

Surface LED Downlight Luminaire
SLD Series

HALO

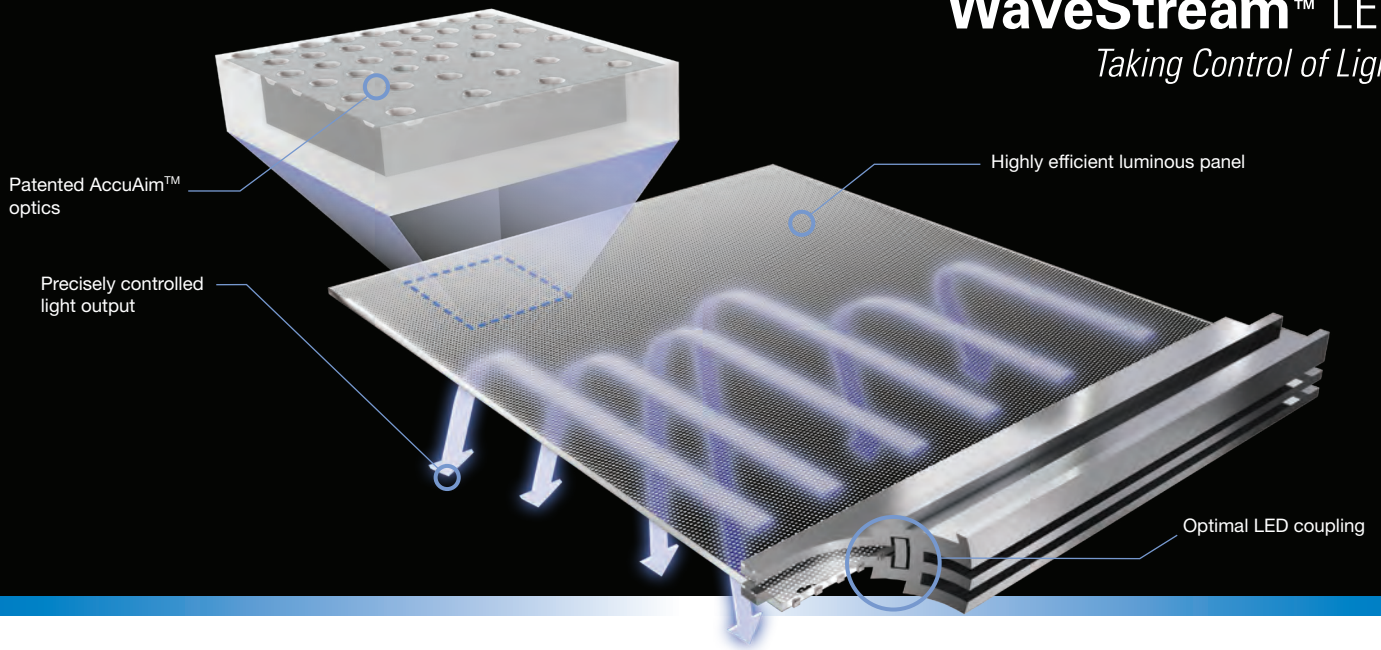


Cooper Lighting

by **FAT•N**

WaveStream™ LED

Taking Control of Light.



Design Freedom
Optical Control
Energy Efficiency
Brightness Control
Mainstream Value

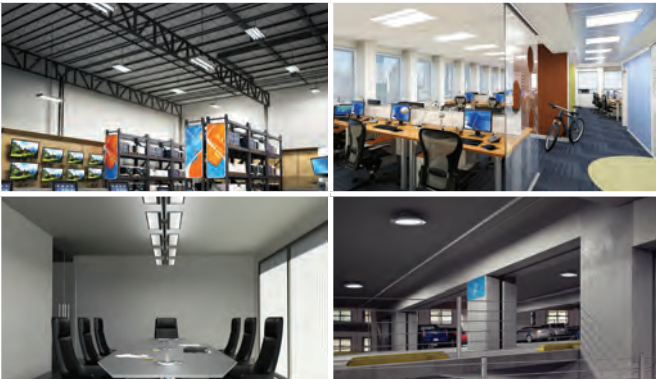
The Breakthrough You've Been Waiting For

WaveStream™ LED technology presents a new paradigm that will take LEDs mainstream in a way that hasn't been possible before — transforming the LED point source into a highly efficient and elegant luminous plane. It's a groundbreaking technology that delivers unparalleled design freedom, maximum energy efficiency and unrivaled optical and brightness control.

The Science Behind the Beauty

A patented optical coupling process maximizes the amount of light injected into the WaveStream panel, dramatically improving luminaire efficiency. Laser-precise, patented AccuAim™ optics arranged in exacting patterns provide unparalleled brightness control while delivering optimal distributions tailored to each fixture and application.

WaveStream is the first lighting technology designed and optimized exclusively for LEDs — with form and function that allows mainstream adoption like never before. Once you factor in all the ways you can build and customize WaveStream lighting solutions, over 500,000 configurations are available to address nearly every major lighting application.





SLD Series

Surface LED Downlight Luminaire

Halo **SLD Series** Surface LED Downlight luminaires incorporate WaveStream™ LED technology to create an ultra-low profile, surface-mounting luminaire with the performance and look of traditional downlights. The SLD Series 4" and 6" luminaires are designed for installation in many standard and fire-rated 4" x 2-1/8" deep junction boxes, and may be retrofit in 4", 5", or 6" aperture IC and Non-IC recessed housings. A dedicated LED wiring connector meets high-efficacy code requirements in recessed downlight housings and prevents substitution of lower efficacy sources. Perfect for residential or commercial installations and ideal for closets, storage areas, attics and basements. For closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5). The SLD Series offers unparalleled design freedom with mainstream value.



SLD Series

The LED Surface
Downlight Luminaire

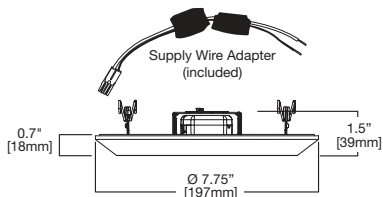
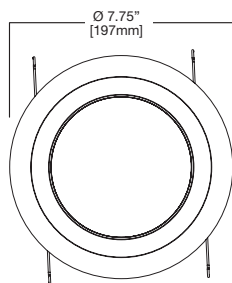
LASTS **22**^{*}
YEARS



SLD6
6" LED Surface Downlight Luminaire



SLD4
4" LED Surface Downlight Luminaire



SLD6 ENERGY DATA

	80 CRI	90 CRI
Lumens	675	675
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.15 A	0.15 A
Input Power	12.5 W	12.9 W
Efficiency	54 lm/W	52 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	≤ 22 dba	

OVER \$400^{}
SAVINGS**

* Based on average six hours use per day.

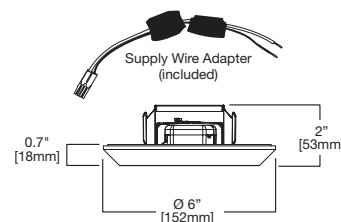
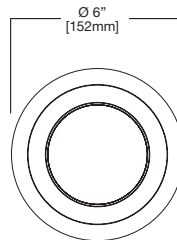
** SLD6

Savings are over the life of the Halo SLD6 luminaire.

Energy savings: \$300

Replacement lamp savings: \$100

Savings based on \$0.115 per kilowatt hour, average six hours use per day, 50,000 hours of lamp usage, and 65W BR30 lumen equivalent.



SLD4 ENERGY DATA

	80 CRI	90 CRI
Lumens	650	625
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.15 A	0.15 A
Input Power	12.5 W	12 W
Efficiency	52 lm/W	52 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	≤ 22 dba	

**OVER \$325^Δ
SAVINGS**

* Based on average six hours use per day.

Δ SLD4

Savings are over the life of the Halo SLD4 luminaire.

Energy savings: \$157

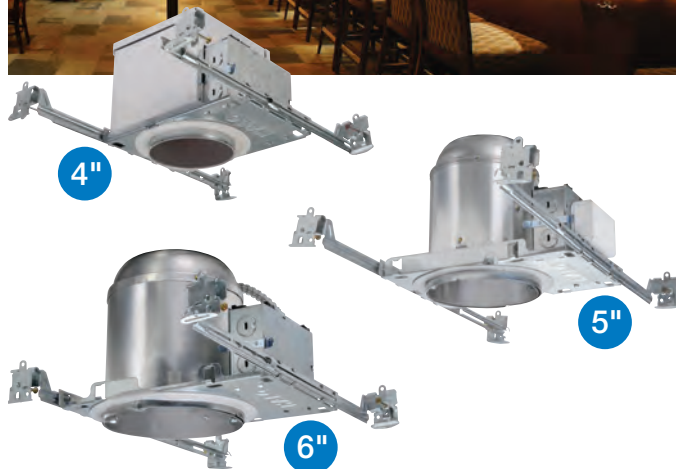
Replacement lamp savings: \$170

Savings based on \$0.115 per kilowatt hour, average six hours use per day, 50,000 hours of lamp usage, and 40W R20 halogen/IR lamp lumen equivalent.

Replaces conventional surface fixtures.



Retrofits 4", 5", or 6" recessed housings.



- WaveStream™ LED Technology
 - Downlight cone-of-light performance
 - AccuAim™ optics for directional control
- Lumens:
 - SLD4 - 650
 - SLD6 - 675
- Wattage: 12.5W / Voltage: 120V
- 3000K CCT
- 80 CRI and 90 CRI options

Features

- 4" and 6" ultra-low profile less than 3/4" in height
- Compatible with forward and reverse phase control dimmers
- Installs in 4" x 2-1/8" standard or fire-rated ceiling junction boxes or recessed downlight housings
- Required supply wire adapter for junction box wiring
- Plug-in LED connector* for easy installation
 - For Halo LED housing connection*
 - Screwbase adapter for recessed retrofit**

*Meets CA Title 24 ** Not for use in CA Title 24



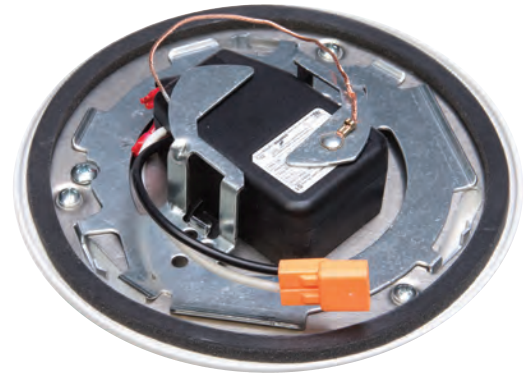
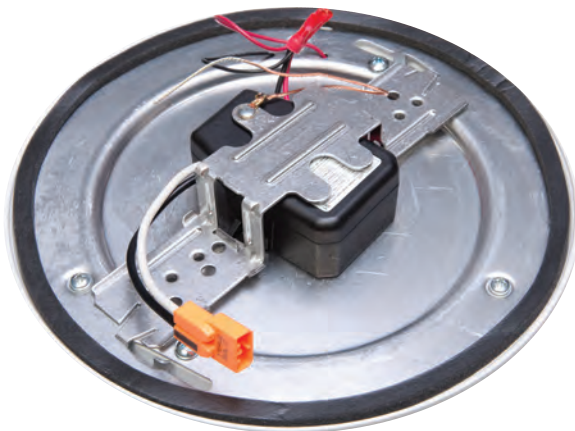
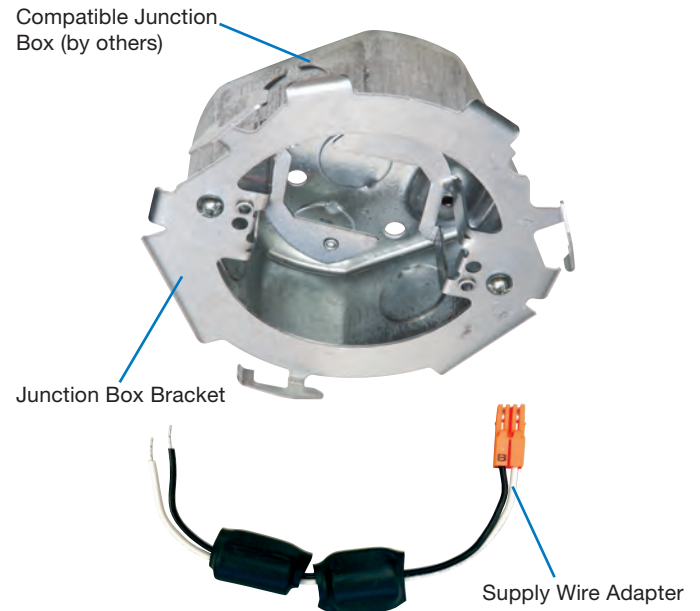
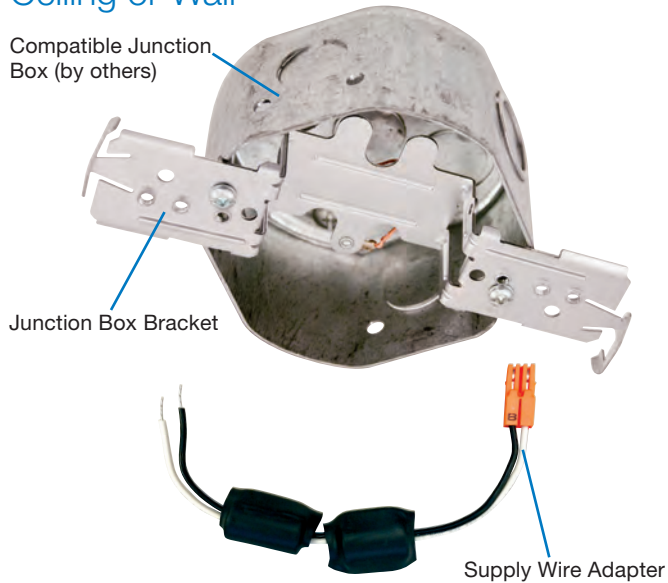
Compliances

- cULus Listed for Halo housings (UL Classified for other housings)
- Damp Location Listed for walls
- Wet Location Listed for showers and outdoor protected ceilings
- ENERGY STAR® qualified luminaire
- CA Title 24 compliant / CA T20 registered (California)
- IECC (International Energy Conservation Code)
- WSEC (Washington State Energy Code)



Junction Box Mounting

Ceiling or Wall



SLD6 with junction box bracket installed.

SLD4 with junction box bracket installed.

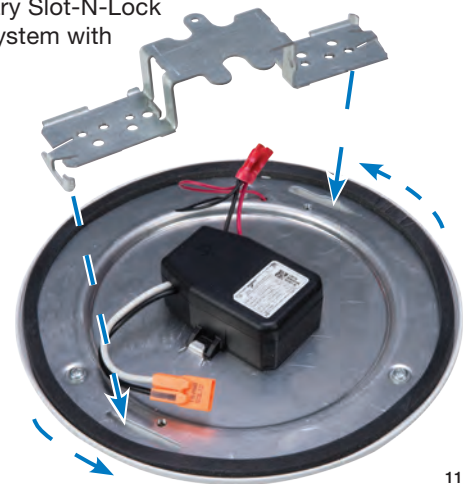
Junction Box Mounting

1. Install junction box bracket.
2. Unplug supply wire adapter from SLD. Connect black and white wires from the supply wire adapter to house wiring (black to black and white to white).
3. Locate the supply wire adapter (included) behind the junction box bracket.
4. Plug matching orange LED connector from supply wire adapter to SLD.
5. Align two bracket tabs with slots on back of fixture.
6. Turn clockwise to lock in place.

Note that this is only a summary. Read the instructions included with the product for full details.

Slot-N-Lock™

Halo SLD proprietary Slot-N-Lock quick installation system with mounting bracket.



SLD4 Compatible Junction Boxes

Standard and fire-rated junction boxes.*



**4" octagon light fixture/
fan steel box**
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" round new work
non-metallic light fixture/
fan box**
4" x 2-3/16"
(102mm x 56mm)



4" round new work non-metallic box with hanger bar assembly
4" x 2-3/16"
(102mm x 56mm)

SLD6 Compatible Junction Boxes

Standard and fire-rated junction boxes.*



**4" octagon light fixture/
fan steel box**
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" square deep
steel box**
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



**4" round new work
non-metallic light fixture/
fan box**
4" x 2-3/16"
(102mm x 56mm)



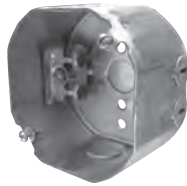
4" round new work non-metallic box with hanger bar assembly
4" x 2-3/16"
(102mm x 56mm)

Crouse-Hinds by **EATON**

SLD4 and SLD6 are compatible with Eaton's
Crouse-Hinds standard, fire-rated junction boxes.



TP316
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)



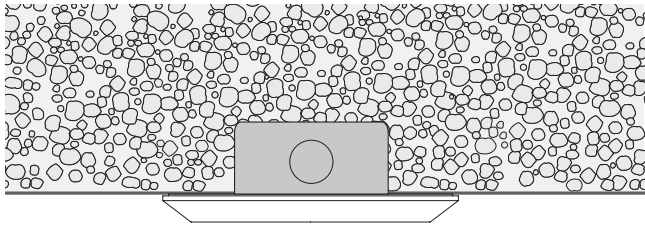
TP317
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

- UL Listed
- Two-hour fire-rated ANSI/UL 263
- Refer to www.crouse-hinds.com

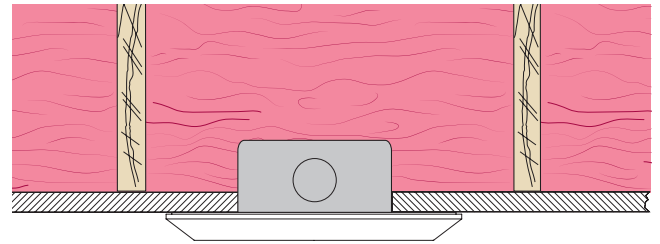
**This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Cooper Lighting makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the SLD mounting bracket in the box.*

Mounting Applications - Junction Box

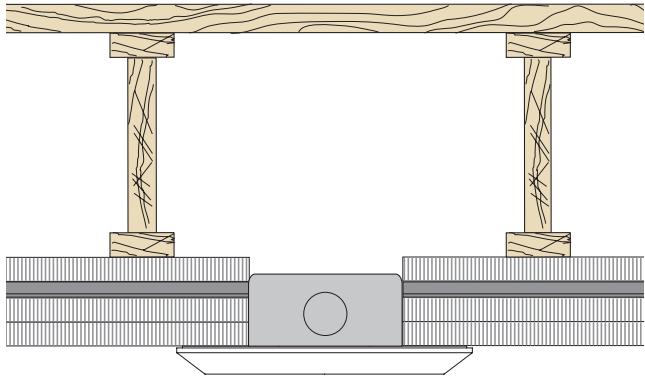
Concrete



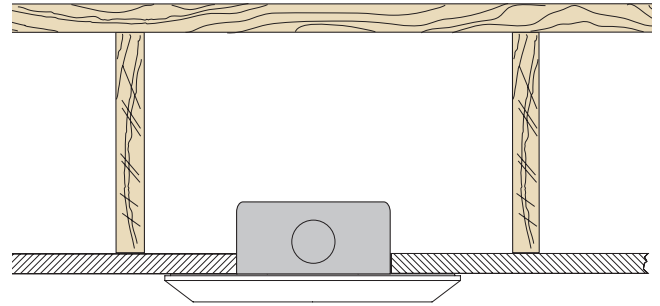
Insulation - batting or spray foam



Fire-rated



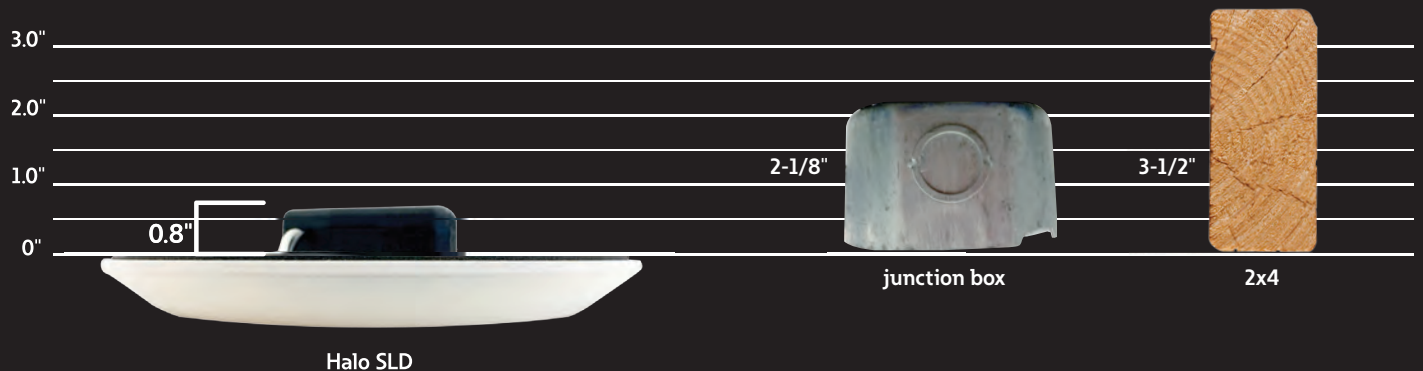
Framing



Junction box mounting applications are generalized for illustrative concept only. These are not for construction or specification. Refer to appropriate professional and code authority for specific box and installation requirements.

Shallow plenum? No problem.

The perfect solution where there is no plenum space for a recessed downlight.



Halo SLD

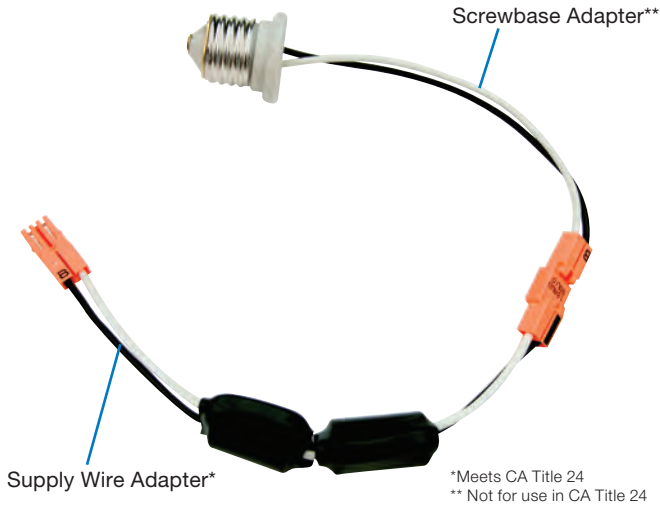
Recessed Housing Mounting

New Construction or Retrofit

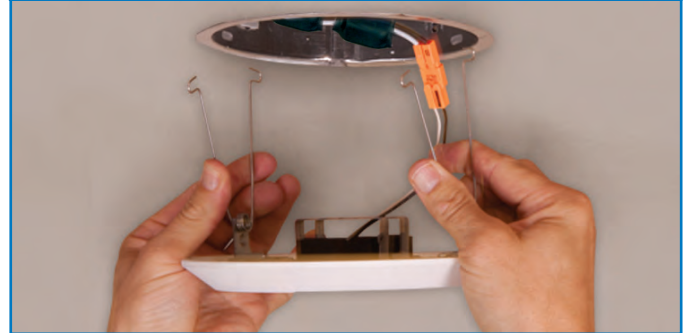
Recessed Mounting

1. Install screwbase adapter to fixture socket.
2. Attach orange connector from parts kit (included) to supply wire adapter and then attach to screwbase adapter.
3. Attach the combined adapter assembly to SLD.

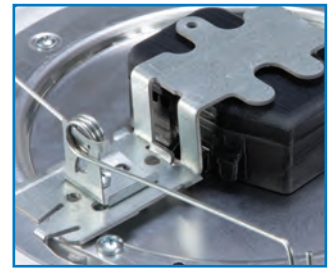
Note that this is only a summary. Read the instructions included with the product for full details.



SLD6 Series Torsion Spring Installation

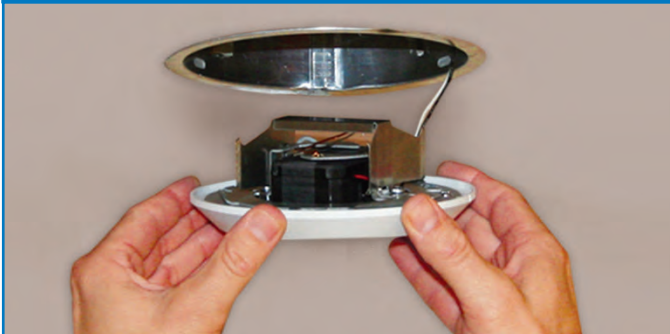


6-inch torsion spring position



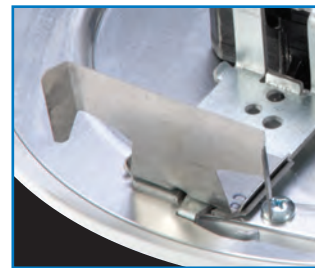
5-inch torsion spring position

SLD4 Series Friction Clip Installation



4-inch friction clip

SLD6 Series Friction Clip Installation



6-inch friction clip position



5-inch friction clip position

Ordering Information

SLD6

SLD6

Sample Number: SLD606830WH

Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.

Recessed Installation: Order Halo LED recessed housing separately to complete installation.

Models	CRI	Color Temperature (CCT)	Finish
SLD606 = 6" Surface LED Downlight, 120V	8 =80 CRI 9 =90 CRI	30 =3000K	WH =White

The SLD6 is UL Listed or Classified for use with **any** 5 or 6 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 107.9 in³ in addition to those noted below.

Housings - Halo UL Listed Compatibility

Compatible Halo LED Housings with LED Luminaire High-efficacy Compliant Connector (Meets CA Title 24 requirements)

Recessed Can Size	Catalog Number	Description
5"	H550ICAT	5" LED, Insulated Ceiling, AIR-TITE, New Construction Housing
	H550RICAT	5" LED, Insulated Ceiling, AIR-TITE, Remodel Housing
6"	H750ICAT	6" LED, Insulated Ceiling, AIR-TITE, New Construction Housing
	H750RICAT	6" LED, Insulated Ceiling, AIR-TITE, Remodel Housing
	H750T	6" LED, Non-IC, AIR-TITE, New Construction Housing
	H750RINTD010	6" LED, Non-IC, AIR-TITE, Remodel International Housing, 0-10V DC Dimming
	H750TCP	6" LED, Non-IC, New Construction/Remodel Chicago Plenum Housing
	H2750ICAT	6" LED, Shallow, Insulated Ceiling, AIR-TITE, New Construction Housing

Compatible Halo Incandescent E26 Screwbase Housings

5"	H5ICAT	5" Insulated Ceiling, AIR-TITE New Construction Housing
	H5RICAT	5" Insulated Ceiling, AIR-TITE Remodel Housing
	H5T	5" Non-IC, New Construction Housing
	H5RT	5" Non-IC, Remodel Housing
	H5TM	5" Non-IC, New Construction Housing (metric version - Canada)
	H25ICAT	5" Shallow, Insulated Ceiling, AIR-TITE New Construction
6"	H7ICAT	6" Insulated Ceiling, AIR-TITE New Construction Housing
	H7RICAT	6" Insulated Ceiling, AIR-TITE Remodel Housing
	H7ICT	6" Insulated Ceiling, New Construction Housing
	H7RICT	6" Insulated Ceiling, Remodel Housing
	H7ICATNB	6" Insulated Ceiling, AIR-TITE New Construction Housing, No Socket Bracket
	H7ICTNB	6" Insulated Ceiling, New Construction Housing, No Socket Bracket
	H7T	6" Non-IC, New Construction Housing
	H7RT	6" Non-IC, Remodel Housing
	H7TNB	6" Non-IC, New Construction Housing, No Socket Bracket
	H7TCP	6" Non-IC, Chicago Plenum, New Construction/Remodel Housing

SLD6

Compatible Halo Incandescent E26 Screwbase Housings (Continued)

6"	H7UICT	6" Insulated Ceiling, Universal New Construction Housing
	H7UICAT	6" Insulated Ceiling, Universal, AIR-TITE, New Construction Housing
	H27ICAT	6" Shallow, Insulated Ceiling, AIR-TITE New Construction Housing
	H27RICAT	6" Shallow, Insulated Ceiling, AIR-TITE Remodel Housing
	H27ICT	6" Shallow, Insulated Ceiling, New Construction Housing
	H27RICT	6" Shallow, Insulated Ceiling, Remodel Housing
	H27T	6" Shallow, Non-IC, New Construction Housing
	H27RT	6" Shallow, Non-IC, Remodel Housing

Halo LED Retrofit Enclosures

6"	ML7BXRFK	6" Retrofit Enclosure, Non-IC, BX Whip - Meets CA Title 24
	ML7E26RFK	6" Retrofit Enclosure, Non-IC, E26 Screw base Interface

Compatible All-Pro Incandescent E26 Screwbase Housings

Recessed Can Size	Catalog Number	Description
5"	EI500AT	5" Insulated Ceiling, AIR-TITE New Construction Housing
	EI500RAT	5" Insulated Ceiling, AIR-TITE Remodel Housing
	ET500	5" Non-IC, New Construction Housing
	ET500R	5" Non-IC, Remodel Housing
6"	EI700AT	6" Insulated Ceiling, AIR-TITE New Construction Housing
	EI700RAT	6" Insulated Ceiling, AIR-TITE Remodel Housing
	EI700	6" Insulated Ceiling, New Construction Housing
	EI700R	6" Insulated Ceiling, Remodel Housing
	EI700ATNB	6" Insulated Ceiling, AIR-TITE New Construction Housing, No Socket Bracket
	EI700NB	6" Insulated Ceiling, New Construction Housing, No Socket Bracket
	EI700U	6" Insulated Ceiling, Universal New Construction Housing
	EI700UAT	6" Insulated Ceiling, Universal, AIR-TITE, New Construction Housing
	ET700	6" Non-IC, New Construction Housing
	ET700R	6" Non-IC, Remodel Housing
	EI2700AT	6" Shallow, Insulated Ceiling, AIR-TITE New Construction Housing
	EI2700	6" Shallow, Insulated Ceiling, New Construction Housing
	EI2700R	6" Shallow, Insulated Ceiling, AIR-TITE Remodel Housing
	ET2700	6" Shallow, Non-IC, New Construction Housing
	ET2700R	6" Shallow, Non-IC, Remodel Housing

Ordering Information

SLD6

Housings - UL Classified for Retrofit Compatibility in 5" and 6" Incandescent E26 Screwbase Housings

Juno®	IC22, IC22R, IC22W, IC22S, IC23, IC23W, IC21, IC21R, IC2, TC2, TC2R, IC20, IC20R, IC25, IC25R, IC25W, IC25S, TC20, TC20R
Capri	CR1, PR1, QL1, R9ASIC, R5*
Lightolier®	1104ICS*, 1104ICR*, 1104SIC*, 1104SICR*, 1004ICS*, 1004ICR*, 1004SIC*, 1004SICR* 1104ICX - Requires installation of ML7RAB retrofit adapter band accessory (not included).
Progress® Lighting	P87-AT*, P86TG
Lithonia Lighting®	L7X, L7XP
Thomas® Lighting	PS1, R9ASIC/PS9RM
Prescolite®	IBXS
Commercial Electric™	C7ICA (H3), H18
Elco Lighting®	(HL7ICA) EL7ICA

*Requires installation with included friction clips.

Juno®, Capri Lighting, Lightolier®, Lithonia Lighting®, Thomas® Lighting, Elco Lighting®, Progress® Lighting, Prescolite® and Commercial Electric™ and their product brand names, where identified above, are tradenames or trademarks of each respective company and Cooper makes no representations on these trademarks.



SLD4

SLD4

Sample Number: SLD405830WH

Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.

Recessed Installation: Order Halo recessed housing separately to complete installation.

Models	CRI	Color Temperature (CCT)	Finish
SLD405 = 4" Surface LED Downlight, 120V	8 =80 CRI 9 =90 CRI	30 =3000K	WH =White

The SLD4 is UL Listed or Classified for use with any 4 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 62.3 in³ in addition to those noted below.

Housings - Halo UL Listed Compatibility

Compatible Halo LED Housings with LED Luminaire High-efficacy Compliant Connector (Meets CA Title 24 requirements)

Recessed Can Size	Catalog Number	Description
4"	H995ICAT	4" LED, Insulated Ceiling, AIR-TITE, New Construction Housing
	H995RICAT	4" LED, Insulated Ceiling, AIR-TITE, Remodel Housing

Housings - 4" Incandescent E26 Screwbase Housings

UL Listed	UL Classified	
Recessed E26 screwbase	All-Pro	ET400ATSB, ET400RATSB, E1400ATSB
	Halo	H99ICAT, H99RTAT, H99TAT
UL Classified UL Classified for retrofit in the listed 4" recessed E26 screwbase housings.	Utilitech	CR04ICAT
	Thomas	PS4
	Lithonia Lighting	L3, L3R
	Commercial Electric	HBR2000B
	Juno	IC1, TC1, TC1R
	Progress Lighting	P830-TG, P832-TG



Complete Lighting Control Solutions

Eaton's AL Series dimmers offer versatile options to set the mood and reduce energy consumption.

Visit www.cooperwiringdevices.com/ALSeries for more information.



Dimmer Features	ACCELL (AAL06)	DEVINE (DAL06P)
Rapid Start feature	Selectable ON or OFF	Fully adjustable
Adjustable high-end trim	•	
Adjustable low-end trim	•	•
Wiring configurations	Single-pole or multi-location	Single-pole or three-way
Color change kits	•	•



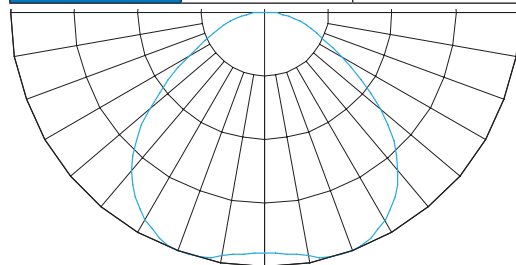
Dimmer Features	SKYE (SAL06P)	TRACE (TAL06P)
Rapid Start feature	Fixed ON	Fully adjustable
Adjustable high-end trim		
Adjustable low-end trim	•	•
Wiring configurations	Single-pole or three-way	Single-pole or three-way
Color change kits		•

Note: The Rapid Start feature is used to ensure the right amount of power boost during start-up. When a dimmer with Rapid Start is turned on from a low dimmer setting, the LED lighting may exhibit a momentary flash. Select dimmer models offer an adjustment of the Rapid Start feature. The user may wish to adjust this setting to reduce the boost and resulting momentary flash. If this capability is desired, the user should select dimmer models designated as "fully adjustable" or "selectable ON or OFF".

Photometric Performance

- Downlight cone-of-light distribution
- Maximum spacing criteria
- Optimized design for general downlighting
- 84% of light between 0-60° cone-of-light zone
- ENERGY STAR® and California Title 24 - zonal and efficacy requirements

SLD606830WH		
Luminaire lumens	675	
Input watts	12.5	
LER (LPW)	54	
Spacing Criteria	0-180	1.44
	90-270	1.44
	Diagonal	1.46
Beam angle (degrees)	105	
Field angle (degrees)	158	
Zonal lumen	Lumens	% Lumens
0-30	198.7	29%
0-40	332.2	49%
0-60	564.1	84%
0-90	675.1	100%



Eaton's Cooper Lighting Business

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www.cooperlighting.com

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Our Lighting

Product Brands

Halo

Halo Commercial

Portfolio

IRiS

RSA

Metalux

Corelite

Neo-Ray

Fail-Safe

MWS

Ametrix

Shaper

io

Lumark

McGraw-Edison

Invue

Lumière

Streetworks

AtLite

Sure-Lites

Our Controls

Product Brands

Greengate

iLumin

Zero 88

Fifth Light Technology

iLight (International Only)

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United States

Eaton.com

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Powering Business Worldwide