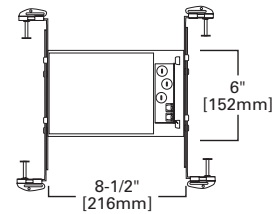
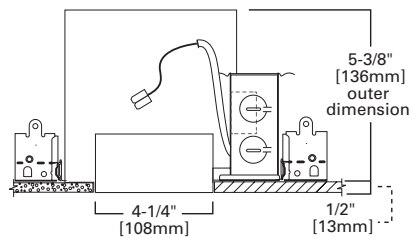


H4 LED Series Housing

H457ICAT1E



H457ICAT1E

4" IC, Air-Tite, Shallow New Construction, LED Housing

The Halo H4 LED is a family of 4" aperture recessed downlight H457 series of housings designed for exclusive use with Halo EL406, ELG406, ELSG406 series LED light engines and compatible 4" TL4 and TLS4 LED trims. Halo H4 LED housings have LED drivers that offer dimming as a standard feature. This is an insulated ceiling* Air-Tite™ housing offering 120 volt dimming capability. The H4 LED series offers high quality downlighting along with high efficacy – the result being great lighting and significant energy savings.



Special Features

Got Nail!™ bar hangers
Pass-N-Thru™ bars
Slide-N-Side™ junction box
Quick Connect™ push wire nuts
Air-Tite™ code compliant

Compatible Light Engines

EL406927	ELG406927	ELSG406927
EL406930	ELG406930	ELSG406930
EL406935	ELG406935	ELSG406935
EL406940	ELG406940	ELSG406940

Compatible Trims

TL402	TL409	TL411
TL403	TL410	TL422
TL408		

Features

Housing

- Enclosure of formed aluminum construction
- Openings are gasketed Air-Tite
- Designed for insulated ceilings in direct contact with insulation* (May also be installed in non-insulated ceilings)

Plaster Frame

- Galvanized steel die-formed construction
- The collar can be removed from plaster frame to provide access to the junction box
- Collar adjusts for ceilings up to 1-1/4" thick
- Plaster frame features include:
 - Patented regressed locking screw positioned for securing hanger bars from below the ceiling
 - Cutouts for easily crimping hanger bars in position
 - Air-Tite aperture gasket is pre-installed
 - Halo identity embossed on plaster frame

Includes:

- Got Nail!™ bar hangers (Details Pg. 13)
- Pass-N-Thru™ bars (Details Pg. 13)
- Slide-N-Side™ junction box wire traps (Details Pg. 13)
- Quick Connect™ push wire nuts (Details Pg. 13)
- Air-Tite™ code compliant (Details Pg. 13)

LED Light Engine Connection

- LED connector is a non-screw base connector offering easy installation with the H4 LED EL406, ELG406, ELSG406 series LED light engines
- This non-screw base connection preserves the high efficacy rating and prevents use of low efficacy sources (see LED module specification)

LED Driver

- LED dimmable driver mounts in the junction box.
- Driver is a 120 volt, high efficiency, electronic power supply providing low voltage power to EL series LED light engines
- Driver meets FCC EMI/RFI consumer level limits for use in residential and commercial installations
- Driver features high power factor and low THD and has integral thermal protection in the event of over temperature or internal failure
- If dimming is not required the fixture can be operated from a standard wall switch

Dimming

- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control dimmers. Dimmers with low end trim adjustment offer greater assurance of achieving 5% level.
- Consult dimmer manufacturer for compatibility and conditions of use (Note, some dimmers require a neutral in the wallbox)

Compliance

- cULus Listed 1598 luminaire
- cULus Listed for damp location
- cULus Listed for wet location, covered ceiling, with select trims
- cULus Listed for direct contact with insulation* and combustible material
- Use with designated HALO LED systems for ENERGY STAR® certification
- Can be used for State of California Title 24 high efficacy luminaire compliance with EL series LED light engines
- Can be used for International Energy Conservation Code (IECC) high efficacy luminaire compliance
- Air-Tite code compliant. Certified under ASTM E283; not exceeding 2.0 cfm (0.944 L/s) air leakage rate tested at a 1.57 psf (75 Pa) pressure differential

*Not to be used in direct contact with spray foam insulation (consult NEMA LSD57-2013)

H457ICAT1E Energy Data

H4 Series LED (Values at non-dimming line voltage)

Minimum Starting Temp: -30°C (-22°F)

EMI/RFI: FCC Title 47 CFR, Part 18, (Consumer)

Sound Rating: Class A standards

Input Voltage: 120V

Power Factor: >0.90

Input Frequency: 50/60Hz

THD: <20%

Input Power: 13W

Input Current: 121mA

Driver Compliance: UL6950, LPS rated

H4 LED Lighting System

A LED Housing



B LED Light Engine



C LED Trim



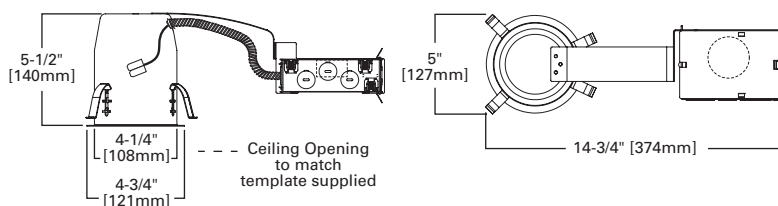
OR

B/C LED Adjustable Gimbale and Light Engine



H4 LED Series Housing

H457RICAT1E



H457RICAT1E

4" IC, Air-Tite, Shallow Remodel, LED Housing

The Halo H4 LED is a family of 4" aperture recessed downlight H457 series of housings designed for exclusive use with Halo EL406, ELG406, ELSG406 series LED light engines and compatible TL4 and TLS4 LED trims. Halo H4 LED housings have LED drivers that offer dimming as a standard feature. This is an insulated ceiling*, Air-Tite™, remodel housing offering 120 Volt dimming capability. The H4 LED series offers high quality downlighting along with high efficacy – the result being great lighting and significant energy savings.



Special Features

Slide-N-Side™ junction box
Quick Connect™ push wire nuts
Air-Tite™ code compliant

Compatible Light Engines

EL406927	ELG406927	ELSG406927
EL406930	ELG406930	ELSG406930
EL406935	ELG406935	ELSG406935
EL406940	ELG406940	ELSG406940

Compatible Trims

TL402	TL409	TL411
TL403	TL410	TL422
TL408		

Features

Housing

Single wall formed aluminum construction. Openings are gasketed for Air-Tite installation. 5-1/2" height allows use in shallow joist construction. Air-Tite aperture gasket is pre-installed.

Remodel Arm

Spring steel construction designed for ease of installation and ceiling support of LED driver

Remodel Springs

Four remodel clips secure housing and accommodate 1/2" and 5/8" ceiling material

Includes:

- Slide-N-Side™ junction box wire traps (Details Pg. 13)
- Air-Tite™ code compliant (Details Pg. 13)
- Quick Connect™ push wire nuts (Details Pg. 13)

LED Light Engine Connection

- LED connector is a non-screw base connector offering easy installation with the H4 LED EL406, ELG406, ELSG406 series LED light engines
- This non-screw base connection preserves the high efficacy rating and prevents use of low efficacy sources (See LED module specification)

LED Driver

- LED dimmable driver mounts in the junction box
- Driver is a 120 Volt, high efficiency, electronic power supply providing low voltage power to EL series LED light engines
- Driver meets FCC EMI/RFI consumer level limits for use in residential and commercial installations
- Driver features high power factor and low THD and has integral thermal protection in the event of over temperature or internal failure
- If dimming is not required the fixture can be operated from a standard wall switch

Dimming

- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control dimmers. Dimmers with low end trim adjustment offer greater assurance of achieving 5% level.
- Consult dimmer manufacturer for compatibility and conditions of use (Note, some dimmers require a neutral in the wallbox)

Compliance

- cULus Listed 1598 luminaire
- cULus Listed for damp location
- cULus Listed for wet location, covered ceiling, with select trims
- cULus Listed for direct contact with insulation and combustible material
- Use with designated HALO LED systems for ENERGY STAR® certification
- Can be used for State of California Title 24 high efficacy luminaire compliance with EL series LED light engines
- Can be used for International Energy Conservation Code (IECC) high efficacy luminaire compliance
- Air-Tite code compliant. Certified under ASTM E283; not exceeding 2.0 cfm (0.944 L/s) air leakage rate tested at a 1.57 psf (75 Pa) pressure differential.

*Not to be used in direct contact with spray foam insulation (consult NEMA LSD57-2013)

H457RICAT1E Energy Data

H4 Series LED (Values at non-dimming line voltage)

Minimum Starting Temp: -30°C (-22°F)

EMI/RFI: FCC Title 47 CFR, Part 18, (Consumer)

Sound Rating: Class A standards

Input Voltage: 120V

Power Factor: >0.90

Input Frequency: 50/60Hz

THD: <20%

Input Power: 13W

Input Current: 120mA

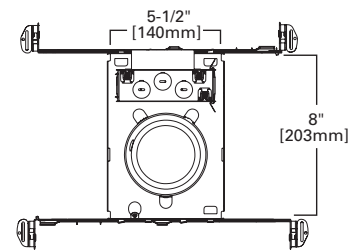
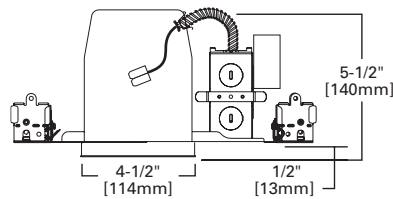
Driver Compliance: UL8750, Class II rated

H4 LED Lighting System



H4 LED Series Housing

H457TATE010



H457TATE010

4" Non-IC, Shallow New Construction, Dimmable LED Housing

The Halo H4 LED is a family of 4" aperture recessed downlight H457 series of housings designed for exclusive use with Halo EL406, ELG406, ELSG406 series LED light engines and compatible 4" TL4 and TLS4 LED trims. Halo H4 LED housings have integral LED drivers that offer dimming as a standard feature. This is a Non-IC, Air-Tite™ housing for non-insulated ceiling installations, universal voltage 120V-277V input, and dimming with either 120V phase control dimmers, or 0-10V DC control systems. The H4 LED series offers high quality downlighting along with high efficacy – the result being great lighting and significant energy savings.



Special Features

Got Nail!™ bar hangers
Pass-N-Thru™ bars
Slide-N-Side™ junction box
Quick Connect™ push wire nuts
Air-Tite™ code compliant

Compatible Light Engines

EL406927	ELG406927	ELSG406927
EL406930	ELG406930	ELSG406930
EL406935	ELG406935	ELSG406935
EL406940	ELG406940	ELSG406940

Compatible Trims

TL402	TL409	TL411
TL403	TL410	TL422
TL408		

Features

Housing

- Single wall die-formed construction
- Openings are gasketed

Plaster Frame

- Galvanized steel die-formed construction
- Housing can be removed from plaster frame for access to junction box
- Housing adjusts for ceilings up to 1" thickness
- Plaster frame features include:
 - Patented regressed locking screw positioned for securing hanger bars from below the ceiling
 - Cutouts for easily crimping hanger bars in position
 - Air-Tite aperture gasket is pre-installed
 - Halo identity embossed on plaster frame

Includes:

- Got Nail!™ bar hangers (Details Pg. 13)
- Pass-N-Thru™ bars (Details Pg. 13)
- Slide-N-Side™ junction box wire traps (Details Pg. 13)
- Quick Connect™ push wire nuts (Details Pg. 13)
- Air-Tite™ code compliant (Details Pg. 13)

LED Light Engine Connection

- LED connector is a non-screw base connector offering easy installation with the H4 LED EL406, ELG406, ELSG406 series LED light engines
- This non-screw base connection preserves the high efficacy rating and prevents use of low efficacy sources (See LED module specification)

LED Driver

- LED dimmable driver mounts to the housing junction box
- Driver is a 120V-277V universal voltage, high efficiency, electronic power supply providing low voltage power to EL series LED light engines
- Driver meets FCC EMI/RFI consumer level limits for use in residential and commercial installations
- Driver features high power factor and low THD, and has integral thermal protection in the event of over temperature or internal failure
- If dimming is not required the fixture can be operated from a standard wall switch

Dimming - Phase Control

Designed for continuous dimming to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control dimmers. Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note, some dimmers require a neutral in the wallbox)

Dimming - 0-10V

- Dimmable to 10% with compatible 0-10V DC low voltage dimmers
- 0-10V DC dimmers operate using two low voltage dimming wires (color coded violet and gray). The low voltage dimming wires are separate from the 120V AC or 277V AC power.
- Switching on/off is controlled via the line voltage (120V AC or 277V AC) power, and dimming is controlled via the 2-wire 0-10V DC low voltage wiring

Compliance

- cULus Listed 1598 luminaire
- cULus Listed for damp location
- cULus Listed for wet location, covered ceiling, with select trims
- For non-insulated ceilings. If ceiling insulation is present, it must be kept 3 inches from all sides of housing.
- Use with designated HALO LED systems for ENERGY STAR® certification
- Can be used to comply with State of California Title 24 non-residential lighting controls requirements as part of an LED luminaire
- Air-Tite code compliant. Certified under ASTM E283; not exceeding 2.0 cfm (0.944 L/s) air leakage rate tested at a 1.57 psf (75 Pa) pressure differential

H457TATE010 Energy Data

H4 Series LED (Values at non-dimming line voltage)

Minimum Starting Temp: -30°C (-22°F)

EMI/RFI: FCC Title 47 CFR, Part 18, (Consumer)

Sound Rating: Class A standards

Input Voltage: 120V-277V

Power Factor: >0.90

Input Frequency: 50/60Hz

THD: <25%

Input Power: 13W

Input Current: 121mA

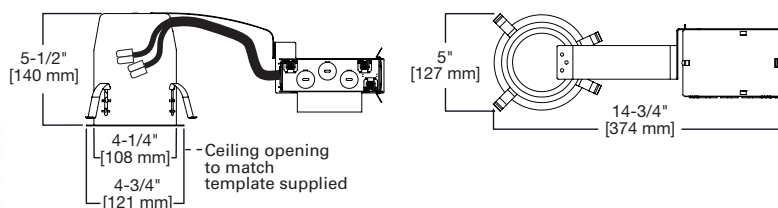
Driver Compliance: UL8750, Class II rated

H4 LED Lighting System



H4 LED Series Housing

H457RTATE010



4" Non-IC, Shallow Remodel, Dimmable LED Housing

The Halo H4 LED is a family of 4" aperture recessed downlight H457 series of housings designed for exclusive use with Halo EL406, ELG406, ELSG406 series LED light engines and compatible 4" TL4 and TLS4 LED trims. Halo H4 LED housings have integral LED drivers that offer dimming as a standard feature. This is a Non-IC, Air-Tite™ remodel housing designed for non-insulated ceiling installations, universal voltage 120V-277V input, and dimming with either 120V phase control dimmers, or 0-10V DC control systems. The H4 LED series offers high quality downlighting along with high efficacy – the result being great lighting and significant energy savings.



Special Features

Slide-N-Side™ junction box
Quick Connect™ push wire nuts
Air-Tite™ code compliant

Compatible Light Engines

EL406927	ELG406927	ELSG406927
EL406930	ELG406930	ELSG406930
EL406935	ELG406935	ELSG406935
EL406940	ELG406940	ELSG406940

Compatible Trims

TL402	TL409	TL411
TL403	TL410	TL422
TL408		

Features

Housing

Single wall aluminum housing. Openings are gasketed for Air-Tite installation. 5-1/2" height allows use in shallow joist construction. Air-Tite aperture gasket is pre-installed.

Remodel Arm

Spring steel construction designed for ease of installation and ceiling support of LED driver

Remodel Springs

Four remodel clips secure housing and accommodate 1/2" and 5/8" ceiling material

Includes:

- Air-Tite™ code compliant (Details Pg. 13)
- Slide-N-Side™ junction box wire traps (Details Pg. 13)
- Quick Connect™ push wire nuts (Details Pg. 13)

LED Light Engine Connection

- LED connector is a non-screw base connector offering easy installation with the H4 LED EL406, ELG406, ELSG406 series LED light engines
- This non-screw base connection preserves the high efficacy rating and prevents use of low efficacy sources (See LED module specification)

LED Driver

- LED dimmable driver mounts to the housing junction box
- Driver is a 120V-277V universal voltage, high efficiency, electronic power supply providing low voltage power to EL series LED light engines
- Driver meets FCC EMI/RFI consumer level limits for use in residential and commercial installations
- Driver features high power factor and low THD and has integral thermal protection in the event of over temperature or internal failure
- If dimming is not required the fixture can be operated from a standard wall switch

Dimming - Phase Control

Designed for continuous dimming to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control dimmers. Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note, some dimmers require a neutral in the wallbox)

Dimming - 0-10V

- Dimmable to 10% with compatible 0-10V DC low voltage dimmers
- 0-10V DC dimmers operate using two low voltage dimming wires (color coded violet and gray). The low voltage dimming wires are separate from the 120V AC or 277V AC power.

- Switching on/off is controlled via the line voltage (120V AC or 277V AC) power, and dimming is controlled via the 2-wire 0-10V DC low voltage wiring

Compliance

- cULus Listed 1598 luminaire
- cULus Listed for damp location
- cULus Listed for wet location, covered ceiling, with select trims
- Air-Tite code compliant. Certified under ASTM E283; not exceeding 2.0 cfm (0.944 L/s) air leakage rate tested at a 1.57 psf (75 Pa) pressure differential
- Use with designated HALO LED systems for ENERGY STAR® certification
- Can be used to comply with State of California Title 24 non-residential lighting controls requirements as part of an LED luminaire
- For non-insulated ceilings. If ceiling insulation is present, it must be kept 3 inches from all sides of housing.

H457RTATE010 Energy Data

H4 Series LED (Values at non-dimming line voltage)

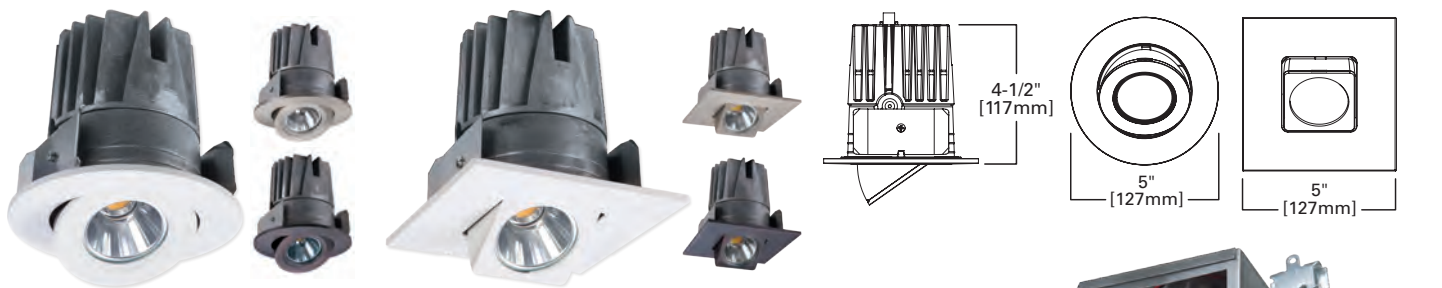
Minimum Starting Temp: -30°C (-22°F)
EMI/RFI: FCC Title 47 CFR, Part 15, (Consumer)
Sound Rating: Class A standards
Input Voltage: 120V-277V
Power Factor: >0.90
Input Frequency: 50/60Hz
THD: <25%
Input Power: 13W
Input Current: 121mA
Driver Compliance: UL8750, Class II rated

H4 LED Lighting System



H4 LED Series Adjustable/Light Engine

ELG4069xx & ELSG4069xx



ELG4069xx

ELSG4069xx

4" LED Gimbal, 2nd Generation

Halo H4 LED adjustable gimbals, ELG406 series, combine an adjustable gimbal trim and LED light engine for use with H457 series housings. The H4 LED adjustable gimbals feature 35° tilt and offer interchangeable optics with three beam distributions of 25°, 35°, and 50°. H4 LED offers 90 CRI color rendering index and four color temperatures 2700K, 3000K, 3500K, 4000K. Three high-quality trim finishes of white, satin nickel, and tuscan bronze are available. Halo LED offers high quality, fit, finish, and performance in an energy-efficient, high efficacy gimbal.

Compatible Housings

H457ICAT1E H457TATE010
H457RICAT1E H457RTATE010
H457TCPE010



Features

Upper Heat Sink

- Durable aluminum construction
- Conducts heat away from the LED keeping the junction temperatures below specified maximums, even when installed in insulated ceiling housings

Gimbal

- Precision designed fit and finish
- Die-cast aluminum with snap-in front loading ring allowing interchange of beam forming reflectors
- Gimbal front ring holds one lens media. Clear glass lens is included. Optional lens media such as L111 soft focus may be used in place of clear glass lens.
- 35° tilt adjustment with friction fit to heat sink
- Smooth travel from nadir to 35°
- Works with the upper heat sink for thermal conduction away from the LED

Friction Blades:

- Precision formed stainless steel spring blades provide retention of the EL406 series of light engines in the H457 series housings
- Friction blade design allows the light engine to be installed in any position within the housing aperture (360 degrees)

LED Connection

- LED connector is non-screw base offering easy installation with the H457 series housings
- LED connector is compliant with high efficacy luminaire code requirements as a non-screw base socket
- Separate grounding cable included on the module for attachment to the housing during installation

Optics

- Three beam distribution options with interchangeable round beam forming reflectors
- Gimbal is supplied with 25° reflector pre-installed
- Reflector options: 25°, 35°, 50° beam angle order (TL412RK kit)
- Clear glass cover lens included with gimbal. One optional accessory lens may be used in place of clear lens.
- Reflector and lens are accessible behind the gimbal's snap-in front ring

Optical Accessory Reflector Kit – TL412RK

- Includes all three reflector options
 - 25° beam angle reflector (one included with gimbal)
 - 35° beam angle reflector
 - 50° beam angle reflector

Color Specification & Quality Standards

- LED is a chip on board design consisting of a multiple LED package with proximity phosphor coating to create one virtual white light source for a productive "cone of light"
- Halo employs a tight chromaticity specification and LED color binning process to ensure LED color uniformity, sustainable Color Rendering Index (CRI) and Correlated Color Temperature (CCT) consistency over the useful life of the LED
- Halo H4 LED chromaticity specification is 3 SDCM which exceeds ENERGY STAR® color standards (as per ANSI 78.377)
- Every Halo LED module is quality tested and performance measured on the production line, and then serialized to register lumens, wattage, CRI and CCT

LED

- Correlated Color Temperature (CCT): 2700°K, 3000°K, 3500°K, 4000°K*
- Color Rendering Index (CRI): 90 (R9 > 50)
- LED emits no ultraviolet and minimal infrared wavelengths
- 700-930 nominal lumens, dependent on CCT and trim*
- Lumen maintenance L70 at 50,000 hours

Compliance

- Use with designated HALO LED systems for ENERGY STAR® certification
- Can be used to comply with California Title 24 high efficacy requirements. Title 20 Certified for residential compliance.
- International Energy Conservation Code (IECC) high efficacy requirements when used with designated LED trims
- RoHS compliant
- Damp location listed with H457 LED housings
- Electrical/Energy Data refer to H457 LED housings (LED driver is integral to housing)

Selection of Gimbal Light Engine

Model Number	Nominal CCT
ELG406927 • ELSG406927	2700
ELG406930 • ELSG406930	3000
ELG406935 • ELSG406935	3500
ELG406940 • ELSG406940	4000

2700K

3000K

3500K

4100K

5000K

6500K

*Trim type and color temperature determines the delivered lumen value. Refer to specification sheets and photometric files at www.eaton.com/lighting

H4 LED Lighting System

