractor)

Feldkamp Enterprises, Inc. 3642 Muddy Creek Cincinnati OH 45238 , CONTRACTOR,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not  
relieve the Surety Company of any of its obligations to (here insert name and address of Owner)

Cincinnati Public School District  
2651 Burnet Ave, 2nd FL Rm 204  
Cincinnati, Oh 45219

, OWNER,

as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF,  
the Surety Company has hereunto set its hand this 1st day of August 2008

United Fire and Casualty Company  
Surety Company

Signature of Authorized Representative  
Michael D. Gilroy Attorney-In-Fact

Title

Attest:  
(Seal):

NOTE: This form is to be used as a companion document to AIA DOCUMENT G706, CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND  
CLAIMS, Current Edition

UNITED FIRE & CASUALTY COMPANY  
HOME OFFICE - CEDAR RAPIDS, IOWA  
CERTIFIED COPY OF POWER OF ATTORNEY

(Original on file at Home Office of Company - See Certification)

NOW ALL MEN BY THESE PRESENTS, That the UNITED FIRE & CASUALTY COMPANY, a corporation duly organized and existing under the laws of the State of Iowa, and having its principal office in Cedar Rapids, State of Iowa, does make, constitute and appoint MICHAEL D GILROY, OR DEBRA K. POLLINO, OR PAUL M SWANSON, OR RONALD E WOOD, ALL INDIVIDUALLY OF CINCINNATI OH

its true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature as follows: Any and All Bonds and to bind UNITED FIRE & CASUALTY COMPANY thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of UNITED FIRE & CASUALTY COMPANY and all the acts of said Attorney, pursuant to the authority hereby given are hereby ratified and confirmed.

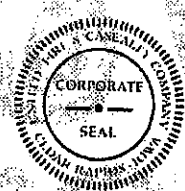
The Authority hereby granted is continuous and shall remain in full force and effect until revoked by UNITED FIRE & CASUALTY COMPANY.

This power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by Board of Directors of the Company on April 18, 1973:

"Article V - Surety Bonds and Undertakings"

Section 2, Appointment of Attorney-in-Fact. "The President or any Vice President, or any other officer of the Company may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Company in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed. Such attorneys-in fact, subject to the limitations set forth in their respective certificates of authority shall have full power to bind the Company by their signature and execution of any such instruments and to attach the seal of the Company thereto. The President or any Vice President, the Board of Directors or any other officer of the Company may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the UNITED FIRE & CASUALTY COMPANY has caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 8th day of April, 2008



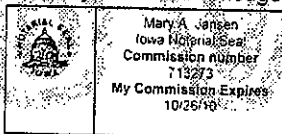
UNITED FIRE & CASUALTY COMPANY

By Dennis J. Richman  
Vice President

State of Iowa, County of Linn, ss:

On 8th day of April, 2008, before me personally came Dennis J. Richmann

to me known, who being by me duly sworn, did depose and say; that he resides in Cedar Rapids, State of Iowa; that he is a Vice President of the UNITED FIRE & CASUALTY COMPANY, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.



Mary A. Jensen  
Notary Public

I, the undersigned officer of the UNITED FIRE & CASUALTY COMPANY, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the by-laws of said Company as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID COMPANY, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.



In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Company this 15 day of August 20 08.

Dan A. Jones  
Secretary



**Feldkamp Enterprises Inc.**

3642 Muddy Creek  
Cincinnati, Ohio 45238

[513] 347-4500  
Fax [513] 347-4506  
www.FeldkampHVAC.com

**INCUMBENCY CERTIFICATE**

To: The Bank of New York Trust Company, N.A.  
Attn: Chris Pastura  
525 Vine St., Suite 900  
Cincinnati, Ohio 45202

Re: Cincinnati Public School District 2006 Retainage Escrow

In conjunction with accounts administered in your Corporate Trust department, I hereby certify that the following persons are authorized to give instructions and directions on behalf of the above referenced issue:

Chadd Feldkamp  
Name

*Chadd J. Feldkamp*  
Authorized Signature

513-347-4500  
Phone Number

Vice President  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Title

\_\_\_\_\_  
Name

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Phone Number

\_\_\_\_\_  
Title

I further certify that the signatures opposite the names of such authorized persons are their correct signatures and that I am authorized to make this certification.

5-21-08  
Date

*Patricia A. Huck*  
Certifying Signature

Accounting  
Corporate Title or Capacity

**MECHANICAL CONTRACTORS**  
**INDUSTRIAL AND COMMERCIAL SHEET METAL FABRICATORS**  
AN EQUAL EMPLOYMENT OPPORTUNITY COMPANY

EXHIBIT C  
COMPLETION NOTICE

Date: July 21, 2008

The Bank of New York Trust Company, N.A.  
Attn: Chris Pastura  
525 Vine St., Suite 900  
Cincinnati, Ohio 45202  
Fax: (513) 721-3240

Re: Retainage Escrow Agreement

In accordance with Section 4(a) of the Retainage Escrow Agreement, please accept this notice as instruction to release the following amount(s) held in escrow, plus accrued interest and/or other investment income earned on such amount(s):

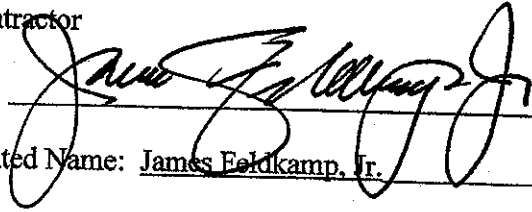
<u>Contractor Name, Address &amp; Tax ID Number</u>	<u>Contract Number</u>	<u>Amount to Release</u>
Feldkamp Enterprises, Inc. 3642 Muddy Creek Rd. Cincinnati, OH 45238 TID: 31-0868966	38-0192-033134-B135-X-509709	\$26,210.00

**This authorization does not constitute a waiver of any right of the Owner against the Contractor in the event of any omissions, defects or other problems with the work or material provided by the Contractor are subsequently discovered or determined to be more severe.**

Board of Education of the  
Cincinnati City School District, as Owner

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Contractor  
By:   
Printed Name: James Feldkamp, Jr.

# CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

AIA Document G706A

(Instructions on reverse side)

OWNER   
ARCHITECT   
CONTRACTOR   
SURETY   
OTHER

TO OWNER:

(Name and address)

Cincinnati Public Schools  
2315 Iowa Street  
Cincinnati, OH 45206

ARCHITECT'S PROJECT NO.:

CONTRACT FOR:

Mechanical

PROJECT:

(Name and address)

South Avondale Elementary  
636 Prospect Place  
Cincinnati, OH 45229

CONTRACT DATED:

9/13/2006

STATE OF:

Ohio

COUNTY OF:

Hamilton

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

## SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR:  
(Name and address)

Feldkamp Enterprises, Inc.  
3642 Muddy Creek  
Cincinnati, OH 45238

BY:

(Signature of authorized representative)

Chadd Feldkamp - Vice President

(Printed name and title)

Subscribed and sworn to before me on this day

Notary Public: *Brett Meyer*

1/20/2009

My Commission Expires:

11/18/2012



Brett Meyer  
Notary Public, State of Ohio  
My Commission Expires 11-18-2012



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# CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

AIA Document G706

(Instructions on reverse side)

OWNER	<input type="checkbox"/>
ARCHITECT	<input type="checkbox"/>
CONTRACTOR	<input type="checkbox"/>
SURETY	<input type="checkbox"/>
OTHER	<input type="checkbox"/>

TO OWNER:  
*(Name and address)*

Cincinnati Public Schools  
2315 Iowa Street  
Cincinnati, OH 45206

ARCHITECT'S PROJECT NO.:

CONTRACT FOR: Mechanical

PROJECT:  
*(Name and address)*

South Avondale Elementary  
636 Prospect Place  
Cincinnati, OH 45229

CONTRACT DATED: 9/13/2006

STATE OF: Ohio  
COUNTY OF: Hamilton

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

EXCEPTIONS:

### SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707, Consent of Surety, may be used for this purpose.

Indicate attachment:  yes  no

*The following supporting documents should be attached hereto if required by the Owner:*

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.
3. Contractor's Affidavit of Release of Liens (AIA Document G706A).

CONTRACTOR:  
*(Name and address)*

Feldkamp Enterprises, Inc.  
3642 Muddy Creek  
Cincinnati, OH 45238

BY:

*Chadd Feldkamp*  
*(Signature of authorized representative)*

Chadd Feldkamp - Vice President

*(Printed name and title)*

Subscribed and sworn to before me on this 1/20/2009

Notary Public:

*Brad Meyer*

My Commission Expires: 11/18/2012



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Notary Public, State of Ohio  
My Commission Expires 11-18-2012

**The Ohio School Facilities Commission**  
 10 West Broad Street  
 Suite 1400  
 Columbus, Ohio 43215

Contractor's Name: Feldkamp Enterprises, Inc.  
 Address: 3642 Muddy Creek Road, Cincinnati, Ohio 45238

**Contractor Pay Application Summary**

Project Name: South Avondale Elementary  
 Bid Package No.:

1	Original Contract Amount	\$ 1,629,000.00
2	Net Changes to Date	\$ 62,306.03
3	Current Contract Amount	\$ 1,691,306.03
4	Labor Completed to Date	\$ 684,806.03
5	Material Completed to Date	\$ 1,006,500.00
6	Total Work Completed to Date	\$ 1,691,306.03
7	Store Material to Date	\$ 0.00
8	Less Retained to Date	\$ 0.00
9	Total Amount Due	\$ 1,691,306.03
10	Less Previous Payments	\$ 1,665,096.03
11	Less Amount Retained to Cover Lien	\$ 0.00
12	Less Amount Retained for Liquidated Damages	\$ 0.00
13	Less Other Amounts Withheld	\$ 0.00
14	Current Due	\$ 26,210.00
15	Balance to Complete	\$ 0.00

**The Ohio School Facilities Commission approval required for the following contract adjustments:**

1. Assessment of liquidated damages
2. Other amounts withheld

The Ohio School Facilities Commission	Date _____
Comments:	

**Turner**  **TYS**  
Rebuilding Cincinnati Public Schools

January 29, 2009

Angie Tolle  
Cincinnati Public Schools  
2315 Iowa Avenue  
Cincinnati, OH 45206

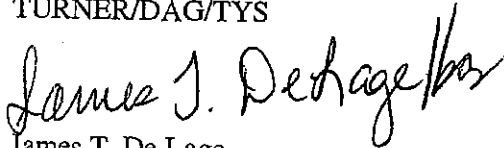
Dear Angie:

Attached are **Pay Applications** for the **South Avondale**, please **process for payment**.

Contractor	Application #	Monthly Billing	Total Billing To Date	Contract Amount to Date
BP#6 Feldkamp Enter.	#23	\$ 26,210.00	\$1,691,306.03	\$ 1,691,306.03

Please call if you have any questions.

Sincerely,  
TURNER/DAG/TYS



James T. De Lage  
Project Executive

/bcs

Attachments

cc: Bob Powell – ATA/Beilharz  
Todd Malpass – Turner/DAG/TYS  
File 0025 – 10960PO

T:PROJECTS/SEGMENT2/South Avondale/00250 Pay Application/2009-01-29 Feldkamp Pay App. Ltr. Doc