



**Walker® Infloor Systems**

# RC7AFF1TC Poke-Thru Series INSTALLATION INSTRUCTIONS

Installation Instruction No.: 1 003 355 – February 2003

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 may bear the mark as UL Listed and/or Classified and should be installed in conformance with current local and/or the National Electrical Code.

**IMPORTANT: Please read all instructions before beginning.**

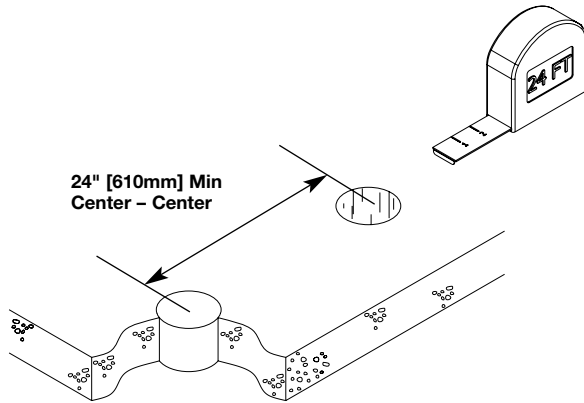
Products Covered: RC7AFF1TC & RC7AFF1TCLJB

**CAUTION** DO NOT operate tile stripper or resurfacing equipment over top of covers. This may result in damage to the surface finish of the product.

Suitable for use in air handling spaces in accordance with Sec. 300-22 (C) of the National Electric Code.

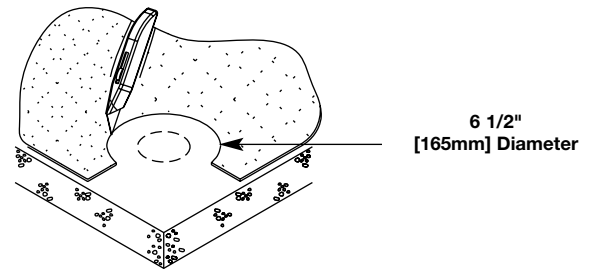
## Step 1 Layout and locate position of hole(s).

**CAUTION:** Holes shall be spaced a minimum of 2' [610mm] on center and not more than one hole per each 65 sq. ft. [6 sq. m] of floor area in each span.



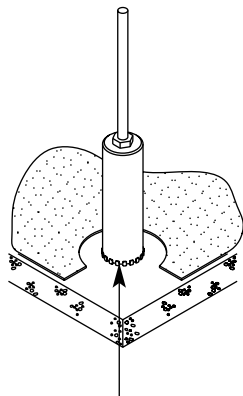
**CAUTION:** Be certain to drill hole at least 4" [102mm] from any wall or pillar to leave enough room for poke-thru cover assembly.

## Step 2 Remove 6 1/2" [165mm] section from carpet or tile. Use template provided.



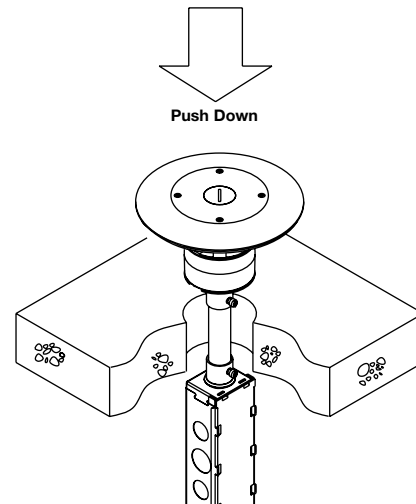
**CAUTION:** For tile thickness greater than 3/4" [19.1mm] consult factory.

## Step 3 Core drill hole.



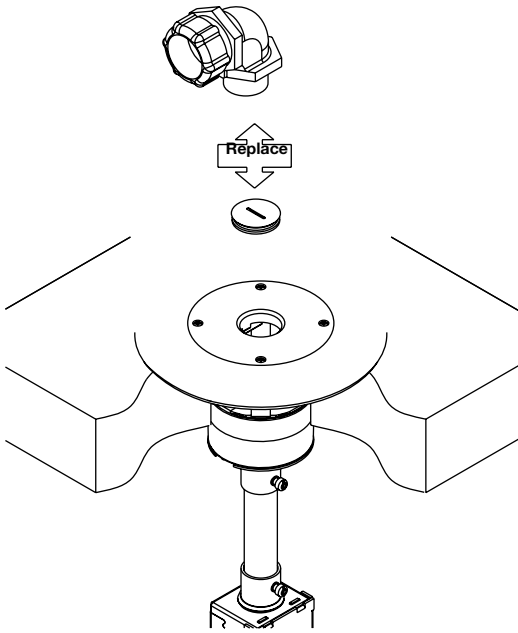
3" [76mm] Diameter Core Drill  
3 1/16" [78mm] Actual Diameter

## Step 4 Insert assembly into hole.

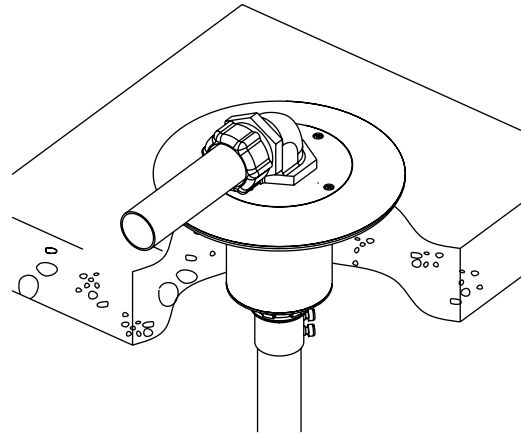


**CAUTION:** Poke-Thru cannot be rotated in hole after insertion into the floor.

**Step 5** Remove screw plug and replace with a 1" trade size conduit connector.



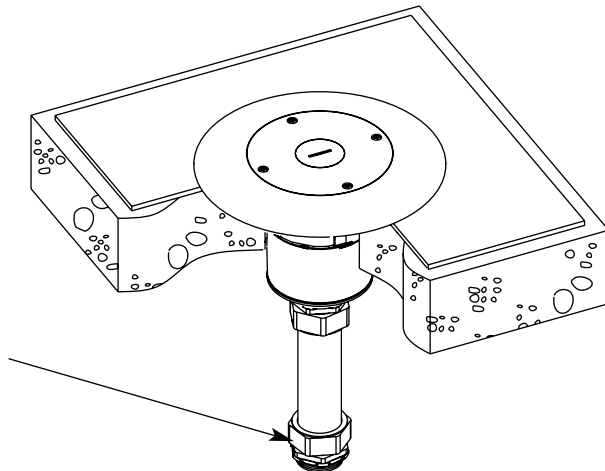
**Step 6** Attach conduit, pull wires and the installation is complete.



**RC7AFF1TCLJB Poke-Thru**

(Applies to installations in the City of Chicago or other locations where local codes require the use of EMT compression fittings, and a junction box suitable for use in environmental air spaces.)

**Step 7.** Follow steps 1 through 6 for installation.



Once unit is Pushed into the Cored Hole, from Below, Install an EMT Compression Fitting (Not Supplied) and Junction Box (Not Supplied) to the Conduit System. Complete Installation Per NEC and Local Codes.

**The RC7AFF1TC Series Poke-Thru Devices are UL Listed and Classified to U.S. and Canadian safety standards to the following conditions:**

The RC7AFF1TC factory assembled poke-thru devices are for use with 1, 1-1/2-, 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 service 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 ft OC and not more than 1 unit per 65 sq ft of floor area in each span.
2. – **Concrete** – Minimum thickness of structural concrete topping of 2-1/4 in. over metal deck or a minimum 3 in. thick reinforced concrete slab. Unit weight of concrete to be 110 to 155 pcf.
3. – **Installation** – Mounted in a 3 in. diameter core-drilled hole in concrete per installation instructions accompanying the fittings or abandonment fittings. For use with power circuits, date and/or maximum 25 pair size telephone cables as tabulated below:

<b>POKE-THRU FITTING TYPE</b>	<b>POWER CONDUCTORS (A)</b>	<b>COMMUNICATION CONDUCTORS (B)</b>
RC7AFF1TC (Power only)	15 (.07680 sq in.) [49.548mm <sup>2</sup> ]	–
RC7AFF1TC (Communication only)	–	152 (.07600sq. in.) [49.032mm <sup>2</sup> ]

The “TC” suffix letters indicate that device may be installed on tile or carpet covered concrete floors. The “LJB” suffix letters indicate units supplied with a compression type EMT fitting.

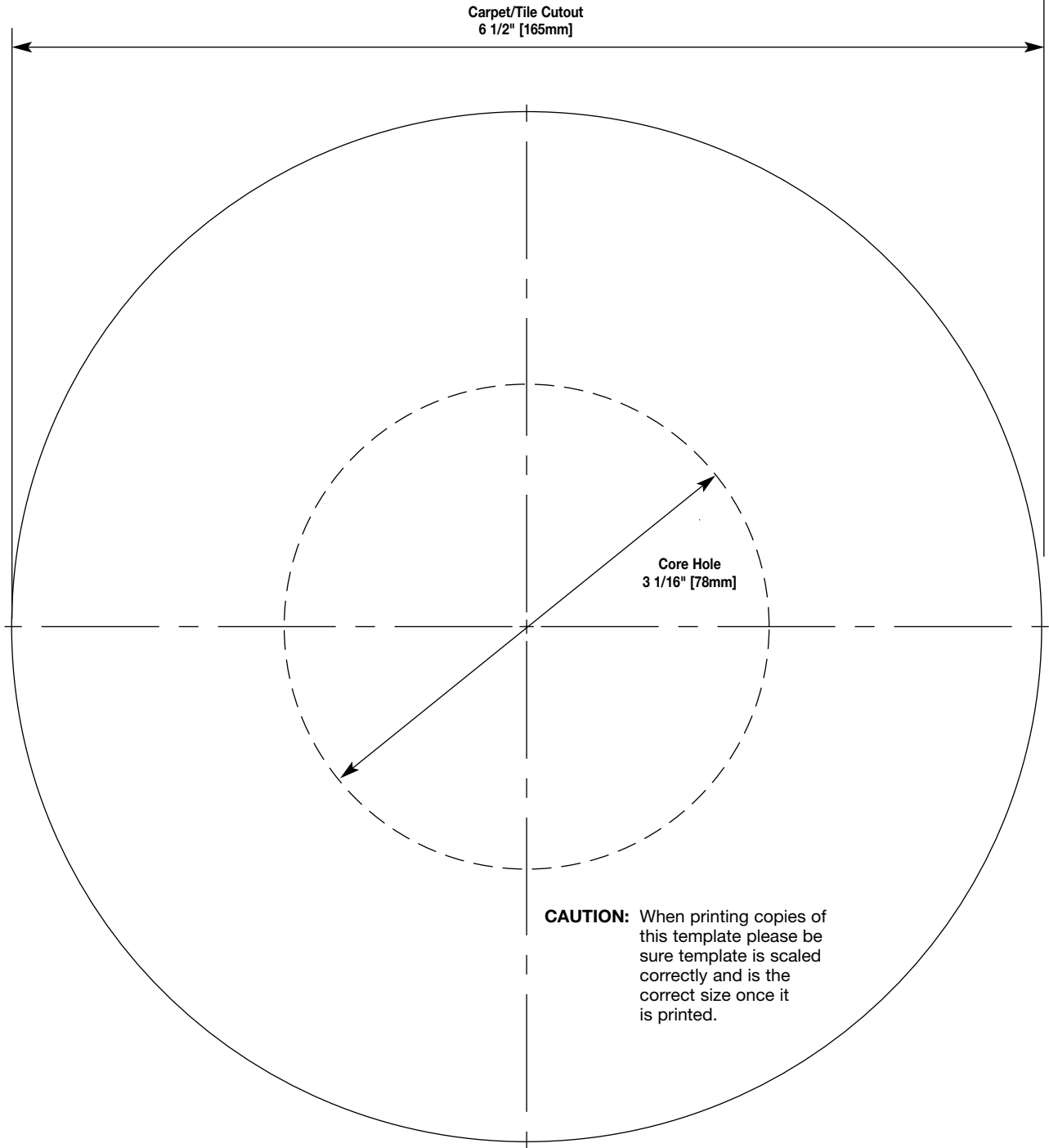
- (a) Maximum number of No. 12 AWG Type THHN conductors in power compartment of poke-thru fitting.
- (b) Maximum number of 22 AWG conductors in low-voltage compartment of poke-thru fitting (4 pair cables have 8 conductors, 25 pair cables have 50 conductors). When conductors larger than No. 22 AWG are 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.

<b>COPPER CROSS SECTIONAL AREA OF COMMONLY USED CONDUCTORS</b>	
<b>Size</b>	<b>Solid</b>
#24	.00032 sq. in. [.20645mm <sup>2</sup> ]
#22	.00050 sq. in. [.32258mm <sup>2</sup> ]
#14	.00323 sq. in. [2.08386mm <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.

**FLOOR COVERINGS:** The poke-thru device is fire rated for carpet or wood covered floors, tile floor coverings up to 3/4” [19.1 mm] maximum thickness, and linoleum floor coverings up to a maximum 1/8” [3.2 mm] thickness. For other floor coverings not listed above, consult factory.

# Carpet/Tile Cutout Template



## The Wiremold Company

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