

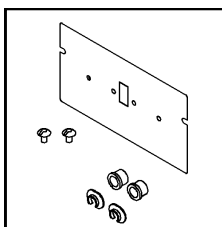
System Overview

These instructions review how to install Chopstick LED wall mount fixtures. Chopstick 4ft, 6ft, & 8ft modules can be installed as individual standalone units, or they can be joined together to create continuous rows. The graphic below shows the components required to install a typical row of Chopstick LED wall mount fixtures.

Chopstick mounting kit(s)*

- Rail bracket
- Wall bracket
- #8-32 screws (x2)

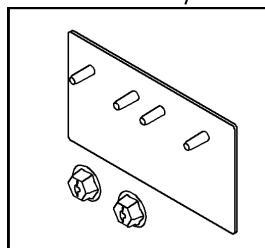
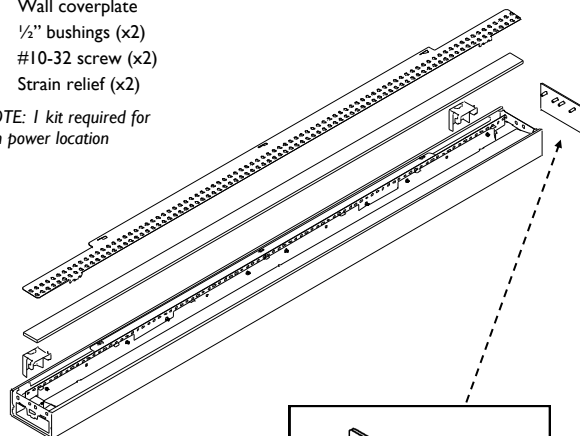
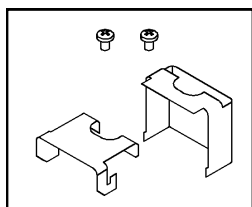
*NOTE: 2 kits required for each 4ft and/or 6ft row. 3 kits required for each 8ft row.



Chopstick power kit(s)*

- Wall coverplate
- 1/2" bushings (x2)
- #10-32 screw (x2)
- Strain relief (x2)

*NOTE: 1 kit required for each power location



Chopstick end kit(s)*

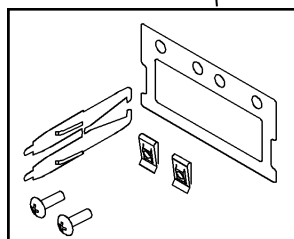
- Endcap
- 11/32" self-threading nuts (x2)

*Note: 2 kits required for row (one for each end).

Chopstick joint kit(s)*

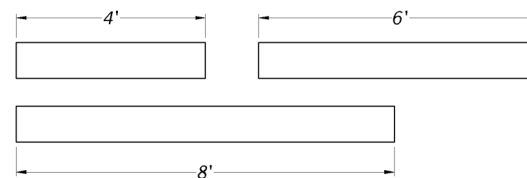
- Gasket
- Break apart joiner aligner
- #10-32 screws (x2)
- #10 spring nut (x2)

*NOTE: 1 kit required for each joint



Module Lengths

Chopstick LED wall mount systems come in 4ft, 6ft, and 8ft modules. Overall module lengths are shown below. Module lengths do not include endcaps.



Endcaps

Add two endcaps to the length of each row.



Mount Spacing

- Mounts variable within 2" – 5" to end of joint. On 8ft module, additional mount to be located within 2"- 5" of fixture centerline.
- Side-mounted 2"x4" J-box (supplied by others)

Row Configurations

The table below indicates how 4ft, 6ft, & 8ft modules can be combined to create continuous rows of various lengths.

Nominal row length	4'	6'	8'
4'	1x		
6'		1x	
8'			1x
10'	1x	1x	
12'	1x		1x
14'		1x	1x
16'			2x
18'	1x	1x	1x
20'	1x		2x

! ATTENTION: Install in accordance with national and local building and electrical codes.

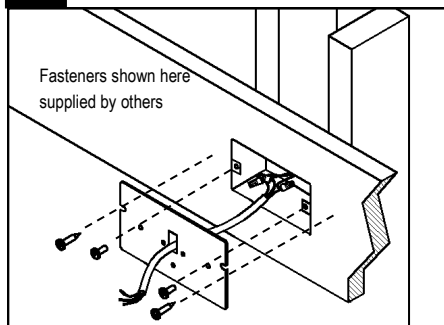
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IMPORTANT: All mount brackets must be secured to wall structure (e.g studs or cross-braces).

1

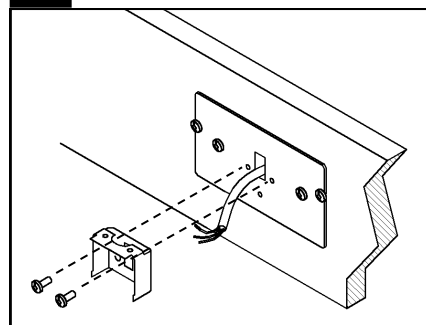
Install J-box and J-box cover



Determine power feed location and install 2"x4" J-box (supplied by others) parallel with the fixture. Complete connections at J-box **with supplied power cord**. On supplied J-box cover plate, feed power cord through rectangular hole. Secure cover to wall and J-box using applicable hardware (supplied by others).

2

Install wall bracket at power locations

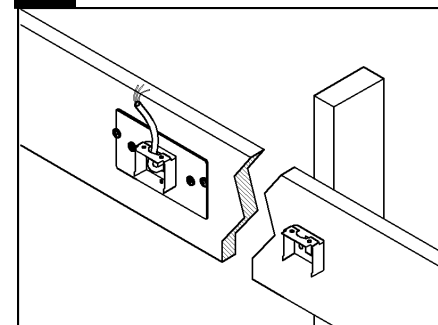


RECOMMENDED: Feed power cord through top of wall bracket and attach to J-box cover with 2 screws (supplied). Leave power cord outside wall for connection.

ALTERNATE: Install wall bracket within 2-5" from fixture end, as close as possible to power supply. Secure bracket to wall structure.

3

Install wall bracket at non-power locations



Install additional wall brackets as required for single fixture or continuous rows. Ensure additional brackets are level with first bracket.

IMPORTANT: Attach wall brackets to wall structure within 2-5" from ends of fixture.

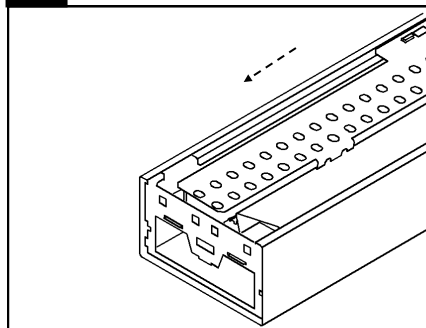
For 8ft fixture: Attach an additional bracket within 2-5" from the centerline of the 8ft fixture

4

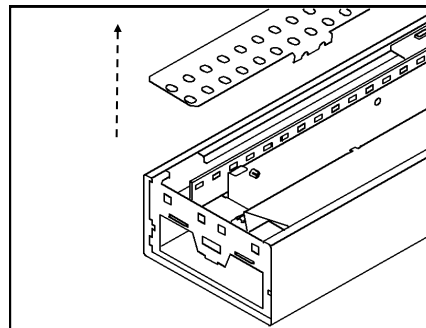
Arrange boxed fixtures on floor in specified mounting locations, remove fixtures from boxes.

NOTE: If conditions are dusty/dirty, recommended practice is to leave fixtures in their plastic bag. Cut small holes in bag as needed to complete the following installation sequence, and then completely remove the bag from the fixture when conditions are clean.

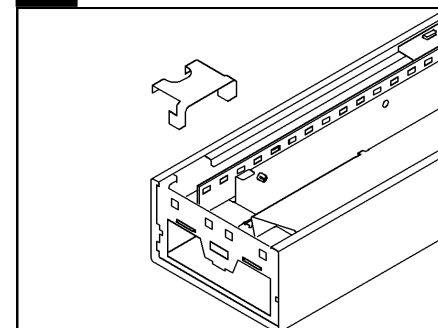
5



Remove TOP REFLECTOR by sliding to one side then lifting off.



6



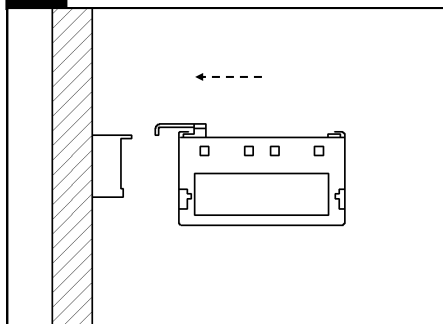
Install required number of rail brackets, per steps 2-3, on the housing. Slide along the length of housing to approximate location matching the brackets on the wall.

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ATTENTION: Install in accordance with national and local building and electrical codes.

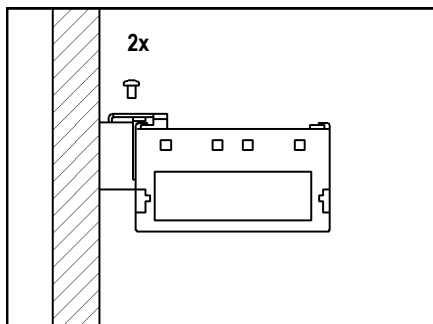
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7 Raise fixture and engage on wall brackets



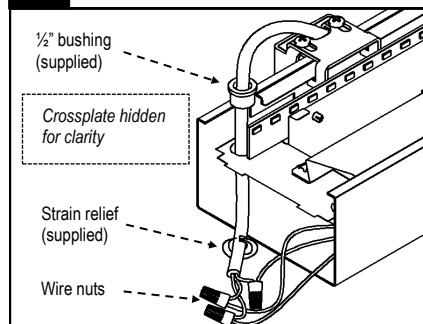
With 2 people, raise fixture into position and engage it on hooks located on top of wall brackets. Secure bracket using supplied hardware.

POWER LOCATIONS: Feed installed power cord through the access slot at the top of the rail bracket.



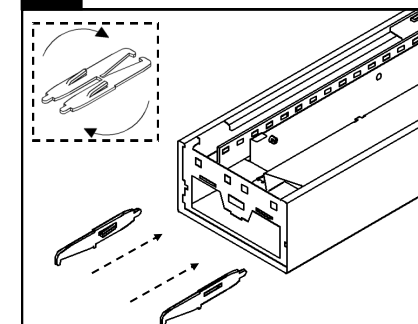
Level fixture prior to final tightening of hardware.

8 Complete electrical connections



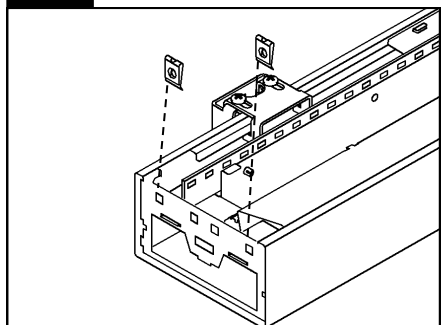
POWER LOCATIONS: Break required 1/2" round knockout(s) in wire cover. Insert supplied bushing into 1/2" round hole. Feed power cable through 1/2" bushing and into wire cavity. Apply supplied strain relief to power cord. Remove installed quick wire connectors (if applicable) and complete electrical connections using wire nuts (supplied by others). Tuck wires into wire cavity.

9 Install in-row joiner aligners

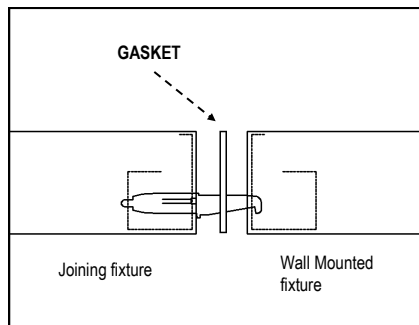


For each additional fixture in the row, at the end where it will join to the existing wall mounted fixture, insert joiner aligners into the crossplate (aligners will lock into place).

10 Install and join additional fixture to create row



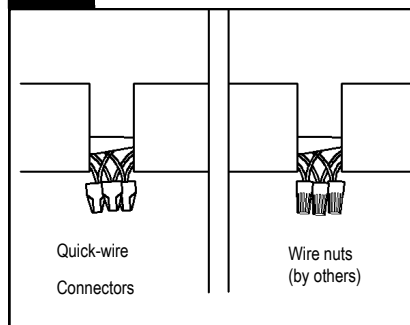
Slide spring clips onto existing wall mounted fixture.



With two people, raise second fixture to wall. At joint, insert joiner aligners through black **GASKET** and into wall mounted fixture. At other end of joining fixture, install wall bracket as in step 7.

IMPORTANT: Do not attempt to join fixtures on floor. Correct method is to hang one fixture at a time and join fixtures at ceiling level.

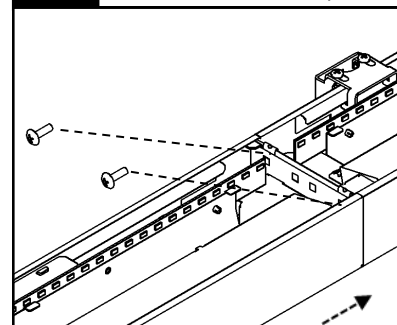
11 Complete electrical connections at joint



NON-POWER LOCATIONS: Use supplied quick-wire connectors. Tuck wires into wire cavity.

POWER LOCATIONS: Remove installed quick-wire connectors and complete electrical connections using wire nuts (supplied by others). Tuck wires into wiring cavity.

12 Secure fixtures at joint

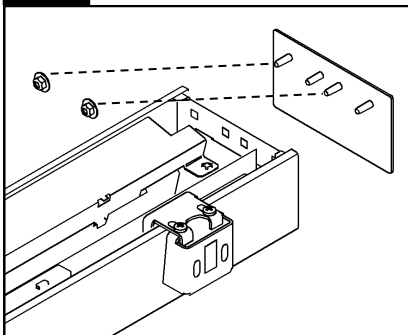


Slide second fixture flush against first fixture. Secure joint using supplied hardware. Secure and level fixture to wall bracket as in step 7. For additional fixtures, repeat steps 9-12.

! ATTENTION: Install in accordance with national and local building and electrical codes.

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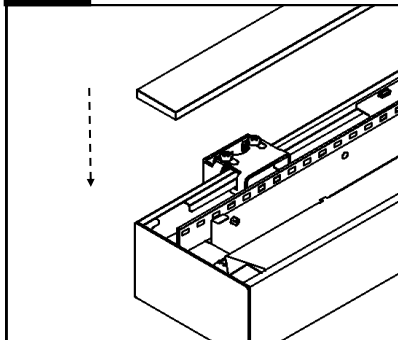
13 Install endcaps



Attach endcap to first and last module in each row using supplied hardware. Use the two endcap studs shown in above image.

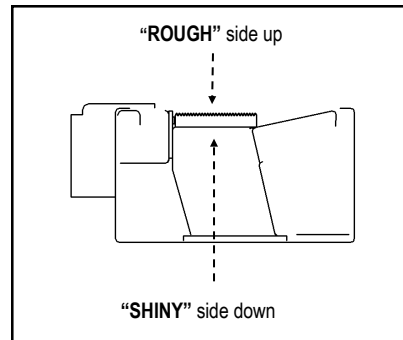
IMPORTANT: Do not over-tighten endcap hardware. Tighten by hand. When nut is flush with crossplate, turn additional 1/8 – 1/4 turn.

14 Install LIGHTGUIDE PANEL

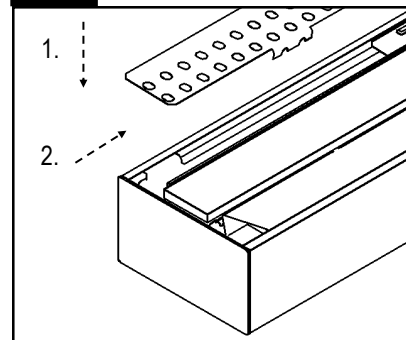


Locate LIGHTGUIDE panel in fixture box, peel protective layer from both sides of panel, and install **SHINY SIDE DOWN** in fixture as shown.

IMPORTANT: INSTALL SHINY SIDE DOWN



15 Re-Install top reflector



1. Re-install top reflector from step 5.

2. Shift into place.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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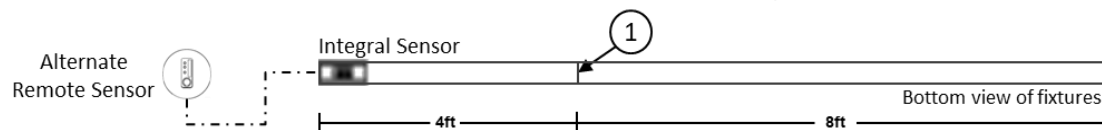
Sensor in Rows

Single Sensor Controlling Whole Row

1. Purple & brown (or purple & grey/pink) control wires **MUST** be connected between fixtures.

Note :

- A maximum of 8 drivers can be wired to 8 sensors; confirm fixture driver count with factory.



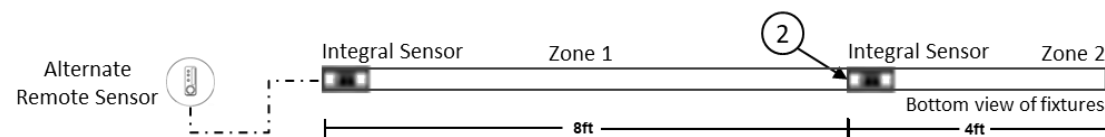
Multiple Sensors Controlling Separates Zones in a Row

2. Purple & brown (or purple & grey/pink) control wires **MUST NOT** be connected between zones.

Notes :

- A maximum of 8 drivers can be wired to one sensor; confirm fixture driver count with factory.

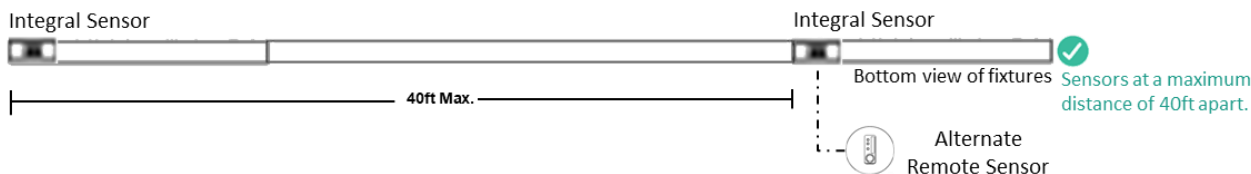
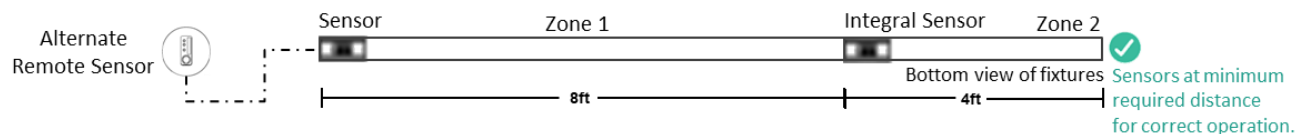
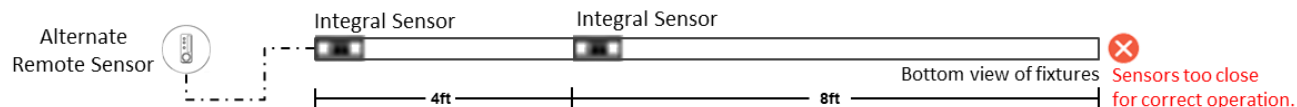
- Only one sensor is allowed on a wired zone. (Sensors can be paired together wirelessly via a mobile app).



Sensor Spacing

- For correct operation, sensor should be placed a minimum distance of 8ft apart.

- Wireless sensor should be placed no further than 40ft apart for good wireless signal connection.



Important Consideration When Using Sensor in a Row

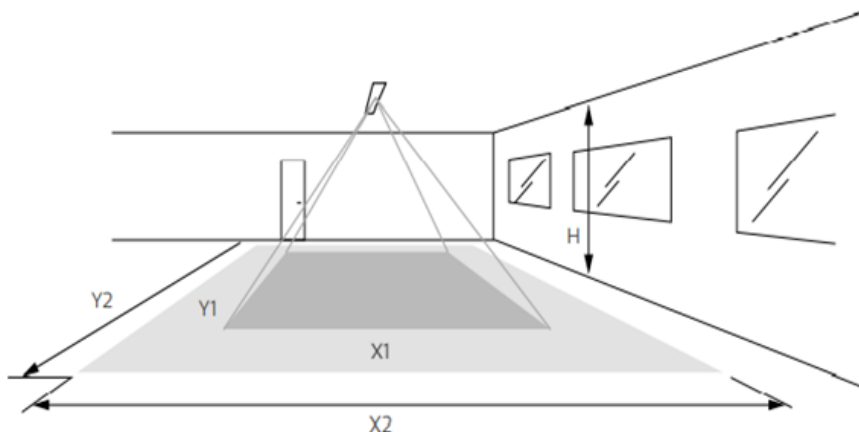
- For fixtures with wireless sensors (CS, SB or RA options): **DO NOT** connect fixture purple and brown (or purple & grey/pink) control wires to an external dimming switch. Fixture mains wiring should not be connected to a circuit with an external on/off switch.
- For best aesthetic condition, place sensors at ends of row only so as not to break the continuous lens.
- For better occupancy coverage in longer rows, sensors may be placed mid run, but keep in mind this will break the continuous lens into discrete sections. Alternatively, remote sensors may be used, note the same wiring rules will apply.

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Occupancy Sensor Coverage:

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of the luminaire.

**Daylight Sensor**

The light sensor measures the total amount of light in a circular field of approximately 80% of the PIR detection area. The following aspects should be observed during installation:

- Minimum distance from the window $\geq 2\text{ ft}$ (0.6m).
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car hood) as this will lead to incorrect light regulation.

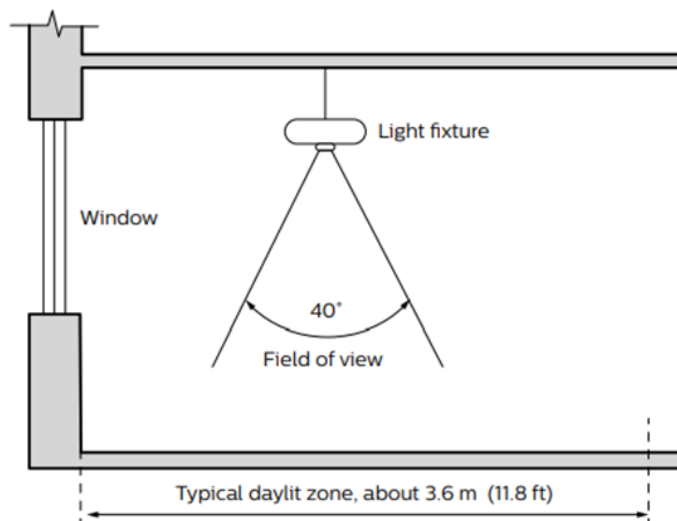
As a guideline the formula $0.72 \times H$ can be used to calculate the minimum distance between the window and sensor whereby H is the height from the bottom of the window to the sensor.



Height	Minor movement		Major movement	
h	X1	Y1	X2	Y2
2.4 m (7.9 ft)	1.9 m (6.2 ft)	2.9 m (9.5 ft)	2.9 m (9.5 ft)	4.3 m (14.1 ft)
3 m (9.8 ft)	2.4 m (7.9 ft)	3.6 m (11.8 ft)	3.6 m (11.8 ft)	5.4 m (17.7 ft)

The detection area for the movement sensor can be roughly divided into two parts;

- Minor movements (person moving $\leq 3\text{ ft/s}$ or 0.9 m/s).
- Major movements (person moving $\geq 3\text{ ft/s}$ or 0.9 m/s).

Photosensor spatial response

ATTENTION: Install in accordance with national and local building and electrical codes.

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