Project: PBA - Apartments Std Res Prepared By: Nick Evanoff



# PROPOSED ROOF TOP UNITS



# **Outdoor Unit Parameters**

Unit Model:	25HPB	
Unit Size:	1.5 Tons	
Voltage:	208/230-1-60	V-Ph-Hz

# **Outdoor Unit Dimensions and Weight**

Unit Length:		in
Unit Width:		
Unit Height:	35.0625	in
Unit Shinning Weight	213	lh

#### **Indoor Coil Parameters**

Unit Size: Cabinet Insulation	FV4C Size 002 (18 - 36,000 Btuh) n:Single-piece cabinet with 1-	in. super
Voltage: Refrigerant Type:		V-Ph-Hz

## **Indoor Coil Dimensions and Weight**

Unit Length:22.0625	in
Unit Width:	in
Unit Height: 42.6875	in
Unit Shipping Weight:135.	lb

#### **RESIDENTIAL APPLICATIONS**

This warranty is to the original purchasing owner and subsequent owners only to the extent and as stated in the Warranty Conditions and below. The limited warranty period in years, depending on the part and the claimant, is as shown in the table below.

Limited Warranty (Years)									
Item	Original Owner	Subsequent Owner							
Parts	10* (or 5)	5							
Compressor	10* (or 5)	5							

<sup>\*</sup>If properly registered within 90 days of original installation, otherwise 5 years (except in California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration). See Warranty Conditions below.

# OTHER APPLICATIONS

The warranty period is five (5) years on the compressor, and one (1) year on all other parts. The warranty is the original owner only and is not available for subsequent owners.

#### **Ordering Information**

Part Number	Description	Quantity
Outdoor Unit		
25HPB618A003	25HPB Carrier Comfort Heat Pump with Puron 1.5 Tons Cooling	1
	16 SEER @ ARI Conditions	
Indoor Coil		
FV4CNF002L00	FV4C Performance Series Fan Coil with Puron 2 Tons Cooling 208/230-1-60	1
	Single-piece cabinet with 1-in. super thick insulation	
	Aluminum	
Accessories		
KFCEH2401C05	5 kW Electric Heater with Circuit Breaker for Indoor Unit	
KFASP0101SPK	Single Point Wiring Kit for Indoor Unit	



PROPOSED
SURFACE MOUNT
LIGHT IN RECESSED
FRONT ENTRANCE.
BLACK FINISH.



#### Ceiling and wall luminaires

A series of low profile ceiling and wall luminaires with hand-blown, three-ply opal or white crystal glass. This family of luminaires can be utilized individually or in groups for glare-free illumination in interior or exterior spaces.

Aluminum housing · Crystal glass inside white or three-ply opal glass

LED color temperatures: 2700 K, 3000 K, 3500 K, 4000 K

BEGA luminaires offer a minimum service life of 60,000 hours, with suitable LED replacement modules guaranteed for up to 20 years after date of purchase. Further LED technical data including luminous flux, CRI, dimming and electrical characteristics are provided on the individual luminaire specification sheets, available at www.bega-us.com

All BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA Unidure<sup>®</sup> finish, a fluoropolymer technology, provides superior fade protection in Black, Bronze, and Silver. BEGA standard White, as well as optionally available RAL and custom colors, are a polyester powder.

NRTL listed to North American standards  $\cdot$  Suitable for wet locations Protection class IP 64

 Opal Glass

 LED
 A
 B

 33 680
 ADA
 14.2 W
 10 %
 2 %

 33 681
 ADA
 19.6 W
 12
 2 %

Ė į

 Crystal Glass · inside white

 LED
 A
 B

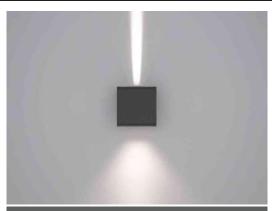
 33 682
 ADA
 14.2 W
 10 %
 2 %

 33 683
 ADA
 19.6 W
 12
 2 %

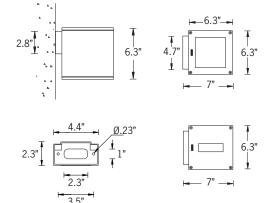
# **UMT-31396**

# Matrix 1 Surface





6/14w COB 1128 Lumens Down, 80 Lumens Up IP65 • Suitable For Wet Locations IK07 • Impact Resistant Weight 4.6 lbs



**Mounting Detail** 

PROPOSED SCONCE FIXTURE. BLACK FINISH, DOWNLIGHT ONLY.

#### Construction

Aluminum. Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

#### Pre paint

8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

#### Memory Retentive -Silicon Gasket

Memory Retentive -Silicon Gasket
Provided with special injection molded "fit for purpose" long life
high temperature memory retentive silicon gaskets. Maintains
the gaskets exact profile and seal over years of use and compression.

#### Thermal management

LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

<u>Surge Suppression</u> Standard 10kv surge suppressor provided with all fixtures.

# BUG Rating B1 - U3 - G0

# Finishing

All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

#### Inspired by Nature Finishes

The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

<u>The Coating Process</u>
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

#### Added Renefits

- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch Super durable (UV resistant)
- · TGIC free (non-toxic)

#### Hardware

Provided Hardware is Marine grade 316 Stainless steel.

#### **Anti Seize Screw Holes**

Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

#### Crystal Clear Low Iron Glass Lens

Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

#### Optics & LED

Precise optic design provides exceptional light control and precise distribution of light. LED CRI > 80

#### Lumen - Maintenance Life

L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Square surface wall-mounted architectural lighting range. Family of lighting effects sanctioning imagination and inspiration to reign in designs.

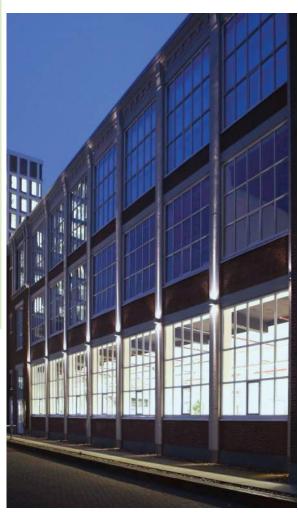
A small profile wall mounted compact cubic luminaire with up and downward light distributions. The Matrix is designed with five light distribution options, namely narrow, medium, wide, very wide and spike.

The Matrix uses high efficiency, long life LEDs and is designed to illuminate the wall and surfaces in front of the wall, as well as light accents on vertical and horizontal surfaces. The Matrix is suitable for indoor and outdoor applications.

This luminaire is available with decorative spikes and can be used with various combinations of light distribution optics.

This luminaire can be mounted at different angles to produce interesting decorative lighting effects on the side of the building facade.

The standard Matrix is designed to mount over a 3" octagonal j-box, a 4" j-box cover plate is available upon request.



# Matrix 1 Surface



PROJECT

QUANTITY

TYPE

NOTE

DATE

ORDERING EXAMPLE || UMT - 31396 - 6/14w - N - W30 - 02 - 120/277v - Options

UMT-31396

**BEAM** 

N - Narrow 20°

M - Medium 25°

**LAMP** 

6/14w COB

1128 Lumens Down

80 Lumens Up

LED COLOR

W27 - 2700K

W30 - 3000K

W - Wide 36° W35 - 3500K VW - Very Wide 74° W40 - 4000K FINISH COLOR

**VOLTAGE** 

01 - BLACK RAL 9011 120/277v

02 - DARK GREY RAL 7043 Other - Specify

03 - WHITE RAL 9003

04 - METALLIC SILVER RAL 9006

05 - MATTE SILVER RAL 9006 06 - LIGMAN BRONZE

07 - CUSTOM RAL

INSPIRED BY NATURE FINISHES

SW01 - OAK FINISH SW02 - WALNUT FINISH

SW03- PINE FINISH

SWUS- PINE FINISH

DF - DOUGLAS FIR FINISH
CW - CHERRY WOOD FINISH

CW CHERRY WOODTHASH

NW - NATIONAL WALNUT FINISH

SU01 - CONCRETE FINISH

SU02 - SOFTSCAPE FINISH SU03 - STONE FINISH

SU04 - CORTEN FINISH

THERE IS AN ADDITIONAL COST FOR THESE FINISHES

# **ADDITIONAL OPTIONS**

NAT - Natatorium Rated F - Frosted Lens

RD - Red Lens

4J - Mounting Plate for 4" Junction Box DIM - 0-10v Dimming

COLORED DICHROIC FILTERS

BL - Blue Lens

GR - Green Lens

AM - Amber Lens

[Specify Other Color]

# More Custom Finishes Available Upon Request







# **Matrix Product Family**



















• UMT-31398-19w-1247lm

• UMT-31407-10w-238lm



# WDGE2 LED

Architectural Wall Sconce Visual Comfort Optic











# Specifications

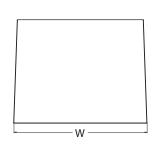
 Depth (D1):
 7 "

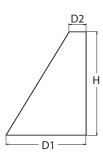
 Depth (D2):
 1.5 "

 Height:
 9 "

 Width:
 11.5 "

 Weight:
 (without options)





# Catalog Number

Notes

Туре

PROPOSED
EXTERIOR
WALLPACK FIXTURE
(ABOVE SERVICE
DOORS). BLACK
FINISH.

#### Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

# **WDGE LED Family Overview**

Luminaina	Ontire	Standard EM, 0°C	Cold EM20°C	Company			Approxima	ate Lumens (4000K, 80CRI)				
Luminaire	Optics	Standard EM, U C	COIO EIVI, -20 C	Sensor	P0	P1	P2	Р3	P4	P5	P6	
WDGE1 LED	Visual Comfort	4W			750	1,200	2,000					
WDGE2 LED	Visual Comfort	10W	18W	Standalone / nLight		1,200	2,000	3,000	4,500	6,000		
WDGE2 LED	Precision Refractive	10W	18W	Standalone / nLight	700	1,200	2,000	3,200	4,200			
WDGE3 LED	Precision Refractive	15W	18W	Standalone / nLight		7,500	8,500	10,000	12,000			
WDGE4 LED	Precision Refractive			Standalone / nLight		12,000	16,000	18,000	20,000	22,000	25,000	

# **Ordering Information**

#### **EXAMPLE:** WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package		Color Temperature		CRI	Distribution		Voltage	Mount	ing		
WDGE2 LED	P1 <sup>1</sup> P2 <sup>1</sup> P3 <sup>1</sup> P4 <sup>1</sup> P5 <sup>1</sup>	P1SW P2SW P3SW Door with small window (SW) is required to accommodate sensors. See page 2 for more details.	27K 30K 35K 40K 50K <sup>2</sup>	2700K 3000K 3500K 4000K 5000K	80CRI 90CRI	VF VW	Visual comfort forward throw Visual comfort wide	MVOLT 347 <sup>3</sup> 480 <sup>3</sup>	Shipp SRM ICW	ed included  Surface mounting bracket Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) <sup>7</sup>	Shipped AWS PBBW	d separately 3/8inch Architectural wall spacer S urface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.

Options				Finish	
E4WH	Emergency battery backup, Certified in CA Title 20 MAEDBS	Standalone S	ensors/Controls (only available with P1SW, P2SW & P3SW)	DDBXD	Dark bronze
E10WH	(4W, 0°C min) Emergency battery backup, Certified in CA Title 20 MAEDBS	PIR	Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.	DBLXD DNAXD	Black Natural aluminum
E20WC	(10W, 5°C min) Emergency battery backup, Certified in CA Title 20 MAEDBS	PIRH	Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching	DWHXD	White
	(18W, -20°C min)	PIR1FC3V	Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-	DSSXD DDBTXD	Sandstone Textured dark bronze
PE⁴ DS⁵	Photocell, Button Type  Dual switching (comes with 2 drivers and 2 light engines; see	PIRH1FC3V	programmed for dusk to dawn operation.  Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-	DBLBXD	Textured black
D1466	page 3 for details)		programmed for dusk to dawn operation.	DNATXD	Textured natural aluminum
DMG <sup>6</sup>	0–10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	Networked Se NLTAIR2 PIR	ensors/Controls (only available with P1SW, P2SW & P3SW)  nLightAIR Wireless enabled bi-level motion/ambient sensor for 8–15' mounting heights.	DWHGXD DSSTXD	Textured white Textured sandstone
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	NLTAIR2 PIRH	nLightAIR Wireless enabled bi-level motion/ambient sensor for 15-30' mounting heights.	DSSTAD	lextured surfusione
BAA	Buy America(n) Act Compliant	See page 4 for out	of box functionality		



COMMERCIAL OUTDOOR

#### Accessories

WDGEAWS DDBXD WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDGE2PBBW DDBXD U WDGE2 surface-mounted back box (specify finish)

#### NOTES

- 1 P1-P5 not available with sensors/controls. Sensors/controls only available with P1SW, P2SW and P3SW.
- 2 50K not available in 90CRI
- 3 347V and 480V not available with E4WH, E10WH, E20WC or DS.
- 4 PE not available in 480V or with sensors/controls
- 5 DS option not available with E4WH, E10WH, E20WC or sensors/controls.
- 6 DMG option not available with sensors/controls
- 7 Not qualified for DLC. Not available with emergency battery backup or sensors/controls





Power Packages: P1, P2, P3, P4, P5

Default configuration with no sensors/controls.



Small Window (SW) configuration

Power Packages: P1SW, P2SW, P3SW





J. ...

Power Packages: P1SW, P2SW, P3SW

# **Performance Data**

#### **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance	Performance System Diet Type			27K (2700K, 80 CRI)				30K (3000K, 80 CRI)			35K (3500K, 80 CRI)					40K (4000K, 80 CRI)				50K (5000K, 80 CRI)								
Package	Watts	Dist. Type	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	Lumens	LPW	В	U	G	
P1 / P1SW	10W	VF	1,166	119	0	0	0	1,209	123	0	0	0	1,251	128	0	0	0	1,256	128	0	0	0	1,254	128	0	0	0	
PI/PISW	1000	VW	1,197	122	0	0	0	1,241	126	0	0	0	1,284	131	0	0	0	1,289	131	0	0	0	1,286	131	0	0	0	
P2 / P2SW	15\\	VF	1,878	129	1	0	0	1,947	134	1	0	0	2,015	139	1	0	0	2,023	139	1	0	0	2,019	139	1	0	0	
PZ/PZ3W	15W	1510	VW	1,927	133	1	0	0	1,997	137	1	0	0	2,067	142	1	0	0	2,075	143	1	0	0	2,071	143	1	0	0
P3 / P3SW	23W	VF	2,908	129	1	0	0	3,015	134	1	0	0	3,119	138	1	0	0	3,132	139	1	0	0	3,126	139	1	0	0	
r3/r33W	2300	VW	2,983	132	1	0	0	3,093	137	1	0	0	3,200	142	1	0	0	3,213	143	1	0	0	3,206	142	1	0	0	
P4	35W	VF	4,096	117	1	0	1	4,247	121	1	0	1	4,394	126	1	0	1	4,412	126	1	0	1	4,403	126	1	0	1	
P4	33W	VW	4,202	120	1	0	0	4,357	125	1	0	1	4,508	129	1	0	1	4,526	129	1	0	1	4,517	129	1	0	1	
P5	48W	VF	5,567	115	1	0	1	5,772	119	1	0	1	5,972	123	1	0	1	5,996	124	1	0	1	5,984	124	1	0	1	
L.3	40 VV	VW	5,711	118	1	0	1	5,921	122	1	0	1	6,127	126	1	0	1	6,151	127	1	0	1	6,139	127	1	0	1	

#### **Electrical Load**

Performance	Custom Watts		Current (A)											
Package	System Watts	120V	208V	240V	277V	347V	480V							
P1 / P1SW	10W	0.082	0.049	0.043	0.038									
PI/PISW	13W					0.046	0.033							
P2 / P2SW	15W	0.132	0.081	0.072	0.064									
P2 / P23W	18W					0.056	0.041							
P3 / P3SW	23W	0.195	0.114	0.100	0.088									
F3 / F33W	26W					0.079	0.058							
P4	35W	0.302	0.175	0.152	0.134									
r4	38W					0.115	0.086							
P5	48W	0.434	0.241	0.211	0.184									
LO	52W					0.157	0.119							

COMMERCIAL OUTDOOR

## **Lumen Multiplier for 90CRI**

Multiplier
0.845
0.867
0.845
0.885
0.898

#### Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens		
E4WH	VF	646		
E4WH	VW	647		
F10W/II	VF	1,658		
E10WH	VW	1,701		
F20WC	VF	2,840		
E20WC	VW	2,913		

#### **Lumen Ambient Temperature (LAT) Multipliers**

Use these factors to determine relative lumen output for average ambient temperatures from 0-40  $^{\circ}$  C (32-104  $^{\circ}$  F).

Amb	pient	Lumen Multiplier		
0°C	32°F	1.03		
10°C	50°F	1.02		
20°C	68°F	1.01		
25°C	77°F	1.00		
30°C	86°F	0.99		
40°C	104°F	0.98		

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a  $25^{\circ}\text{C}$  ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91



# **Photometric Diagrams**

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.



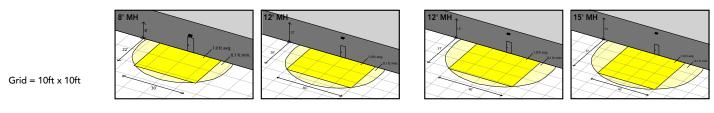
# **Emergency Egress Options**

# **Emergency Battery Backup**

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9

The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E10WH or E20WC and VF distribution.



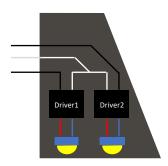
WDGE2 LED xx 40K 80CRI VF MVOLT E10WH

WDGE2 LED xx 40K 80CRI VF MVOLT E20WC

#### **Dual Switching (DS) Option**

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC - section 700.16, NFPA 101 Life Safety Code Section 7.9





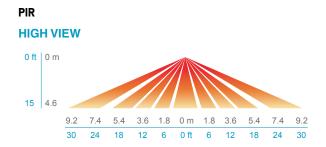
# **Control / Sensor Options**

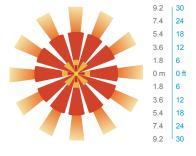
#### Motion/Ambient Sensor (PIR\_, PIRH\_)

Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

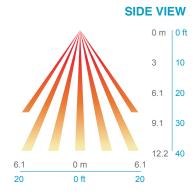
#### **Networked Control (NLTAIR2)**

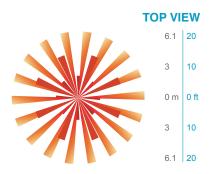
nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY<sup>TM</sup> Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.





#### **PIRH**





Option	Dim Level	High Level (when triggered	Photocell Operation	Motion Time Delay	Ramp-down Time	Ramp-up Time
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 1fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec



COMMERCIAL OUTDOOR

# **Mounting, Options & Accessories**



NLTAIR2 PIR - nLight AIR Motion/Ambient Sensor

D = 7"

H = 11"

W = 11.5"



AWS - 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"



PBBW – Surface-Mounted Back Box Use when there is no junction box available.

D = 1.75"

H = 9"

W = 11.5"

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

#### CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

#### **FINISH**

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

#### OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

#### **ELECTRICAL**

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

#### INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

#### LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

# BUY AMERICAN

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

#### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





# **HPNFC-HO**

PROPOSED SIGNAGE LIGHT EITHER FIXED MOUNTED OR MOUNTED ON 3" ARC ARM PENDING MOCK-UP. CUSTOM RAL COLOR TO MATCH RED/BROWN BRICK.

Shallow Profile Linear LED Strip Fixture

Project:











Blue



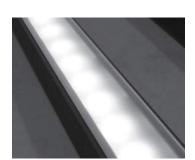


- · Compact, variable light fixture for dry, damp or wet location use.
- · Fixture comes in 6" increments (12" minimum)
- · Many options in optics, color temperature and accessories.
- · EMI Filter integral.
- · Boca Flasher's patented CleanDim® technology ensures even dimming from 0-100%.
- Fixtures are compatible with both forward and reverse phase dimming or can use Boca's SDS module for 0-10V DALI or DMX dimming.
- · Uses standard line voltage dimmers.
- · White or black finish standard.
- · Total linear foot per power feed: 8W = 80 ft., 10W = 65 ft.
- · Contact Boca Flasher for tips with custom installations.

#### **PRODUCT SPECIFICATIONS:**

	LED SPACING	COLOR OPTION	OPTIC	VOLTAGE	FINISH	LOCATION	MOUNTING	LENS	OPTIONS
HPNFC									
	HO8 5W/FT	2700K	10°	120V	<b>W</b> White	Interior-IP50	<b>F</b> Fixed	<b>C</b> Clear	SB Square Baffle
	HO8 8W/FT	3000K	30°	277V	<b>B</b> Black	<b>E</b> Exterior-IP65	<b>S</b> Swivel	<b>D</b> Diffused	<b>ASYM</b> Asymmetric Baffle
	HO8 10W/FT	3500K	60°			<b>W</b> Wet-IP68	<b>H</b> Hinge	SI Satin Ice	<b>SKB</b> Kicker Baffle
		4000K	10°x60°				<b>3Arc</b> 3" Arc Swivel	(Interior Use Only) <b>OW</b> Opal White	HL Hexcell Louver
		5000K	30°x60°				<b>6Arc</b> 6" Arc Swivel	(Exterior Use Only)	(Cannot be used with Satin Ice White or 120° optic)
		Amber	120°						
		Red							
		Green							

## LENS OPTIONS:



\*Additional charges apply.

## Diffused\*

- · Interior or exterior use.
- · 87% transmission.
- Lens is 1/8" (.09) thick, adds 1/16" to overall height of fixture. Call factory for more information.



\*Additional charges apply.

#### Satin Ice White\*

- · Interior use only.
- · Best for direct view use.
- · 42% transmission.
- · Lens is 1/4" (.25) thick, adds 1/8" to overall height of fixture. Call factory for more information.

# **HPNFC-HO**

Shallow Profile Linear LED Strip Fixture



#### **TECHNICAL SPECIFICATIONS:**

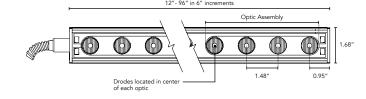
WATTAGE	5, 8 or 10 watts per linear ft.
INPUT VOLTAGE	90-120V or 230-277V
CONTROL	Leading Edge/Trailing Edge line dimmer 0-10V, DALI, DMX*
LED SPACING	1.5" on center
LENGTH	12"- 96", 6" increments
TOTAL HEIGHT	1.04" (not including clip)
TOTAL WIDTH	1.68"
COLOR OPTIONS	2700K,3000K, 3500K, 4000K, 5000K, amber, red, green, blue
MOUNTING	Fixed, swivel, 3" Arc or 6" Arc
AVAILABLE OPTICS	10°, 30°, 60°, 10° x 60°, 30° x 60°, 120°
RATING	IP50, IP65, IP68
COLOR RENDERING INDEX (CRI)	90 + CRI
POWER CABLE	UL Standard 6.5 ft.
Operating temperatur	re40°F-140°F Ambient(-40°C-60°C)**

<sup>\*\*</sup> Military spec available under special request-lead times may be impacted.

#### **DIMENSIONS:**

- · For vertical installation please contact the factory for specific mounting instructions.
- · For installations above 4' please contact the factory.

Plan View



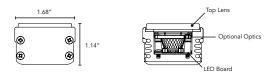
Elevation View



Hinge View



End View

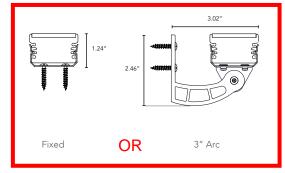


# MOUNTING INFORMATION:

**ENVIRONMENTAL** 

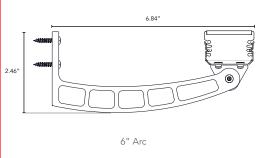
 $\cdot$  For vertical installation please contact the factory for specific mounting instructions.

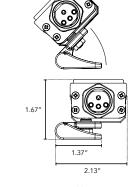




Storage temperature -40°F-140°F Ambient indoor fixtures

operation limited to =<50% relative humidity





Hinge

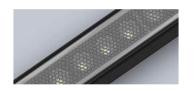
Boca Flasher, Inc. 508 South Military Trail, Deerfield Beach, Florida 33442 USA Phone: 561.989.5338 Fax: 561.982.8323 © 2017 Boca Flasher, Inc

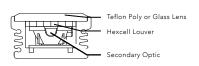
# **HPNFC-HO**

# Shallow Profile Linear LED Strip Fixture



#### **BODY CHOICES:**





#### Hexcell Louver

- · Economical solution to off axis glare issues.
- · Louver is located flush to secondary optic, preventing unwanted striation.
- $\cdot$  Louver cannot be utilized when no optic (120°) is specified.
- · Louver is behind lens to ensure no damage is done during installation or after. This also ensures no dust build-up.
- · Louver ships pre-fitted making on site fixture installation easy.
- · No unsightly clips, screws, or brackets.
- · Can be used with other baffles.
- · Adds nothing to overall height.
- · To specify add "HL" in options box.
  - \*Additional charges may apply.







SB - Square Baffle SSB - Sq. Slanted Baffle

SKB - Sq. Kicker Baffle

#### Baffle Square Design

- · Design cuts off light at 90°
- · Baffles are lightweight black PVC with non-reflective surfaces to avoid glare from interior sections.
- $\cdot$  One piece baffle slides onto the extruded housing making installation easy.
- · SB only adds .75" to overall height SSB adds .90" to overall height SKB adds 1.625" to overall height
- $\cdot$  To specify add "SB" or "SSB" for slanted version or "SKB" for kicker version in options box.

#### **LUMINAIRE INFORMATION:**

LUMENS PER LAMP -3500K 30X60	936 (1 lamp)
TOTAL LAMP LUMENS	936
LUMINAIRE LUMENS	936
TOTAL LUMINAIRE EFFECIENCY	100%
LUMEN EFFECACY RATING	94
TOTAL LUMINAIRE WATTS	10.02
BALLAST FACTOR	1.00
CIE TYPE	Direct
SPACING CRITERION (0-180)	0.58
SPACING CRITERION (90-270)	0.62
SPACING CRITERION (Diagonal)	0.60
BASIC LUMINOUS SHAPE	Rectangular
LUMINOUS LENGTH (0-180)	0.31m
LUMINOUS WIDTH (90-270)	0.04m
LUMINOUS HEIGHT	0.03m

- · Lo8 Data 10W for 6W use 0.65 multiplier
- · Specific Files Available On Request

630/631 634/635 PROPOSED METAL COILING DOOR REPLACEMENT. BLACK POWDERCOAT FINISH

# FIREKING<sup>®</sup>



# **ROLLING FIRE DOOR COLLECTION**



FIRE PROTECTION.
INNOVATIVE DESIGN.
OPTIMIZED PERFORMANCE.



INDUSTRY LEADING
COMMERCIAL & INDUSTRIAL SOLUTIONS



# Standard features at a glance

## Technical data

Application Exterior/Interior for fire rated walls
Operation Non-motorized, mechanical floor

Non-motorized, mechanical floor resettable hoist with viscous

governor

Mounting Face of wall (between jambs

optional on 630,631,635)

Models 630 – Standard fire door

631 – Basic fire door

634 - Fire door up to 24'x24'; 4

hour rating UL

635 – Insulated fire door

Drop speed Meets NFPA 80 requirements of

6" to 24" per second

Curtain

Finish

Material Steel slats in a variety of gauges

Baked-on polyester top coat in Gray,

Tan, White or Brown

Guides Three steel angles (some use

structural and some are roll formed)

Bottom bar Steel double angle

# Counterbalance system

Counterbalance High tensile helical torsion spring

housed in a steel tube or pipe

Brackets Steel plates to support

counterbalance, curtain and hood

**Limited warranty** 2-Year Limited;

3-Year/20,000 Cycles Limited on Overhead Door™ door and operator system (when purchased

together)

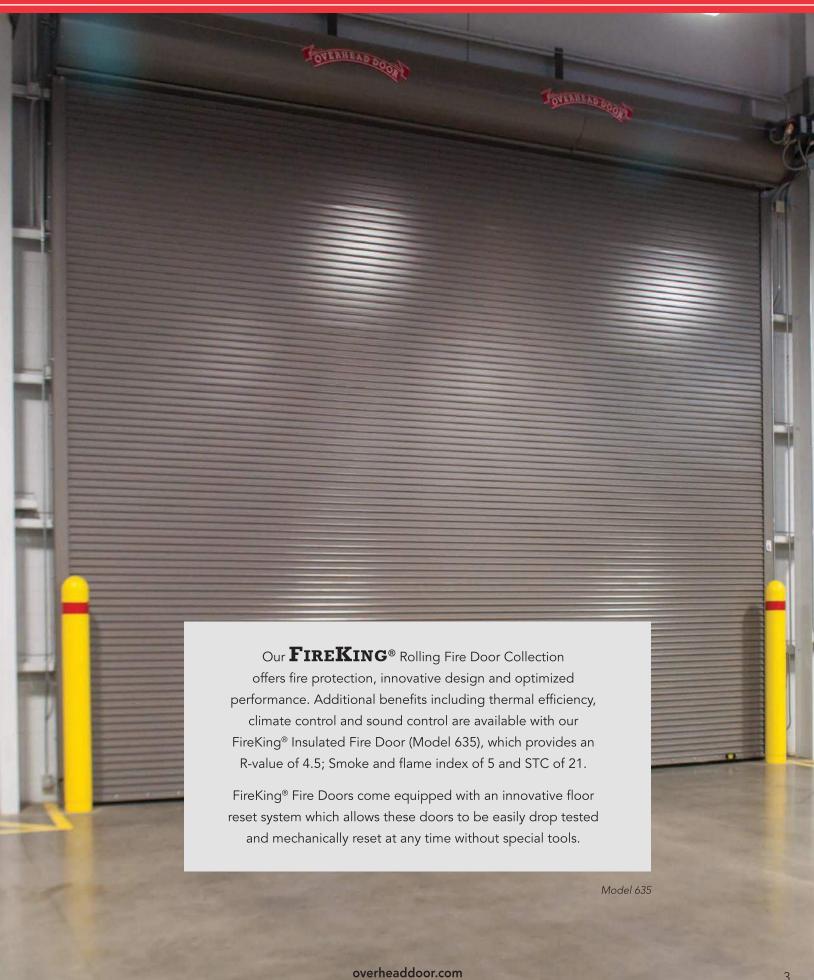
# **Options**

- Between jamb mount (630, 631, 635)
- Fire Sentinel® time-delay release device
- FireLite® vision lite (Flat and insulated slats only with a max of 4 per door)
- Smoke detectors and heat detectors
- UL-listed brush-type smoke seals "S" label (flat or insulated slats only)
- Flame baffle system an FM requirement
- UL, ULC and FM labels available
- Horns and horns with strobes
- Tension release: push-up or crank, electric motor: RHX® or RSX®
- Non-tension hoist or electric motor: RSX® FDO or RHX® FK
- Stainless or galvanized steel: curtain, hood, guides, bottom bar
- Slide bolts, cylinder locks, interlocks
- Wind load options to include: Florida Building Code (FBC), Miami-Dade, Texas Department of Insurance (TDI)
- PowderGuard® Premium powder coat in approximately 200 RAL standard colors or colormatched to specification
- PowderGuard® Zinc and PowderGuard® Textured finishes

Cover image: Model 630 with C187 slats, Gray powder coat finish

Image above: Model 630 with C187 slats





# Fire door selection chart

Series	630	631	634	635
Label				
UL/ULC/FM 1½ or 3 hr	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)		Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)
UL 4 hr	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm) FM 4 hour is an option	Up to 13'6" (4,115 mm) width/height, max. 152 sf (14.121 sm)
UL oversized door	Over 152 sf (14.121 sm)	Over 152 sf (14.121 sm)	Over 152 sf (14.121 sm)	Over 152 sf (14,121 sm)
FM (optional) oversized door	Over 152 sf (14.121 sm), but less than 18' (5,486 mm) height or width. Over 18' must be certified by FM*		Over 152 sf (14.121 sm), but less than 18' (5,486 mm) height or width. Over 18' must be certified by FM*	Over 152 sf (14.121 sm), but less than 18' (5,486 mm high)*
Applications				
Masonry/steel	•	•	•	•
Non-masonry	•	•		•
Standard				
Maximum width	41'2" (12,548 mm)	14' (4,267 mm)	41'2" (12,548 mm)	24' (7,351 mm)
Maximum height	25'4" (7,722 mm)	12' (3,658 mm)	25'4" (7,722 mm)	24' (7,351 mm)
Curtain material	Painted galvanized steel/stainless steel	Painted galvanized steel	Painted galvanized steel/stainless steel	Painted galvanized steel/stainless steel
R-value**				4.5
Sound transmission class				21 STC <sup>†</sup>
Finish color	Gray/Tan/White/Brown	Gray/Tan/White/Brown	Gray/Tan/White/Brown	Gray/Tan/White/Brown
Available Options				
Fire Sentinel® time-delay release device	•	•	•	•
Smoke detectors	•	•	•	•
FireLite® vision lites	•	•	•	•
UL listed brush-type smoke seals	•	•	•	•
Windload (FBC, TDI, MiamiDade)	•		•	•
Operation options				
Push-up	Up to 80 sf (7.43 sm)	Up to 80 sf (7.43 sm)	Up to 80 sf (7.43 sm)	
Chain hoist	•	•	•	•
Crank	•	•	•	•
Electric motor	•	•	•	•
Locking option				
Slide locks or cylinder locking bottom bar w/mortise cylinder	•	•	•	•
Finish options				
Approximately 200 powder coat premium colors	•	•	•	•

<sup>\*</sup> FM reviews designs for openings over 18' (5,486 mm) wide Information is subject to change. Please call your local Overhead Door™ Distributor for special applications or if your application is not listed. All 635 Series doors are chain hoist minimum.

 $<sup>\</sup>hbox{$^{\star\star}$ R-value: Overhead Door Corporation uses a calculated door section R-value for our insulated doors.}$ 

<sup>&</sup>lt;sup>†</sup> Sound transmission classification.



# Slat data

# C-187 slat F-265 slat C-275 slat F-265i slat F-265i slat 17/8" 2 5/8" 2 5/8" 7/8" 7/8" 7/8"

#### 630 Face-of-wall mounted (between jambs optional) Slat Opening width Standard Optional Thru 14'0" (4,267 mm) 22 ga. steel 20 ga. steel or 22 ga. ss C-187 Thru 20'0" (6,096 mm) 20 ga. steel 18 ga. steel or 20 ga. ss Thru 14'0" (4,267 mm) 22, 20, 18, 16 ga. steel or 22, 20 ga. ss C-275 Thru 20'0" (6,096 mm) 20, 18, 16 ga. steel or 20 ga. ss Thru 41'2" (12,548 mm) 18, 16 ga. steel Thru 14'0" (4,267 mm) 22, 20 ga. steel or 22 ga. ss F-265 Thru 20'0" (6,096 mm) 20, 18 ga. steel or 20 ga. ss Thru 41'2" (12,548 mm) 18 ga. steel

6	631 Face-of-wall mounted (between jambs optional)					
Slat	Opening width	Standard	Optional			
C-187	Thru 14'0" (4,267 mm)	24 ga. steel				
F265	Thru 14'0" (4,267 mm)		24 ga. steel			

634 Face-of-wall mounted							
Opening width	Standard	Optional					
Thru 20'0" (6,096 mm)	20 ga. steel	18 ga. steel or 20 ga. ss					
Thru 20'0" (6,096 mm)		20, 18 ga. steel or 20 ga. ss					
Thru 41'2" (12,548 mm)		18, 16 ga. steel					
Thru 20'0" (6,096 mm)		20, 18 ga. steel or 20 ga. ss					
Thru 41'2" (12,548 mm)		18 ga. steel					
	Opening width Thru 20'0" (6,096 mm) Thru 20'0" (6,096 mm) Thru 41'2" (12,548 mm) Thru 20'0" (6,096 mm)	Opening width         Standard           Thru 20'0" (6,096 mm)         20 ga. steel           Thru 20'0" (6,096 mm)         Thru 41'2" (12,548 mm)           Thru 20'0" (6,096 mm)         Thru 20'0" (6,096 mm)					

635 F	635 Face-of-wall mounted (between jambs optional)							
Slat	Slat Opening width Standard							
F265 with back cover	Thru 24'0" (7,315 mm)	24 ga. steel front 24 ga. steel back	22 ga. steel front 24 ga. steel back; 22 ga.ss front 24 ga. ss back;					

Slats are galvanized and painted or stainless steel (ss). Note: Maximum wall opening height for 22 ga. is 12'0" (3658 mm).

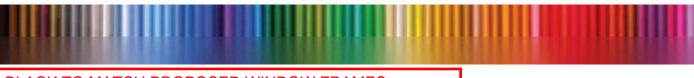
# Maximum insulation

The mineral wool insulation material used in FireKing® insulated fire doors is compressed within the steel slat, completely and uniformly filling the slat for maximum insulation. Overhead Door™ products provide consistent quality in design and performance.

# Color options



PowderGuard® Premium powder coat paint finish is available in approximately 200 RAL colors, or may be color matched to architect's specifications to best complement the look of the facility. PowderGuard® Zinc and PowderGuard® Textured finishes are also available.



BLACK TO MATCH PROPOSED WINDOW FRAMES

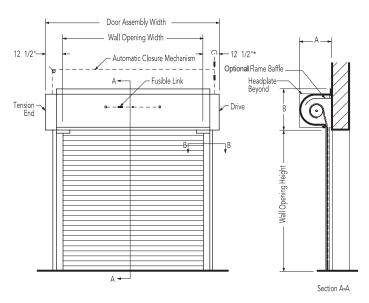
# Door clearance elevations

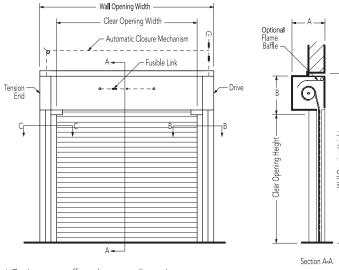
Operation: crank, chain hoist, electric

Chain hoist has only one sash chain located on drive side.

# Face-of-wall mounted

# Between jambs mounted





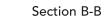
\* Options may effect clearance dimensions.

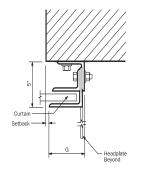
For more detailed information, consult your local Overhead Door™ Distributor.

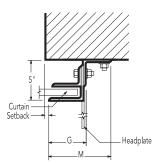
# Angle guide

# Face-of-wall mounted E guide | Z guide

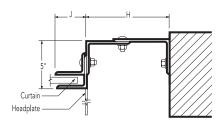
# Between jambs mounted





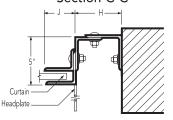


Drive Side - Electric, Chain or Crank Section B-B



Whenever expansion mounting bolts are used maintain a minimum of 6 bolt diameters from edge of wall.

Tension side & push-up drive side Section C-C



Whenever expansion mounting bolts are used maintain a minimum of 6 bolt diameters from edge of wall.

<sup>\*</sup> Add 7" for crank operation.



# Electric operators

Our broad line of electric operators suits new construction and retrofit applications, as well as unusual or special requirements. In order to improve safety and enhance door and motor life, industry quality assurance guidelines recommend the choice of a single manufacturer for both door and operator applications. Overhead Door® commercial operators are UL 325 2010 compliant.

# Model RHX® FK

Model RHX® FK is a heavy duty motor featuring industrial gearbox in oil bath design. It offers unique features like LimitLock™, dual frequency radio system and 16 digit menu setup. Combined with FireKing® fire doors this system offers a unique floor resettable feature as well as providing for easy drop test and reset of fire door within seconds.



## Model RSX® FDO

Model RHX® FDO is a standard duty motor specifically for fire door operation. While similar to RSX, this model has additional features including: floor level auto reset and timed delay of door drop upon alarm activation, automatic door open upon alarm reset, battery back-up and mechanical braking system.



#### Model RHX®

Model RHX® is a heavy duty commercial operator designed to operate doors up to 24' (7,315 mm) in height and 3696 pounds (1676 kg). Available as either a trolley, sidemount or centermount.



# Model RSX®

Model RSX® is a standard duty commercial operator designed to operate doors up to 24' (7,315 mm) in height and 1620 pounds (735 kg). It offers unique features like LimitLock®, SuperBelt™ and 16 digit menu setup.







	Electric operator selection guide									
	Horsepower	Max. area of door*	Super Belt"	Worm gear	Adjustable clutch	Totally enclosed	Continous duty	Explosion proof	Mounting type	
RHX <sup>®</sup> FK	1/2 HP, 3/4 HP, 1 HP, 3 HP	400 sq ft (37.161 sm)		•	•	•	•	•	F	
RSX <sup>®</sup> FDO	1/2 HP, 3/4 HP 1 HP	400 sq ft (37,161 sm)	•		•	•	•		F, T	
RHX*	1/2 HP, 3/4 HP, 1 HP	480 sq ft (44.593 sm)		•	•	•	•	•	F, T, W	
RSX <sup>®</sup>	1/2 HP, 3/4 HP 1 HP	168 sq ft (15.608 sm)			•	•	•		F, T, W	

W= Wall mount T= Top of hood F=Front of hood

# Safety recommendations

We strongly recommend the use of interlock switches and an electric safety edge for all electrically operated rolling service doors. If a sensing edge or other reversing device is not installed, a constantcontact control switch must be used to close the door. We recommend a self-mounting, four-wire, fail-safe electric sensing device as defined by UL 325 2010. Contact your Overhead Door™ Distributor for more information.

With the optional selection of a commercial operator for the Fire Door system the floor resettable chain hoist is not available.

The automatic closing of the door must be tested at the time the door is installed, and the door shall be inspected and tested NFP not less than annually as required by NFPA 80. This requirement applies to all fire doors - even those that are not used and remain in the closed position. The doors must be checked regularly for conditions that may affect the operation of the door.

Based on slat profile, gauge steel and overall weight of door. Contact Distributor for appropriate motor selection.





# **Architect's Corner**

A resource for architects, containing comprehensive technical and resource materials to support your project, including drawings and specifications for commercial doors.

www.overheaddoor.com

# The original, innovative choice for unequalled quality and service.

Overhead Door Corporation pioneered the upward-acting door industry, inventing the first sectional garage door in 1921 and the first electric door operator in 1926. Today, we continue to be the industry leader through the strength of our product innovation, superior craftsmanship and outstanding customer support, underscoring a legacy of quality, expertise and integrity. That's why design and construction professionals specify Overhead Door™ products more often than any other brand. Our family of over 400 Overhead Door™ Distributors across the U.S. and Canada not only share our name and logo, but also our commitment to excellence.















INDUSTRY LEADING **COMMERCIAL & INDUSTRIAL SOLUTIONS** 

2501 S. State Hwy. 121 Bus., Suite 200, Lewisville, TX 75067 1-800-929-DOOR • sales@overheaddoor.com overheaddoor.com