

# NHIC-27LMRAT

6" Shallow IC Air-Tight LED Dedicated New Construction Housing  
(Compatible with Cobalt, Onyx and Pearl)

Type

Project

Catalog No.

Notes

## PRODUCT DESCRIPTION

Dedicated new construction housing for use in insulated ceilings can be in direct contact with insulation. Air-tight construction provides energy savings by reducing the flow of air through the ceiling. The housing is dedicated and labeled for use with LED retrofit luminaires.

## FEATURES

- Shallow IC rated housing for direct contact with insulation
- IC Air-Tight energy saving by reducing the flow of air through the ceiling
- Rated for direct contact with insulation
- cULus listed for damp location and through branch circuit wiring

## CONSTRUCTION

**Housing:** 0.040 aluminum housing with riveted cap adjusts for ceiling thicknesses from 5/8" to 1-1/4" depth.

**Air Flow Restriction:** Housing has factory installed gaskets to restrict airflow from room into ceiling plenum to <2CFM (cubic feet per minute) in accordance with ASTM-283 Air-Tight requirements.

**Clearance:** "IC" Insulated ceiling housings are direct contact rated. Not to be used in direct contact with spray foam insulation.

**Bar Hangers:** Two 13-3/4" to 24-1/2" adjustable bar hangers with captive nails are included on frame. Hanger bars have T-Bar slot and alignment feet. Bar hangers are parallel to junction box, but can be repositioned 90° perpendicular to junction box if desired. "L" Shaped bar hanger foot to align to bottom of construction joist. A T-Bar notch allows easy installation in a suspended ceiling.

**Junction Box:** Prewired 15 cubic inch 0.064" thick galvanized steel box with seven 1/2" trade size knockouts and snap on covers. All leads are #18AWG wire, the ground wire is connected to the bottom, and quick connectors are supplied on all leads. Maximum of 8 no. 12 AWG through branch circuit conductors suitable for at least 90°C permitted in junction box.

**Romex Strain Relief:** Junction box includes two Romex tabs with two slots at each tab for NM-cables of 12/2 to 14/2. The strain relief allows for easy installation and less materials.

## ELECTRICAL

**Input Voltage:** 120/277V or 277V (must specify)  
**Socket:** Quick connect for LED downlights  
**Operating Temperature:** 122°F (50°C) max.  
**Dimming:** Specified by downlight

## STEP DOWN TRANSFORMER (CONVERTS 277V INPUT TO 120V)

Optional 50W step down transformer installed (NHIC-27LMRAT/277). Maximum of 6 no. 12 AWG through branch circuit conductors in junction box.

## COMPATIBLE DOWNLIGHTS

[NLCBC-6 / NLCBC2-6](#) = 6" Cobalt Downlights  
[NOX-56 / NOXAC-56 / NOXTW-56](#) = 5"6" Onyx Downlights  
[NOXAC-636](#) = 6" AC Onyx Square Reflector  
[NPR-56RND](#) = 5"6" Pearl Downlight

**Emergency:** Housing can be specified with an emergency battery installed on frame (Cobalt only). Requires top access.

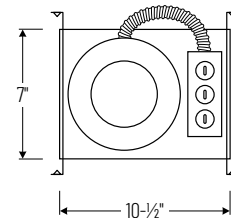
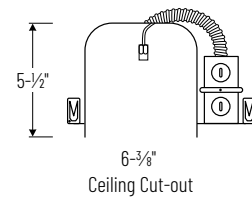
- Up to 7.5W emergency illumination with LEDs
- Illumination Time: 90min
- Voltage: 120/277 VAC, 60Hz
- Output Voltage: 15.0-50.0 VDC
- Remote test switch included

## LABELS AND LISTINGS

- cULus Listed for Damp Location (wet location when used with compatible trims)
- ENERGY STAR certified
- Meets or exceeds ASTM-283 Air-Tight requirements
- Certified to the high efficacy requirements of California Title 24 JA8-2022 (when used with compatible downlights)
- RoHS compliant



## PRODUCT IMAGES & DIMENSIONS



## 6" Shallow IC Air-Tight LED Dedicated New Construction Housing

Housing Type

**NHIC-27LMRAT** = 6" Shallow IC Air-Tight Dedicated New Construction Housing, 120/277V input (120V Triac/ELV dimming)

**NHIC-27LMRAT/277** = 6" Shallow IC Air-Tight Dedicated New Construction Housing, 277V input with 50W Step Down Transformer

**NHIC-27LMRAT/4W** = 6" Shallow IC Air-Tight Dedicated New Construction Housing, 120/277V input (120V Triac/ELV/0-10V & 277V 0-10V dimming, Cobalt only - LE4 required)

**NHIC-27LMRAT/EM** = 6" Shallow IC Air-Tight Dedicated New Construction Housing with Emergency Battery and Remote Test Switch, 120/277V input (Cobalt only - EM required)

**NHIC-27LMRAT/6WEM** = 6" Shallow IC Air-Tight Dedicated New Construction Housing with Emergency Battery and Remote Test Switch, 120/277V input (120V Triac/ELV/0-10V & 277V 0-10V dimming, Cobalt only - LE4EM required)

Example: **NHIC-27LMRAT** = 6" Shallow IC Air-Tight LED Dedicated New Construction Housing, 120/277V input