



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.

## INSTALLATION INSTRUCTIONS

Installation Instruction No.: 1 003 615 – October 2003

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

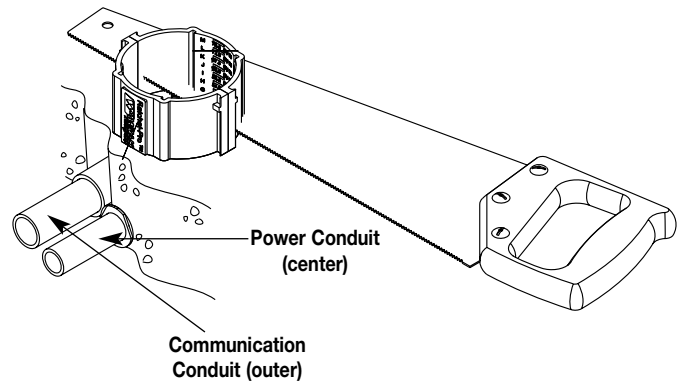
**Products Covered:** 881RC4ATC, 881RC4ARTTC

### Step 1 Determine Floor Covering Thickness.

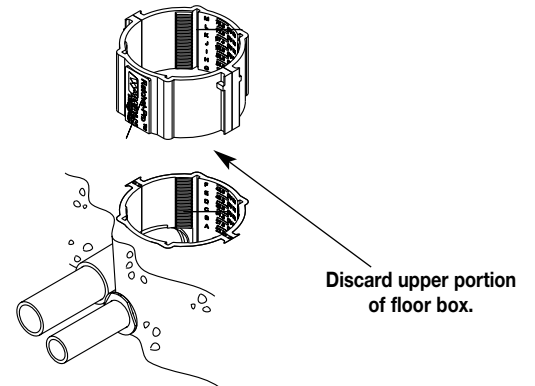
**For Floor Covering less than 3/8" [10mm] thick (carpet or tile):** Cut top of box off flush with concrete surface.

**For Floor Covering greater than 3/8" [10mm] thick but less than 3/4" [19mm] (carpet or tile):** Allow equivalent portion of box (floor covering thickness minus 3/8" [10mm]) to extend above concrete surface.

**For use with no Floor Covering or floor covering greater than 3/4" [19mm] thick (carpet or tile):** Consult factory.



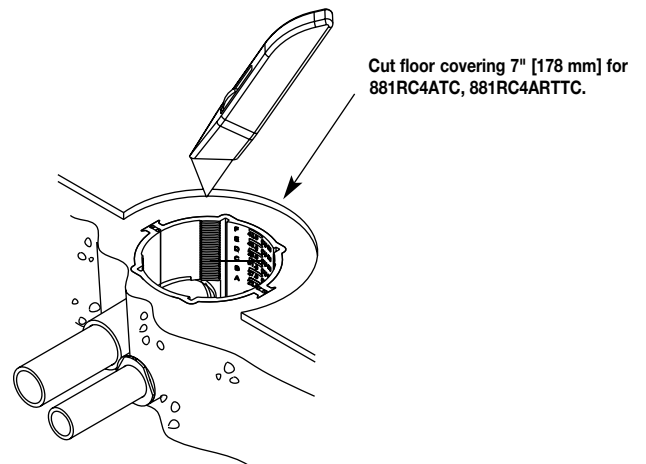
### Step 2 Remove top.



### Step 3 Install floor covering.

Cut circular opening concentric with exposed floor box opening. Use template on back page.

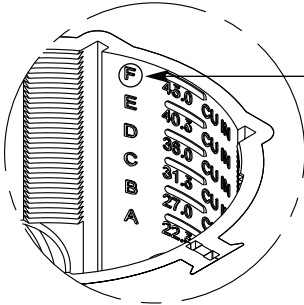
Cat. No. 881RC4ATC, 881RC4ARTTC requires a 7" [178 mm] opening.



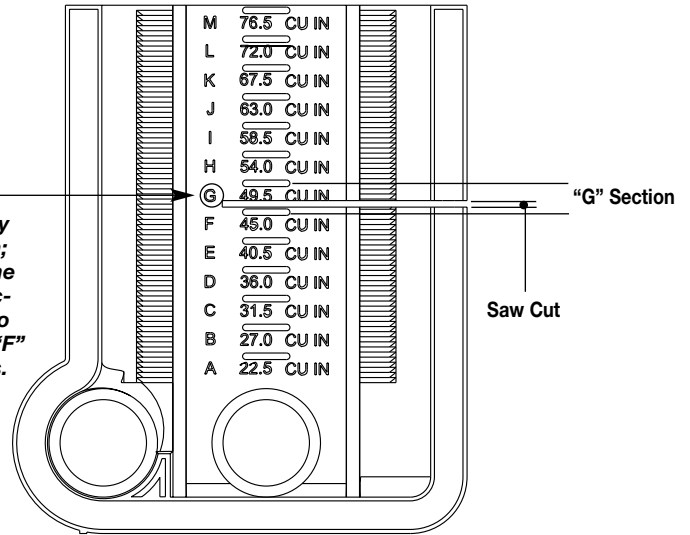
**Step 4** Determine box height to calculate barrier score line.

Determine the letter of the highest uncut section remaining in the box sidewall after the upper section is cut away. If any portion of the box extends above the highest graduation mark, make calculations based on the letter that appears below it.

**CAUTION:** A portion of a letter may be visible in a partial section. Ignore letters in incomplete sections. Note the example shown.

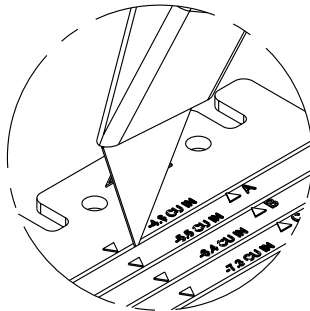
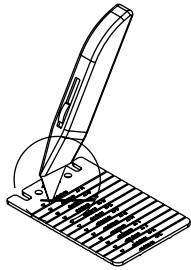


**EXAMPLE:** The box is actually cut in "G" section; however, "F" is the highest uncut section. Cut barrier to length based on "F" section directions.



**Step 5** Cut divider at required score line.  
See cross-reference chart at right.

**EXAMPLE:** "F" cut in box requires divider to be cut on "A" score line.

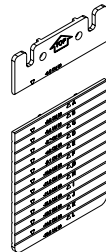


Example shown →

BARRIER HEIGHT CROSS REFERENCE CHART	
BOX LETTER (section between Graduations)	CUT DIVIDER AT THIS LETTER
M (not cut)	H
L	G
K	F
J	E
I	D
H	C
G	B
<b>F</b>	<b>A</b>
E	
D	<i>Do not use in concrete pours less than 4" [102mm].</i>
C	
B	
A	

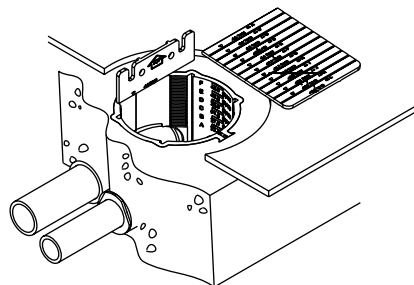
Actual distance between top of box (after removing excess top) and top of divider is 2-3/8" [60 mm]. If uncertain where to cut divider for regions between letters (through horizontal bar), Cut divider to measure a minimum of 2-3/8" below floor level. Can be slightly less if thick floor covering is used.

**Step 6** Separate barrier.



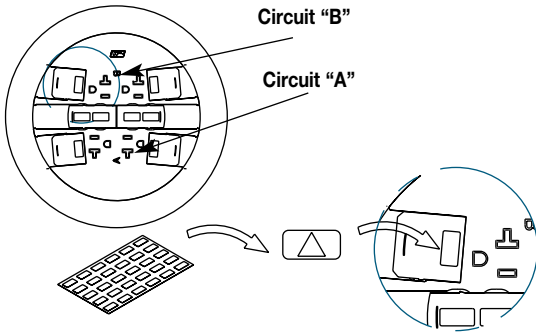
Discard lower portion

**Step 7** Insert upper portion of barrier in floor box adjacent to outer (communication) conduit.

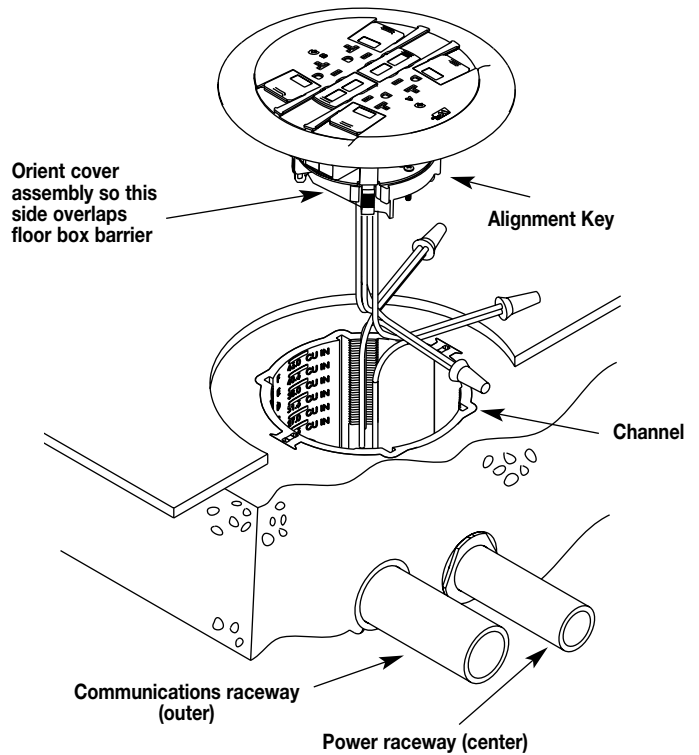


**Step 8** Power Activation  
 Cat. No. 881RC4 This activation is pre-wired. Connect receptacle leads to circuit conductors with wire nuts or other approved methods.

Wire according to required configuration. See schematic below. If circuit is connected to an isolated ground, apply IG icon on receptacle slide as shown.



**NOTE:** The orange triangle shall only be placed on devices that are wired for isolated ground. See NEC 250-146(d).



## Electrical Connections

CONVENTIONAL WIRING SCHEMATIC		ISOLATED GROUND WIRING SCHEMATIC CIRCUIT A		ISOLATED GROUND WIRING SCHEMATIC CIRCUIT B	
<b>BLACK or HOT</b> From branch circuit	<b>BLACK</b> from receptacle	<b>BLACK or HOT</b> From branch circuit	<b>BLACK</b> from activation receptacle	<b>BLACK or HOT</b> From branch circuit	<b>RED</b> from activation receptacle
<b>WHITE or NEUTRAL</b> From branch circuit	<b>WHITE</b> from receptacle	<b>WHITE or NEUTRAL</b> From branch circuit	<b>WHITE</b> from activation receptacle	<b>WHITE or NEUTRAL</b> From branch circuit	<b>WHITE w/ BLUE STRIPE</b> from activation receptacle
<b>GREEN or GROUND</b> From branch circuit	<b>GREEN</b> from receptacle	<b>ISOLATED GROUND</b> From branch circuit	<b>GREEN</b> from activation receptacle	<b>ISOLATED GROUND</b> From branch circuit	<b>GREEN w/YELLOW STRIPE</b> from activation receptacle
<b>System Ground</b>	<b>GREEN</b> equipment ground from receptacle	<b>GREEN or GROUND</b> From branch circuit	<b>GREEN (jumper wire)</b> equipment ground from activation	<b>GREEN or GROUND</b> From branch circuit	<b>GREEN (jumper wire)</b> equipment ground from activation
		<b>System Ground</b>		<b>System Ground</b>	

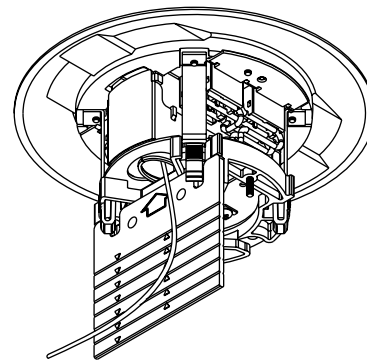
**WARNING:** Ground wire from activation body must be connected to SYSTEM GROUND.

**Step 9** Insert cover assembly into floor box opening. No glue required.

Orient alignment keys to adapter with channels in floor box and push downward. Cover assembly is secured in place with ratchet fingers.

**CAUTION:** Opening on side of adapter must be positioned directly over the divided side of the floor box. This will allow the divider and adapter to overlap, maintaining passage of communication wiring and separation of services.

**Step 10** Pull communication cable through opening in bottom of activation then through cover as shown.

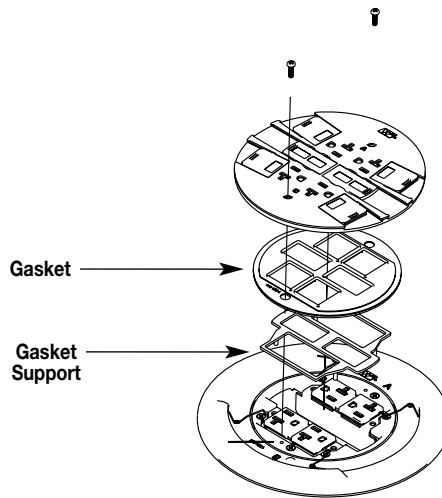


**CAUTION:** Receptacle mounting means not grounded. Grounding wire connection required. For isolated ground wiring, connect ground leads to a separate isolated grounding conductor. See NEC 250-146(d).

**Step 11** Remove slide cover to access communication raceway.

**CAUTION:** De-energize circuit if activated.

**NOTE:** GASKET AND GASKET SUPPORT MUST BE REMOVED BEFORE WIRING DATA CONNECTIONS



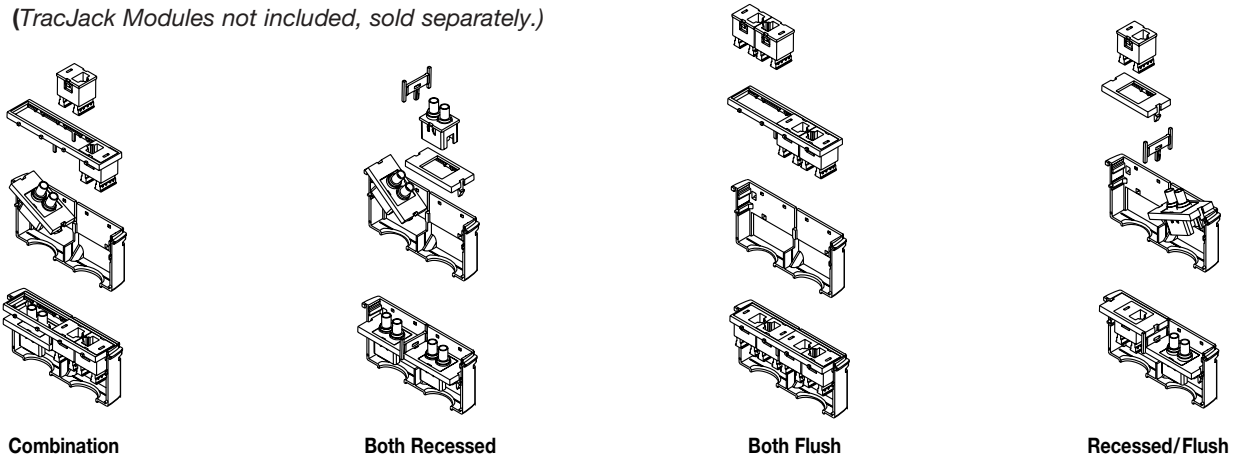
**Step 12 COMMUNICATION CIRCUIT CONNECTIONS**

Wire communication devices per instructions provided with product. Mount in poke thru per illustrations shown below. Communication inserts may be mounted either flush or recessed. Some inserts, such as fiber optic, must be mounted recessed in order for slides to close properly.

**NOTE:** To maintain UL Fire Classification, all communication modules or blank inserts (factory or customer supplied) must be UL Listed Communication Circuit Accessories, and must fit securely in the supplied communication bracket or housing with no visible openings between the modules and bracket/housing. Supplied foam plugs must be used when passing cables through the communication openings.

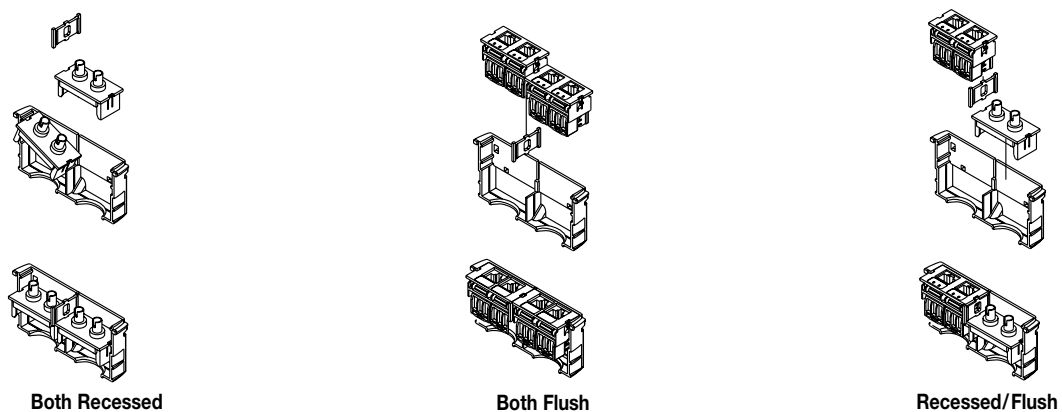
**Ortronics TracJack Installation**

*(TracJack Modules not included, sold separately.)*



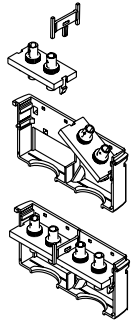
**Ortronics Series II Installation**

*(Series II Modular Inserts not included, sold separately.)*

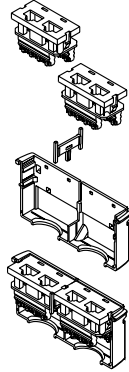


**Pass & Seymour Network Wiring**

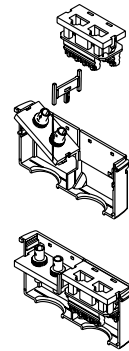
(2 Cat 5e inserts provided with catalog number 881RC4ATC.)



Both Recessed



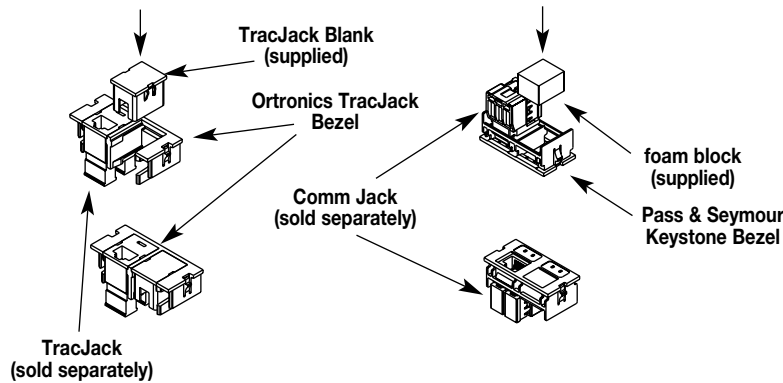
Both Flush



Recessed/Flush

**NOTE:** To accommodate both Keystone and Avaya jacks, four communication inserts are provided with every unit (two dual port Keystone inserts, 2A-U2KEY-BK, and two dual port Avaya inserts, 2A-U2ATT-BK). Two Activate Dual Category 5 (2A245-B5-BK) inserts are also included. Whichever option is not installed can be discarded.

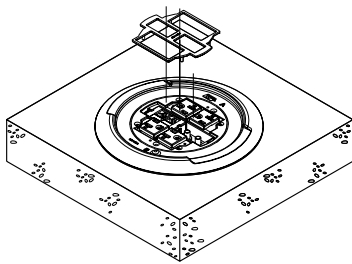
**Step 13** Insert blanking plugs or neoprene foam blocks in unused communication ports.



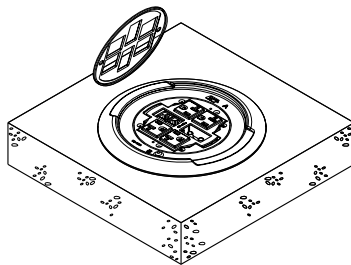
**CAUTION:** Empty communication ports must be closed off with foam blocks or Trac Jack blanks to maintain Fire Classification.

Communication inserts may be mounted either flush or recessed. Some inserts, such as fiber optic, must be mounted recessed in order for slides to close properly. Instructions for mounting communication inserts are on the following page.

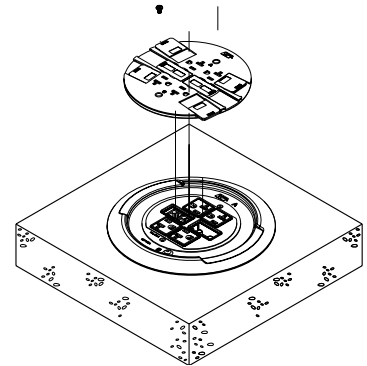
**Step 14** Place gasket support plate on poke-thru inserting the four posts through holes on receptacle brackets.



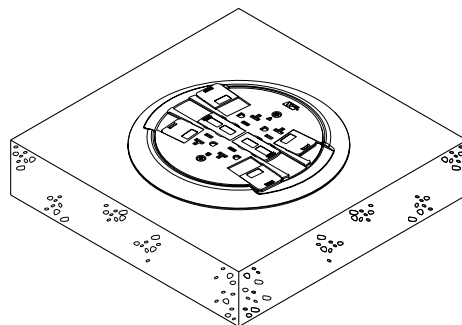
**Step 15** Align gasket over receptacles and press bead into flange channel.



**Step 16** Attach slide cover with (2) #6-32 screws.



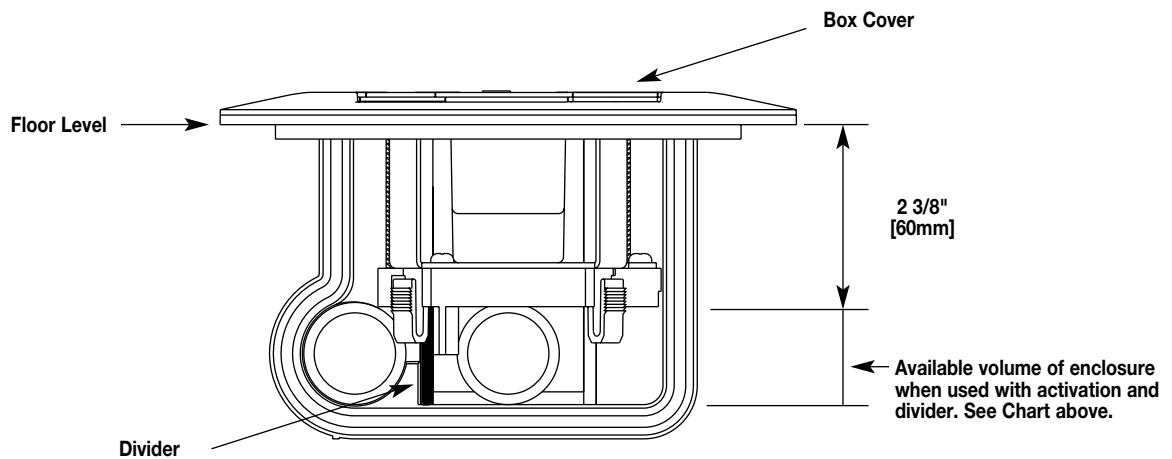
**Step 17** Installation complete.



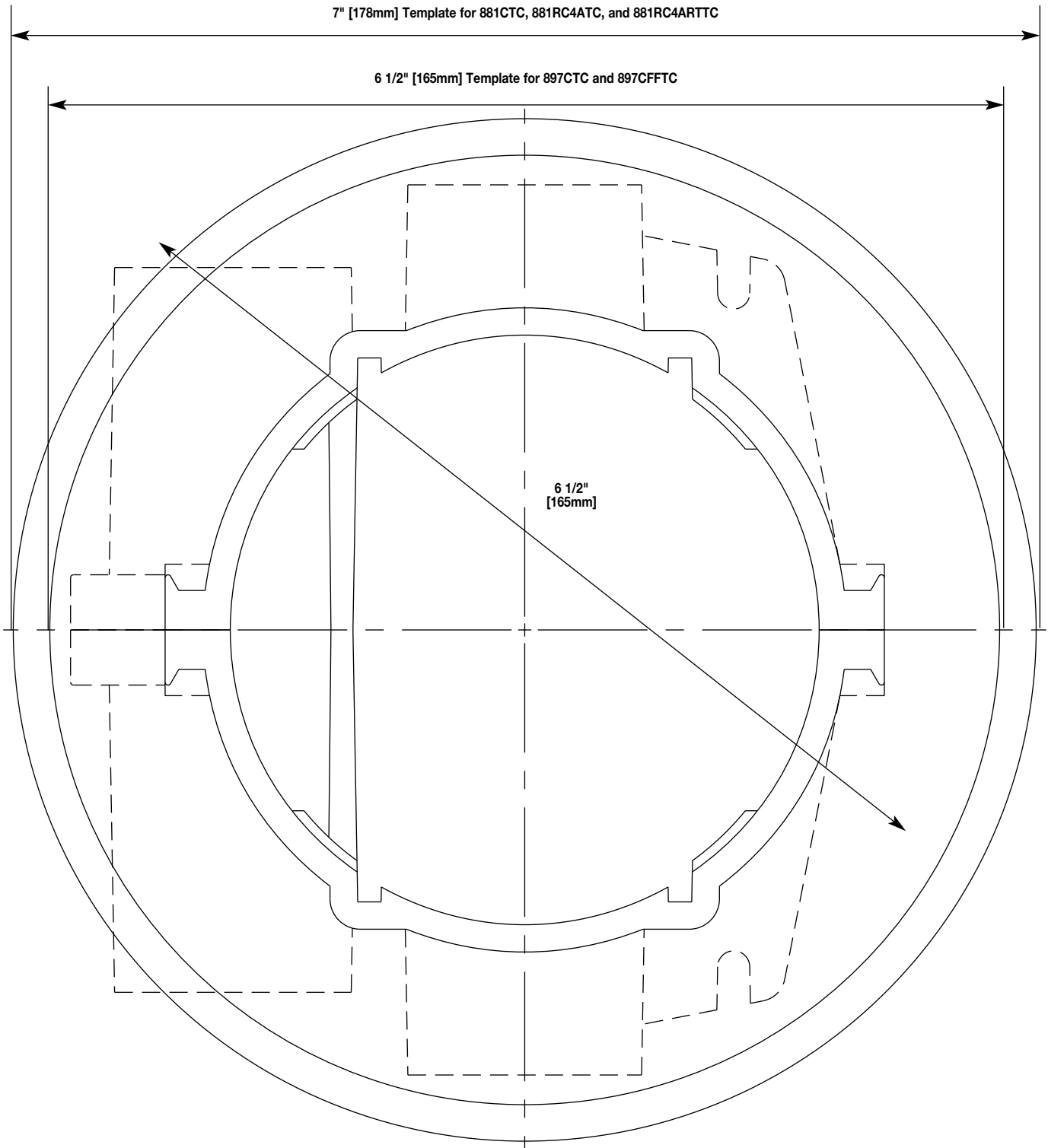
# WIRE FILL CAPACITY CHART

Cat. No. 881 RATCHET PRO FLOOR BOX when used with 881RC4ATC, 881RC4ARTTC COVERS							
LETTER (below complete uncut graduation)	CUT DIVIDER at this LETTER <sup>2</sup>	VOLUME INDICATED by FLOOR BOX <sup>1</sup>		AVAILABLE VOLUME of ENCLOSURE when used with ACTIVATION & DIVIDER		EXTERIOR HEIGHT of BOX (In.)	
		Cu. Inches	[ML]	Cu. Inches	[ML]	Max.	Min.
M (not cut)	H	76.5	1254.0	39.5	647.0	6 7/16	6 7/16
L	G	72.0	1180.0	35.9	588.0	6 7/16	6 1/16
K	F	67.5	1106.0	32.3	529.0	6 1/16	5 3/4
J	E	63.0	1032.0	28.7	470.0	5 3/4	5 3/8
I	D	58.5	959.0	25.1	411.0	5 3/8	5
H	C	54.0	885.0	21.5	352.0	5	4 11/16
G	B	49.5	811.0	17.9	293.0	4 11/16	4 5/16
F	A	45.0	737.0	13.4	220.0	4 5/16	3 15/16
E	<b>DO NOT USE IN CONCRETE POURS LESS THAN 4 INCHES*</b>  * Caution: Installation must comply with NEC & local code conductor volume requirements. Available volume for a dual service installation at 4 inches (102 mm) is 13.4 cu. in. (220 ml). Minimum height of box should be based on necessary wire fill requirements.					3 15/16	3 5/8
D						3 5/8	3 1/4
C						3 1/4	3
B						3	2 9/16
A						2 9/16	2 3/16

1. To calculate box fill capacity, use the displacement of the largest uncut section remaining.
2. The distance between the box cover to the top of the divider is 2-3/8" [60mm]. If uncertain which score line to use to cut the divider, measure a minimum of 2-3/8" below floor level to the top of the divider. This measurement can be slightly less if a thick floor covering is used.



## Carpet/Tile Cut-Out Template



**CAUTION:** When printing copies of this template, please be sure template is scaled correctly and is the correct size once it is printed.



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