




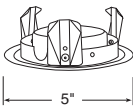

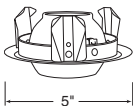

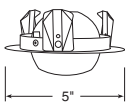

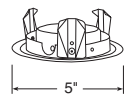

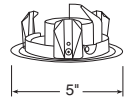

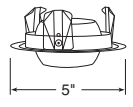
# 4" LINE VOLTAGE TRIM SERIES ADJUSTABLES

Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_













































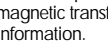
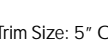
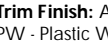
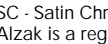

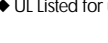
Trim Series	Dimensions	Aperture	Catalog No.	Housing/Lamp Compatibility
 <b>Flush Gimbal Ring</b>	 5"		<b>10-ABZ</b> - Classic Aged Bronze Trim <b>10-BL</b> - Black Trim <b>10-SC</b> - Satin Chrome Trim <b>10-WH</b> - White Trim	IC1P/TC1/TC1S/TC1R: 50W PAR20, 75W ES20 (Requires GU10-WHIP) APT1: 50W PAR20, 75W ES20 (Requires GU10-WHIP)
Adjustment: PAR20 = 25°, ES20 = 35°				
 <b>Mini Eyeball PAR16/R16</b>	 5"		<b>18-SC</b> - Satin Chrome Trim <b>18-WH</b> - White Trim	IC1/IC1W/IC1S/IC1P/TC1/TC1S/TC1R: 60W PAR16, 40W R16 APT1: 60W PAR16, 40W R16
Adjustment: 35° Vertical				
 <b>Mini Eyeball R16/R14 (Intermediate Base)</b>	 5"		<b>19-WH</b> - White Trim	IC1/IC1W/IC1S/IC1P/TC1/TC1S/TC1R: 25W R14, 40W R16 (Intermediate Screw Base) APT1: 40W R14, 40W R16 (Intermediate Screw Base)
Adjustment: 35° Vertical				
 <b>Flush Gimbal Ring</b>	 5"		<b>440-ABZ</b> - Classic Aged Bronze Trim <b>440-BL</b> - Black Trim <b>440-SC</b> - Satin Chrome Trim <b>440-WH</b> - White Trim	IC1/IC1W/IC1S: 35W MR16, 35W ES16 120V GU10 Base (Requires GU10-WHIP) IC1P/TC1/TC1S/TC1R: 50W MR16, 50W PAR16, 50W ES16 120V GU10 Base (Requires GU10-WHIP) APT1: 50W MR16, 50W PAR16, 50W ES16 GU10 (Requires GU10-WHIP)
Adjustment: 40° Vertical				
 <b>Adjustable Slot Aperture</b>	 5"	1 1/2" x 2 1/8" Oblong	<b>445-WH</b> - White Trim	IC1P: 50W MR16, 50W ES16 120V GU10 Base (Requires GU10-WHIP) TC1/TC1S/TC1R: 50W MR16, 50W PAR16, 50W ES16 120V GU10 Base (Requires GU10-WHIP) APT1: 50W MR16, 50W PAR16, 50W ES16 GU10 (Requires GU10-WHIP)
Adjustment: 40° Vertical				
 <b>Eyeball with Black Baffle</b>	 5"		<b>448-SC</b> - Satin Chrome Eyeball with Black Baffle, Satin Chrome Trim <b>448-WH</b> - White Eyeball with Black Baffle, White Trim	IC1/IC1W/IC1S: 35W MR16, 35W ES16 120V GU10 Base (Requires GU10-WHIP) IC1P: 50W MR16, 50W ES16 120V GU10 Base (Requires GU10-WHIP) TC1/TC1S/TC1R: 50W MR16, 50W PAR16, 50W ES16 120V GU10 Base (Requires GU10-WHIP) APT1: 50W MR16, 50W PAR16, 50W ES16 GU10 (Requires GU10-WHIP)
Adjustment: 35° Vertical				



# 4" LOW VOLTAGE UNIVERSAL TC REMODEL HOUSING

50W MR16  
TC44R

## TRIMS

Cat. No.	Description	Cat. No.	Description
 <b>442C-WH</b>	Deep Cone Downlight - Clear Alzak®	 <b>441W-WH</b> ◆	Adjustable Shower Trim, frosted lens with clear center
 <b>442G-WH</b>	Deep Cone Downlight - Gold Alzak®	 <b>441W-SC</b> ◆	35° Vertical Adjustment
 <b>442B-WH</b>	Deep Cone Downlight - Black Alzak®	 <b>441W-ABZ</b> ◆	
 <b>442HZ-WH</b>	Deep Cone Downlight - Haze	 <b>446-WH</b>	Scoop Adjustable 50° Vertical Adjustment
 <b>442WHZ-WH</b>	Deep Cone Downlight - Wheat Haze	 <b>4401-WH</b> ◆	Beveled Dome Shower
 <b>443B-WH</b>	Pinhole with Black Baffle Downlight	 <b>4401-SC</b> ◆	Beveled Dome Shower
 <b>440-WH</b>	Flush Gimbal Ring	 <b>4401-ABZ</b> ◆	Beveled Dome Shower
 <b>440-BL</b>	Flush Gimbal Ring	 <b>4402-WH</b> ◆	Beveled Adjustable Shower
 <b>440-SC</b>	Flush Gimbal Ring	 <b>4402-SC</b> ◆	Beveled Adjustable Shower
 <b>440-ABZ</b>	Flush Gimbal Ring 40° Vertical Adjustment	 <b>4402-ABZ</b> ◆	Beveled Adjustable Shower
 <b>444B-WH</b>	Downlight or Adjustable with Black Baffle	 <b>4403FROST-WH</b>	Beveled Adjustable Cylinder
 <b>444B-SC</b>	Downlight or Adjustable with Black Baffle	 <b>4403FROST-SC</b>	Beveled Adjustable Cylinder
 <b>444B-ABZ</b>	Downlight or Adjustable with Black Baffle	 <b>4404HZ-SC</b>	Beveled Adjustable Cone
 <b>444B-BL</b>	Downlight or Adjustable with Black Baffle	 <b>4404WHZ-ABZ</b>	Beveled Adjustable Cone
 <b>444W-WH</b>	Downlight or Adjustable with White Baffle 35° Vertical Adjustment	 <b>4450MESH-SC</b>	Cylinder
 <b>445-WH</b>	Slot Aperture Downlight or Adjustable 50° Vertical Adjustment	 <b>4480FROST</b>	Solid Glass Collar (torsion spring attachment)
 <b>447C-WH</b>	Downlight or Adjustable - Clear Alzak®	 <b>4481CLEAR</b> ◆	All Glass Shower (torsion spring attachment)
 <b>447G-WH</b>	Downlight or Adjustable - Gold Alzak®		
 <b>447B-WH</b>	Downlight or Adjustable - Black Alzak®		
 <b>447PT-SC</b>	Downlight or Adjustable - Pewter Alzak®		
 <b>447HZ-WH</b>	Downlight or Adjustable - Haze		
 <b>447WHZ-WH</b>	Downlight or Adjustable - Wheat Haze		
 <b>447WHZ-ABZ</b>	Downlight or Adjustable - Wheat Haze 35° Vertical Adjustment		
 <b>448-WH</b>	Eyeball with Black Baffle		
 <b>448-SC</b>	Eyeball with Black Baffle 35° Vertical Adjustment		
 <b>449-WH</b>	75° Vertical Aiming Adjustment		
 <b>449-BL</b>			
 <b>449-SC</b>			
 <b>449-ABZ</b>			
 <b>XR16101WH</b>	AVIO Square Gimbal Ring		
 <b>XR16101BL</b>	AVIO Square Gimbal Ring		
 <b>XR16101GP</b>	AVIO Square Gimbal Ring		
 <b>XR16101SL</b>	AVIO Square Gimbal Ring		

Note: Lamps may be dimmed. Use dimmers specifically designed for low voltage magnetic transformers; consult factory or dimmer manufacturer for additional information.

Trim Size: 5" O.D.

**Trim Finish:** ABZ - Classic Aged Bronze, BL - Black, GP - Graphite,

PW - Plastic White (Polycarbonate material shower trim),

SC - Satin Chrome, SL - Silver, WH - White.

Alzak is a registered trademark of Alcoa Corp.

◆ UL Listed for use in wet location.



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### Description

Non-IC rated, low voltage remodel housing for applications where the back side of the ceiling is not accessible • Designed to be installed in non-insulated areas, or where insulation is spaced at least 3" from housing

### Listings

UL Listed, C-UL/CSA certified for through-branch wiring, damp and wet locations • Wet location listed with trims 441, 4401, 4402 and 4481 • Conforms with City of Chicago IP requirements

### Features

- 4" Remodel housing
- Ceramic bi-pin socket with aluminum heat shield
- Remodel springs accommodate up to a 1 1/8" ceiling thickness
- Steel housing is fully assembled for ease of installation
- Includes 120V to 12V 50VA thermally protected magnetic transformer
- May be dimmed using dimmers specifically designed for magnetic transformers
- Pre-wired junction box with (3) 1/2" knockouts with pryout slots, (4) non-metallic sheathed cable connectors, and ground wire
- Shadow-free, knife-edge trim design blends smoothly into the ceiling and allows architectural continuity with Aculux® trims
- UL Listed, C-UL/CSA certified for through-branch wiring, maximum (4) #12 AWG minimum 90° C branch circuit conductors (2 in, 2 out)
- Thermally protected against improper use of lamps or insulation
- MR16 lamp wattage ratings based on trim selection on pages 28-30

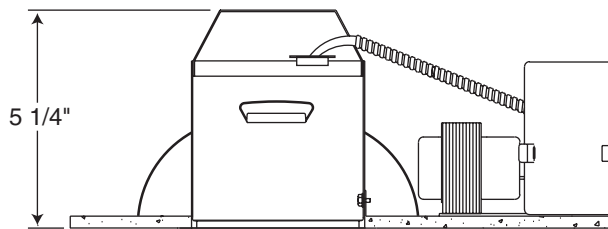
### Ordering Information

Catalog Number: **TC44R**

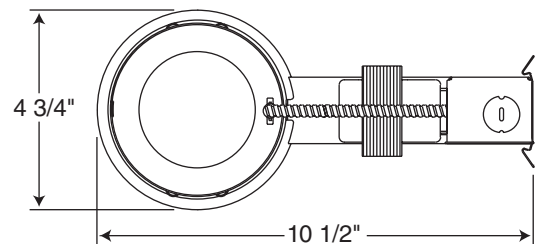
### Accessories

Catalog Number	Description
<b>SMPLT-4</b>	Galvanized steel plate for locating remodel style housings in new construction. Screw/nail holes for full coverage between 16" and 24" joists.

### Dimensions



4 3/8" Ceiling Cutout





# 4" LOW VOLTAGE UNIVERSAL TC REMODEL HOUSING

50W MR16  
TC44R

Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

## PRODUCT DESCRIPTION

TC Remodel Housing for remodel application where back side of ceiling is not accessible • Installs through an opening in the ceiling from below • Secured in place by factory installed remodel springs • Designed for use in non-insulated areas • If installed where insulation is present, the insulation must be pulled back 3" from all sides of the TC Housing.

## PRODUCT SPECIFICATIONS

**Lamp** One 12V, 50W MR16 lamp.

**Socket** Ceramic bi-pin socket with aluminum heat shield.

**Trims** Trim selection shown on reverse.

**Transformer** 120V to 12V 50VA thermally protected magnetic transformer mounted to junction box.

**Dimming** May be dimmed using dimmers specifically designed for low voltage magnetic transformers; consult factory or dimmer manufacturer for additional information.

**Labels** U.L. listed for through-branch wiring, damp locations and IP • Product thermally protected against improper use of lamps or insulation • Union made • UL Listed/CSA certified • Trim No. 441, 4401, 4402 and 4481 are wet location approved for covered ceiling applications.

**Testing** All reports are based on published industry procedures; field performance may differ from laboratory performance.

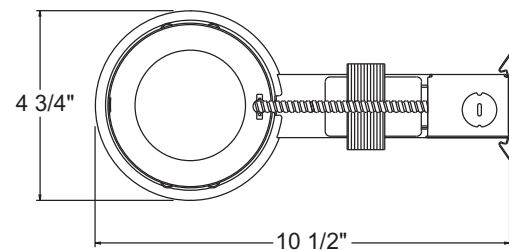
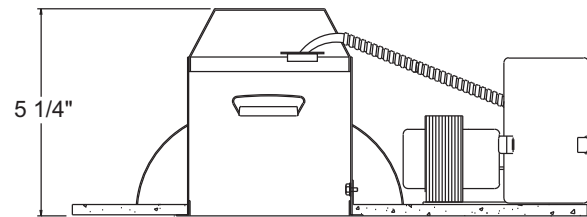
Product specifications subject to change without notice.

## INSTALLATION

**Junction Box** Pre-wired junction box, UL listed/CSA certified for through-branch wiring maximum 4 No. 12 AWG 90° C branch circuit conductors (2 in, 2 out) • Junction box provided with removable access plate, (4) 1/2" knockouts, (2) Non-metallic sheathed cable connectors and ground wire • Knockouts equipped with pryout slots.

**Housing** TC housing, 22 gauge galvanized steel • Remodel springs accommodate up to a 1 1/8" ceiling thickness.

## DIMENSIONS



4 3/8" CEILING CUTOUT

## ACCESSORIES

Catalog No.	Description
SMPLT-4	4" Housing Locator

To order, specify catalog number.

## PRODUCT CODES

Catalog Number	Input Voltage	Lamp Rating (max.)
TC44R	120V	12V 50W MR16

↑

**JUNO**  
**Remodel Housing**  
**4" Template & Installation Instructions**

1. Use disc as template to scribe circle on ceiling...  
CUT HOLE ACCURATELY ALONG SCRIBE  
LINE. HOLE DIAMETER SHOULD  
NOT EXCEED 4-3/8".

2. Provide electrical service through ceiling  
opening with flexible supply. Make  
electrical connections inside junction  
box through knockouts located on  
opposite side of supply entrance.

3. Insert housing into ceiling hole  
junction box first, pushing housing  
flush to ceiling. Release and then lock  
both spring clips into place. (Figure 1)

4. For TC44R fixture only: while  
continuing to hold housing against  
ceiling, tighten transformer  
plate screw. (Figure 2)

5. Install trim.

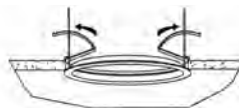


Figure 1

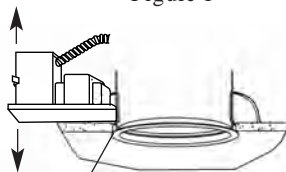


Figure 2

Screw Inside (TC44R)

MADE IN AMERICA  
**JUNO** lighting inc.  
P1987C

↓

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# JUNO® TYPE IC & TC REMODEL RECESSED HOUSING INSTALLATION INSTRUCTIONS

**WARNING:** For your safety, read and understand instructions completely before starting installation. Before wiring to power supply, turn off electricity at the fuse or circuit breaker box.

**NOTE:** Juno recessed fixtures are designed to meet the latest NEC requirements and are listed in full compliance with UL1571, 1570 or 1598. Before attempting installation of any recessed lighting fixture, check your local electrical building code. This code sets the wiring and installation requirements for your locality and should be understood before starting your work.

**NOTE:** Use of Non-Juno trims voids Juno warranty.

## TYPE TC & PL for Non-Insulated Ceilings

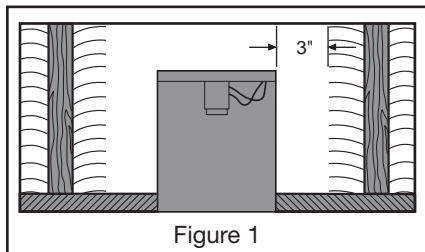


Figure 1

Juno Type TC & PL fixtures are designed for installations where housing and J-Box will not come into contact with insulation. Insulation must be spaced 3" away from the housing and J-Box (Fig. 1)\*. Blinking light after installation indicates that improper bulb or trim is being used or that fixture has been improperly covered with insulation.

## TYPE IC for Insulated Ceilings

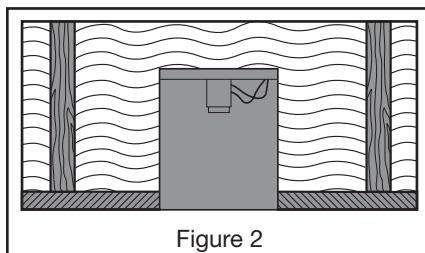


Figure 2

Juno Type IC fixtures are designed for direct contact with insulating materials which are approved for this application (Fig. 2). Blinking light after installation indicates that improper bulb or trim is being used.

Use Juno Air-Loc Gaskets or Air-Loc Rated Trims with Juno IC housings for additional energy savings and to comply with Washington State and other energy codes.

*\*In Canada, when insulation is present, Type IC fixtures must be used.*

## Installation Steps

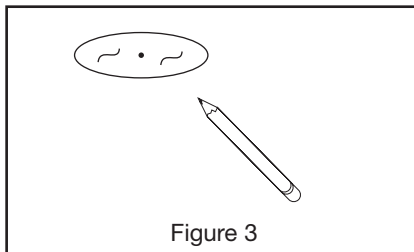


Figure 3

**Step 1.** Locate center of proposed opening on ceiling and use template to mark and accurately cut a 4-3/8" (for 4" housings), 5-1/2" (for 5" housings) or a 6-5/8" (for 6" housings) opening. For sloped ceiling housings, an oval hole template is provided. (Fig. 3).

**Step 2.** Follow steps 1-4 under electrical connection.

**Step 3.** Press housing through ceiling opening so it is flush to ceiling (Fig. 4). Push retention clips outwards until each clip tab clicks into position. On some housings, a single "T" slot clip is provided for additional support. Insert clip through "T" slot from inside housing, force clip down with screwdriver until clip is seated. Secure clip by tightening screw. (Fig. 5).

*(Note: To remove housing from ceiling, push tab on clip upward to disengage).*

**Step 4.** Install trim using coil, leaf, torsion, or push-in springs as provided (Fig. 6). Remove socket paint protector cover and install proper lamp (light bulb) as listed on housing label.

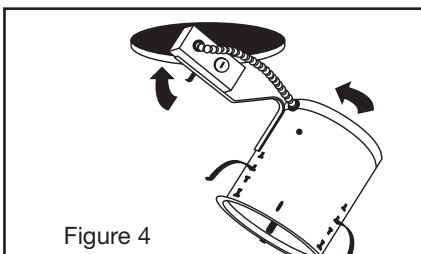


Figure 4

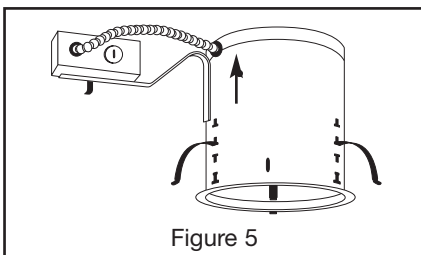


Figure 5

## Electrical Connection Instructions

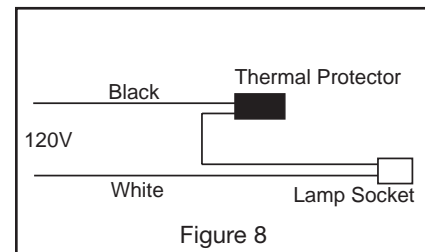


Figure 8

**Step 1.** Provide electrical service according to your local electrical code to the wiring box located on the remodel housing. Supply wire insulation must be rated for at least 90°C.

**Step 2.** Remove wiring box cover. Remove the appropriate knock-out to connect flexible metal conduit or non-metallic cable to wiring box with proper connectors (by others) (Fig. 7).

**Step 3.** Connect supply wires to fixture wires with proper size wire nuts (not supplied), so as to cover all bare current-carrying conductors. Connect black fixture wire to hot, white fixture wire to neutral and green fixture wire to ground (Fig. 8).

**Step 4.** Place all wiring and connections back in wiring box and replace cover.

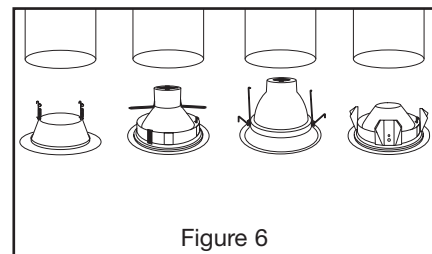


Figure 6

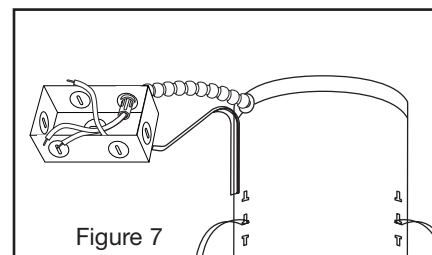


Figure 7



# INSTALACIÓN DE LA CAJA EMPOTRADA TIPO IC Y TC REMODEL DE JUNO®

**ADVERTENCIA:** Para su seguridad, lea y entienda completamente las instrucciones antes de comenzar la instalación. Antes de hacer las conexiones al suministro eléctrico, interrumpa la electricidad en la caja de fusibles o del disyuntor.

**NOTA:** Los portalámparas empotrados de Juno están diseñados para cumplir con los requisitos más recientes de NEC y CEC, están listados por UL y certificados por CSA en cumplimiento con UL1598. Antes de intentar la instalación de cualquier portalámpara empotrado, consulte el código eléctrico local. Este código establece las normas sobre conexiones eléctricas en su localidad, y debe estudiar detenidamente estas normas antes de iniciar su trabajo. Si tiene dudas sobre el código o sobre cualquier otro aspecto de la instalación del producto, consulte a un electricista autorizado.

**NOTA:** El uso de rebordes que no sean marca Juno anulará la garantía de Juno.

**NOTA SOBRE REDUCTORES DE INTENSIDAD:** Los portalámparas IC44R de bajo voltaje requieren el uso de reductores de intensidad específicamente diseñados para usarse con transformadores magnéticos. El uso de un reductor de intensidad inadecuado puede dañar el transformador y/o el reductor. Consulte las instrucciones del fabricante del reductor de intensidad para ver las recomendaciones al respecto. No se puede reducir la intensidad de los portalámparas fluorescentes compactos PL801R y PL802RE.

## TIPO TC y PL para cielo raso no aislado

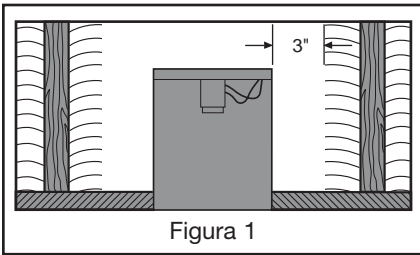


Figura 1

Los portalámparas tipo TC y PL de Juno están diseñados para instalaciones en las que la caja no entra en contacto con el aislamiento. La caja debe estar a una distancia de 3" del aislamiento y a una distancia de 1/2" de materiales de construcción combustibles (fig. 1)\*. Una luz parpadeante después de la instalación puede indicar que se está usando una lámpara inadecuada, o que el portalámpara se instaló incorrectamente en el aislamiento o de manera que está atrapando el calor. El uso de rebordes que no sean marca Juno anulará la garantía de Juno.

## TIPO IC para cielo raso aislado

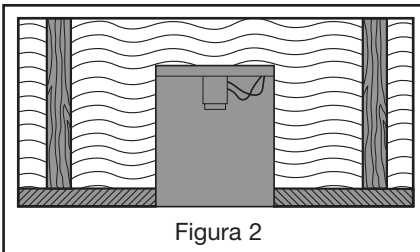


Figura 2

Los portalámparas tipo IC de Juno están diseñados para que puedan ponerse en contacto directo con materiales de aislamiento aprobados para esta aplicación (fig. 2). Una luz parpadeante después de la instalación puede indicar que se está usando una lámpara inadecuada, o que existen otras condiciones que están causando un calentamiento excesivo. El uso de rebordes que no sean marca Juno anulará la garantía de Juno.

\*En Canada insulación no se puede sacar de la caja.

## Pasos de la instalación

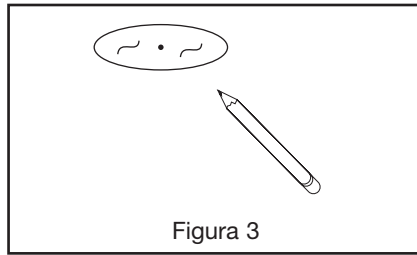


Figura 3

**Paso 1.** Ubique el centro de la abertura propuesta en el cielo raso y use la plantilla para marcar y hacer exactamente una abertura de 4-3/8" (para cajas de 4"), de 5-1/2" (para cajas de 5") o de 6-3/4" (para cajas de 6") de diámetro. Para cajas que se van a instalar en cielo raso inclinado se proporciona una plantilla con un orificio ovalado y las instrucciones correspondientes (fig. 3).

**Paso 2.** Siga los pasos del 1 al 4 de las instrucciones para la conexión eléctrica.

**Paso 3.** Instale la caja a través de la abertura del cielo raso, de manera que quede a ras del cielo raso (fig. 4). Empuje los clips de retención hacia afuera hasta que la aleta de cada clip se conecte a presión en su lugar. En algunas cajas, un solo clip de la ranura de "T" se proporciona para ayuda adicional. Inserte el clip a través de la ranura de "T" por dentro de la caja, forsa el clip hacia abajo con el destornillador hasta que se asienta el clip. Asegure el clip apretando el tornillo (fig. 5).

(Nota: Para quitar la caja del cielo raso, empuje la aleta del clip hacia arriba a fin de des conectarla.)

**Paso 4.** Instale el reborde usando resortes helicoidales, de torsión o de lámina flexible, según se indique (fig. 6). Quite la cubierta protectora azul de la pintura del enchufe e instale la lámpara adecuada según se indica en la etiqueta de la caja.

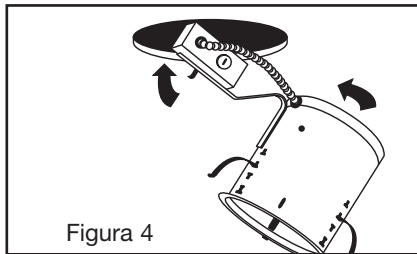


Figura 4

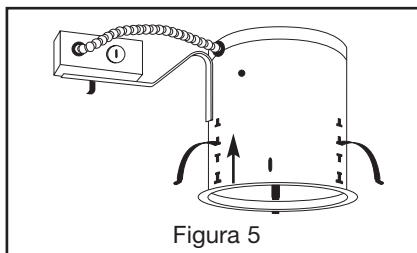


Figura 5

## Instrucciones para la conexión eléctrica

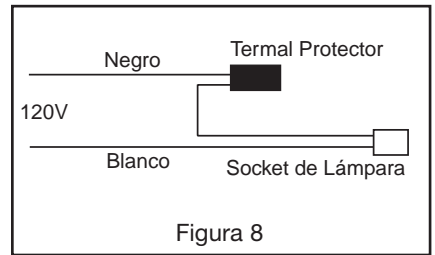


Figura 8

**Paso 1.** Proporcione servicio eléctrico, de acuerdo con el "Código Eléctrico Nacional" o el código eléctrico local, a la caja de conexiones que se encuentra ubicada en la caja de remodelación. El aislamiento del hilo del suministro eléctrico debe estar clasificado al menos para 90 °C.

**Paso 2.** Quite la cubierta de la caja de conexiones (fig. 7). Quite el agujero ciego apropiado para conectar el conducto metálico flexible o el cable no metálico en la caja de conexiones con los conectores adecuados (de otros fabricantes).

**Paso 3.** Conecte los hilos del suministro eléctrico con los hilos del portalámpara utilizando tuercas para hilos del tamaño adecuado (de otros fabricantes), a fin de cubrir todos los conductores activos expuestos. Conecte el cable blanco con el blanco, el negro con el negro y el verde con el verde (fig. 8).

**Paso 4.** Coloque todos los cables y conexiones en la caja de conexiones y vuelva a colocar la cubierta.

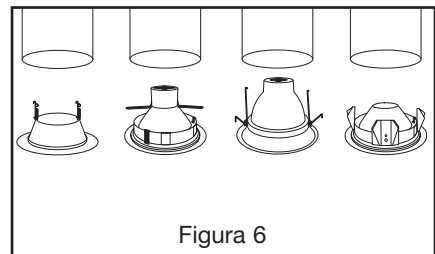


Figura 6

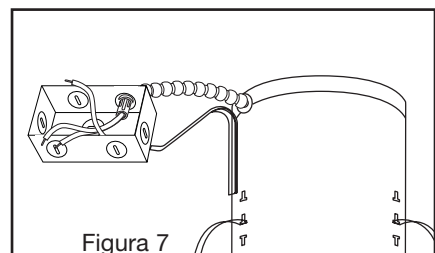


Figura 7

