



Walker® Infloor Systems

# RC3 Fire Rated Poke-Thru Series

## INSTALLATION INSTRUCTIONS

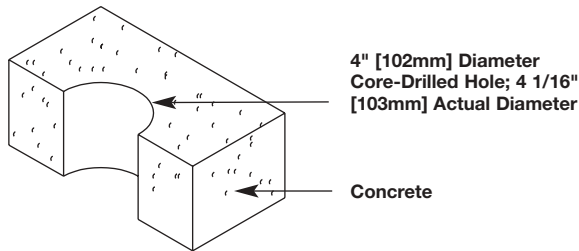
Walker® electrical systems conform to and should be properly grounded in compliance with requirements of the current National Electrical Code or codes administered by local authorities.

All electrical products may present a possible shock or fire hazard if improperly installed or used. Walker electrical products bear the mark as UL Listed and/or Classified and should be installed in conformance with current local and/or the National Electrical Code. Look for listing and/or classification mark on product label.

### IMPORTANT – PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING.

Products Covered: RC3S, RC3C20, RC3C15, RC3A20A, RC3CRT, RC3ART, and RC3G

#### Step 1: Core drilling of hole.



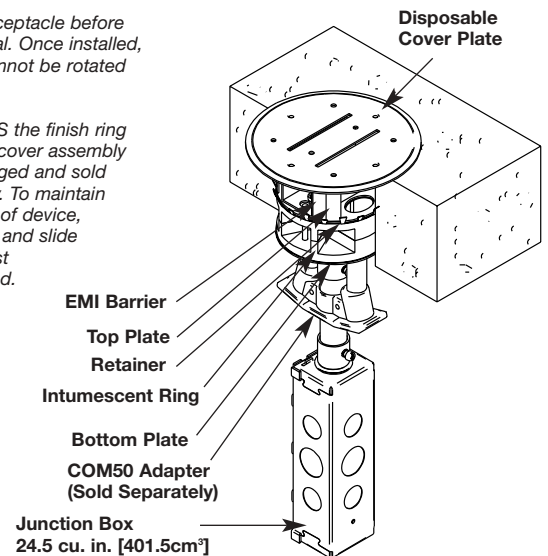
**CAUTION:** Holes shall be spaced a minimum of 2' [610mm] on center and not more than one hole per each 65 sq. ft. [5.9 sq.m] of floor area in each span.

#### Step 2: Insertion of Poke-Thru into Core-Drilled Hole.

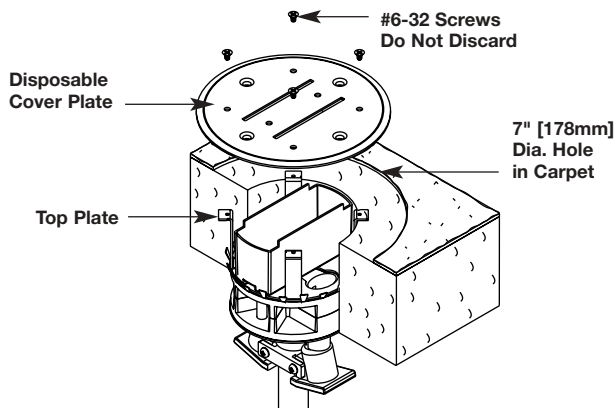
Insert prewired assembly into hole and push down until disposable cover plate or finish ring completely seats onto concrete.

**NOTE:** Orientation of receptacle before insertion is critical. Once installed, the poke-thru cannot be rotated for adjustment.

**IMPORTANT:** With RC3S the finish ring and slide cover assembly are packaged and sold separately. To maintain fire rating of device, finish ring and slide cover must be installed.

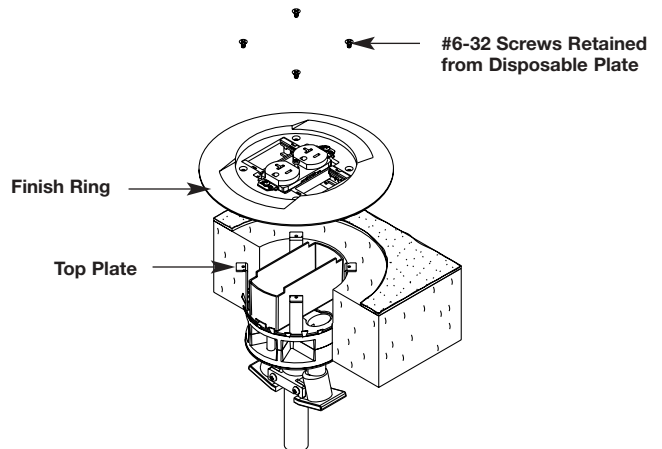


#### Step 3: Remove Disposable Cover Plate (RC3S):



#### Step 4: Install Finish Ring:

Using four #6-32 screws, install ring and push down so that ring compresses floor covering.



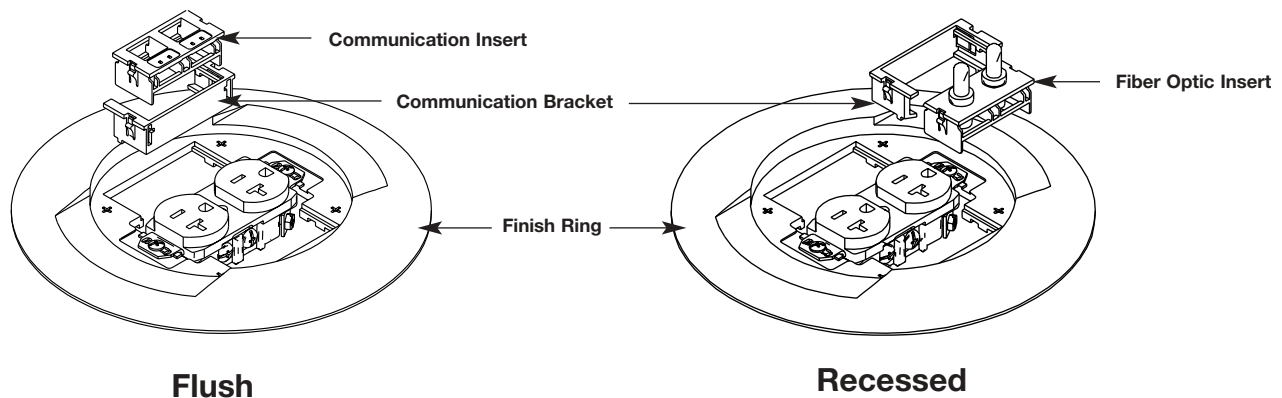
## Communications Installation:

**Option 1:** For catalog numbers RC3ART and RC3CRT – Four Ortronics® TracJack® Category 5e modular inserts (OR-63750001-00), four TracJack blanks (OR-4210001-00), two TracJack and two Series II bezels included. Series II modular inserts are sold separately.

**Option 2:** For catalog numbers RC3A and RC3C – Two dual port Keystone jack inserts (CM2-U2KEY-BK), and two dual port Lucent jack inserts (CM2-U2ATT-BK), two Pass & Seymour Activate™ dual Category 5e inserts also included along with corresponding bezels.

### Step 5A: Installing Communication Modules

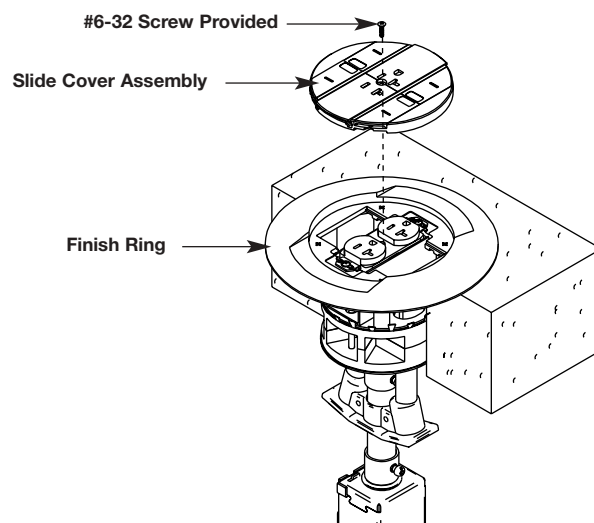
If slide cover is in place, remove it. Pull communication wires through poke-thru device and wire to communication inserts. Snap communication insert and bracket down into the finish ring with open side facing the outside of the hole. Attach slide cover assembly with the #6-32 screw provided. Data jacks may be labeled with the icon labels provided.



**NOTE:** Slide recessed module into lower part of communication bracket as shown before placing in finish ring.

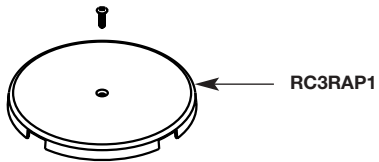
### Step 6: Install Slide Cover Assembly:

Seat slide cover assembly on finish ring so that slide covers are aligned with cutouts in finish ring. Make sure receptacle slides match up with receptacle face. Attach with #6-32 screw provided.

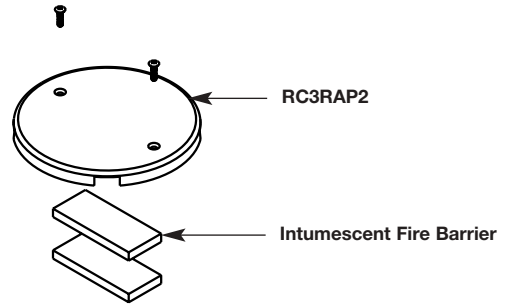


## Abandonment Options: RC3RAP1 and RC3RAP2

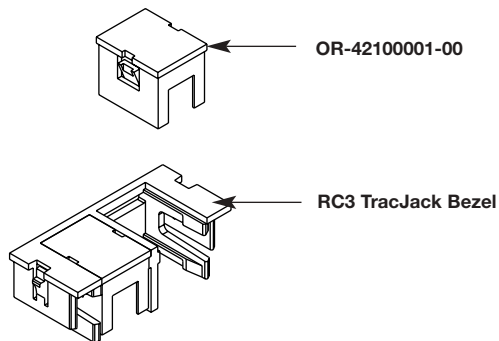
**Step 7A: To Abandon With Receptacle In Place:**  
Remove slide cover. Attach RC3RAP1 Abandonment Plate with the #6-32 screw.



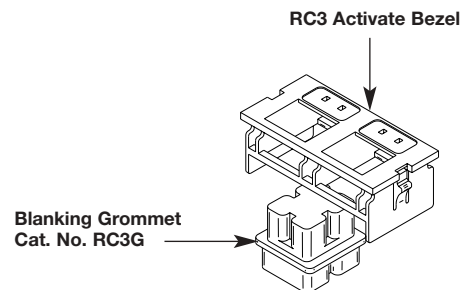
**Step 7B: To Abandon Without Receptacle In Place:**  
Remove slide cover. Place intumescent fire barriers inside receptacle housing. Attach RC3RAP2 Abandonment Plate with screws provided.



**Step 7C:** Four blanking grommets are provided. To maintain the fire rating of device, a blanking grommet must be inserted when a communication jack is not installed.



**OR**



**The RC3 Series Poke-Thru Device is UL Listed and Classified to U.S. and Canadian safety standards to the following conditions:**

The RC3S Poke-Thru Stem with the RC3S Service Head Fitting, the RC3A factory assembled poke-thru device, and the RC3RAP1, RC3RAP2 Abandonment Fitting are for use with 1-, 1 1/2-, or 2-hour rated unprotected, reinforced concrete floors and 1-, 1 1/2-, or 2-hour rated floors employing unprotected steel floor units and concrete topping (D900 Series Designs), or concrete floors with suspended ceilings. (Fire resistive designs with suspended ceilings should have provisions for accessibility in the ceiling area below the poke-thru fittings).

The assembled poke-thru stem and the service fitting or the abandonment fitting will not reduce the ratings of the floor assembly when the thickness and type of concrete (required for the specific rating) are within the specified limits and the fittings are installed as specified:

1. **Spacing** – Minimum of 2' [610mm] OC and not more than one unit per 65 sq. ft. [5.9 sq. m] of floor area in each span.
2. **Concrete** – Minimum thickness of structural concrete topping of 2 1/4" [57mm] over metal deck or a minimum 3" [76mm] thick reinforced concrete slab. Unit weight of concrete to be 110 to 155 pcf.
3. **Installation** – Mounted in a 4" [102mm] diameter core-drilled hole in concrete per installation instructions accompanying the fittings or abandonment fittings. For use with power circuits, data and/or telephone cables as tabulated below:

POKE-THRU FITTING TYPE	SERVICE FITTING TYPE	POWER CONDUCTORS (A)	COMMUNICATION CONDUCTORS (B)
RC3A	–	3 (.01536 sq in.) [9.9103mm <sup>2</sup> ]	32 (.01600 sq. in.) [.10323cm <sup>2</sup> ]
RC3S	RC3C	3 (.01536 sq in.) [9.9103mm <sup>2</sup> ]	32 (.01600 sq. in.) [.10323cm <sup>2</sup> ]

(A) Maximum number of No. 12 AWG Type THHN conductors in power compartment of poke-thru fitting.

(B) Maximum number of 22 AWG conductors in low voltage compartment of poke-thru fitting (4-pair cables have (8) conductors). When conductors larger than No. 22 AWG are used, the aggregate cross-sectional area of the copper conductors shall not exceed the aggregate cross-sectional area of the 22 AWG conductors permitted in the low voltage compartment.

Copper Cross Sectional Area of Commonly Used Conductors	
Size	Solid
#24	.00032 sq. in. [.20645mm <sup>2</sup> ]
#22	.00050 sq. in. [.32258mm <sup>2</sup> ]
#14	.00323 sq. in. [2.08387mm <sup>2</sup> ]
#12	.00512 sq. in. [3.30321mm <sup>2</sup> ]
#10	.00815 sq. in. [5.25805mm <sup>2</sup> ]
# 8	.01296 sq. in. [8.36127mm <sup>2</sup> ]

**NOTE:** Use above values for solid or stranded conductors.

**For use on carpet covered floors only.**

**Replacement receptacles are limited to the following:**

Pass & Seymour 5252, 5352, BR15, IG6200, and IG6300, or Leviton 5262, 5362 only.  
Must remove plaster ears and center the receptacle across the mounting holes.



**Walker Systems, Inc.**

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