

# CP & RCP Series Radiant Ceiling Panel Heaters

## INSTALLATION INSTRUCTIONS



TPI Corporation  
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37602-4973

*America's Comfort Conditioning Company*

### GENERAL INFORMATION:

**Wiring:** Check voltage on nameplate of heater to make sure it conforms with supply voltage. 277 volt heaters operated at 240 volt and 240 volt heaters operated at 208 volts will give a capacity of 75% rated wattage.

All wiring must conform to the N.E.C./C.E.C. and existing local code requirements.

**Location:** Heaters are intended for ceiling mount only. If the situation requires, heating panels may be installed directly adjacent to walls and to other heating panels.

**WARNING: Adhere to all applicable building codes and regulations when installing or using ceiling heaters. Failure to do so could cause improper activation of fire suppression systems leading to property damage or bodily injury.**

**AVERTISSEMENT: respecter tous les codes et réglementations applicables lors de l'installation ou de l'utilisation de radiateurs de plafond. L'omission de le faire pourrait entraîner une mauvaise activation des systèmes de suppression des incendies entraînant des dommages matériels ou corporels.**

**Controls:** Heaters may be controlled by a wall mounted line voltage or pilot duty thermostat, timer or other suitable device. (Controls are not supplied with heaters).

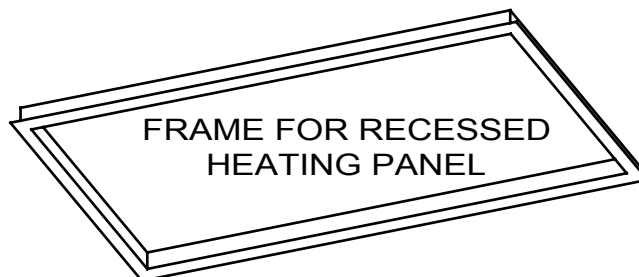
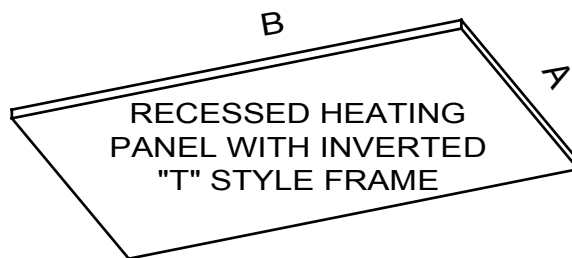
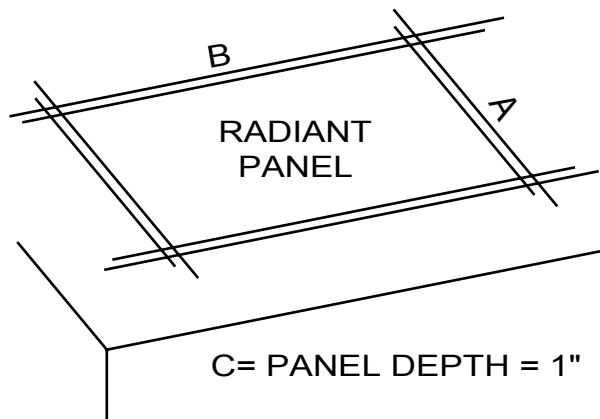
**Insulation:** Insulation is built into the ceiling heaters above the heating element surface to reduce heat loss through the ceiling and deflect the heat downward into the heated space. Additional insulation placed in the ceiling is highly recommended to further reduce the upward passage of heat.

**Handling** Panels are factory supplied in a white egg shell textured finish to match surrounding ceiling areas as closely as possible. Since this finish is more difficult to clean than a high gloss type, it is suggested that the installer wear clean gloves to prevent unnecessary soiling.

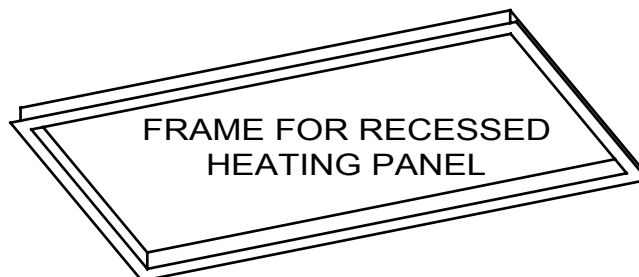
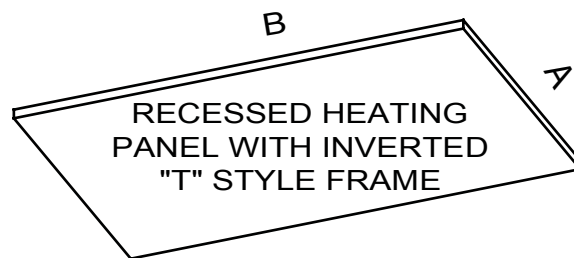
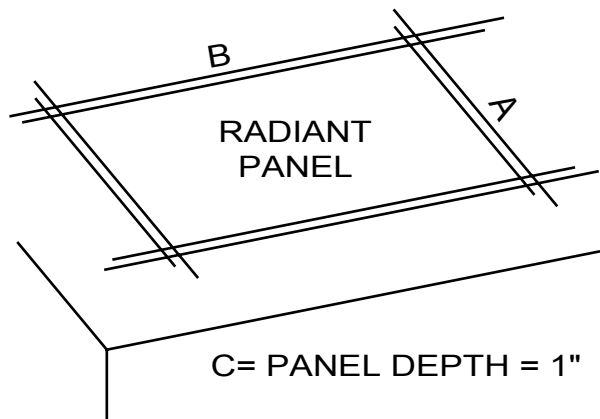
### CLEANING/MAINTENANCE

Cleaning should be done with a vacuum cleaner and soft brush attachment. Gently go over the face of the panel and remove any dust or lint. There is no other maintenance required for the heater.

Model No.	Panel Size			T-Bar Spacing	Watts	Volts
	A	B	C			
CP805	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	500	208
CP125	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	500	120/240
CP705	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	500	277
CP807	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	750	208
CP127	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	750	120/240
CP707	23 3/4 (603MM)	47 3/4 (1213MM)	1	24 X 48 (610MM X 1219MM)	750	277
CP802	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	250	208
CP122	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	250	120/240
CP702	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	250	277
CP803	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	375	208
CP123	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	375	120/240
CP703	23 3/4 (603MM)	23 3/4 (603MM)	1	24 X 24 (610MM X 610MM)	375	277



Model No.	Panel Size			FRAME OUT SIZE		Watts	Volts
	A	B	C	D	E		
RCP805	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	500	208
RCP125	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	500	120/240
RCP705	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	500	277
RCP807	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	750	208
RCP127	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	750	120/240
RCP707	21 3/4 (552MM)	47 3/4 (1213MM)	1	22 1/2 (571MM)	48 12 (1232MM)	750	277
RCP802	21 3/4 (552MM)	21 3/4 (552MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	250	208
RCP122	21 3/4 (552MM)	21 3/4 (552MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	250	120/240
RCP702	21 3/4 (552MM)	21 3/4 (552MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	250	277
RCP803	21 3/4 (552MM)	21 3/4 (552MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	375	208
RCP123	21 3/4 (552MM)	21 3/4 (552MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	375	120/240
RCP703	21 3/4 (552MM)	21 3/4 (522MM)	1	22 1/2 (571MM)	22 1/2 (571MM)	375	277



## IMPORTANT INSTRUCTIONS

1. When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electrical shock, and injury to persons, including the following:
2. Read all instructions before using this heater.
3. **CAUTION: High temperature, risk of fire, keep electrical cords, drapery, furnishings and other combustibles at least 3 feet (0.9m) from the front of the heater. Zero clearance on sides and rear.**

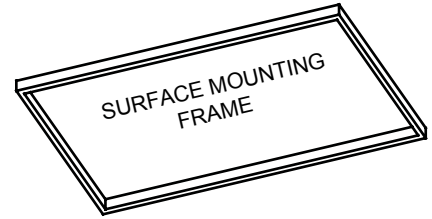
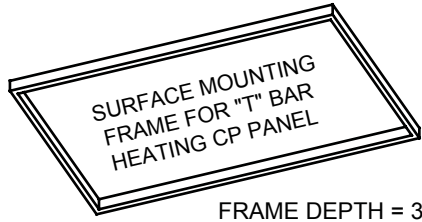
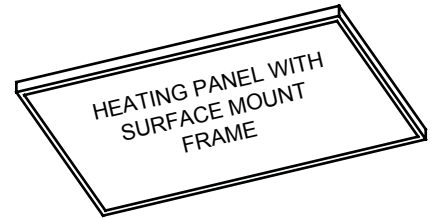
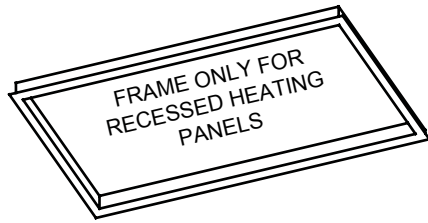
**MISE EN GARDE: Température élevée, risque d'incendie, maintenez les cordons électriques, les draperies, les meubles et autres matériaux combustibles à au moins 0,9 m de l'avant de l'appareil. Zéro dégagement sur les côtés et à l'arrière.**

4. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
5. Do not operate any heater after it malfunctions, has been dropped or damaged in any manner. Return heater to authorized service facility for examination, electrical or mechanical adjustment, or repair.
6. Do not use outdoors.
7. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel (or operate internal disconnect switch if provided).
8. Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
9. To prevent a possible fire, do not block air intakes or exhaust in any manner.
10. A heater has hot and arcing or sparking parts inside. **WARNING: Do not use it in area where gasoline, paint, or flammable liquids are used or stored.**

**AVERTISSEMENT: Ne l'utilisez pas dans un endroit où de l'essence, de la peinture ou des liquides inflammables sont utilisés ou stockés.**

11. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
12. This heater may include an audible or visual alarm to warn that parts of the heater are getting excessively, hot. If the alarm sounds (or illuminates), immediately turn the heater off and inspect for any objects on or adjacent to the heater that may have blocked the airflow or otherwise caused high temperatures to have occurred. **DO NOT OPERATE THE HEATER WITH THE ALARM SOUNDING (OR ILLUMINATING).**

### 13. SAVE THESE INSTRUCTIONS



FRAME DEPTH = 3"

<p>RECESSED PANEL FRAME ACCESSORY FOR USE WITH RECESSED PANELS ONLY</p> <p>NOMINAL SIZE 22" X 22" (559MM X 559MM) 22" X 48" (550MM X 1219MM)</p>	<p>SURFACE MOUNTED FRAME ACCESSORY FOR SURFACE MOUNTED PANELS</p> <p>CATALOG NUMBERS NOMINAL SIZE SF200 24" X 24" (610MM X 610MM) SF400 24" X 48" (610MM X 1219MM)</p> <p>Frame is constructed of extruded aluminum.</p>
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### INSTALLATION INSTRUCTIONS T-BAR CEILING PANELS

All wiring must be in accordance with the latest edition of the N.E.C./C.E.C. and local codes. Install the junction box above and away from the panel above any ceiling insulation. Reference Fig. 1.

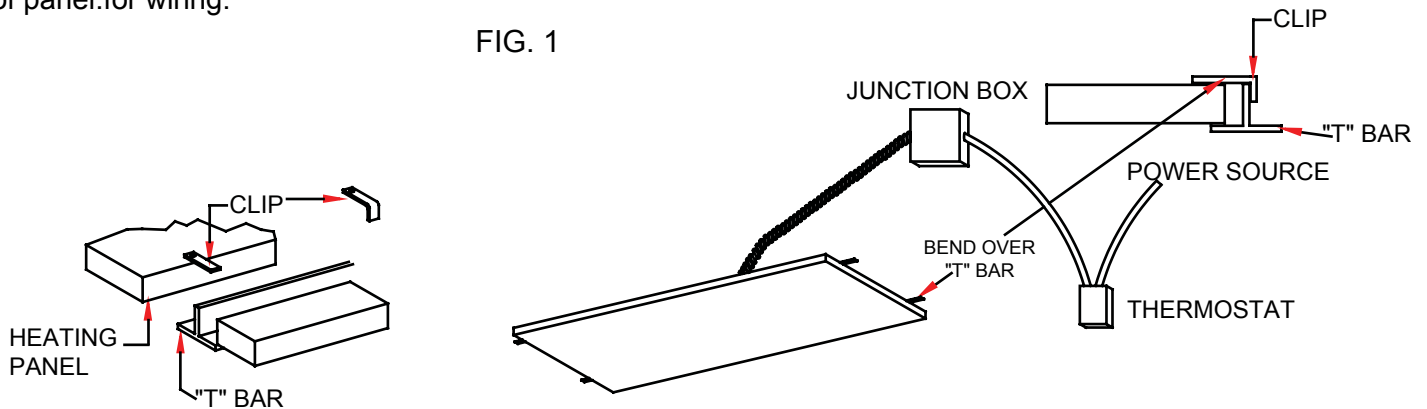
**WARNING: Adhere to all applicable building codes and regulations when installing or using ceiling heaters. Failure to do so could cause improper activation of fire suppression systems leading to property damage or bodily injury.**

**AVERTISSEMENT: respecter tous les codes et réglementations applicables lors de l'installation ou de l'utilisation de radiateurs de plafond. L'omission de le faire pourrait entraîner une mauvaise activation des systèmes de suppression des incendies entraînant des dommages matériels ou corporels.**

Use supply conductors suitable for 75°C.

Heater junction box and thermostat outlet box must be grounded through the grounding conductor. Install heating panels in "T" Bar ceiling maintaining a minimum clearance between overhead ceiling or roof and flat back of panel for wiring.

FIG. 1



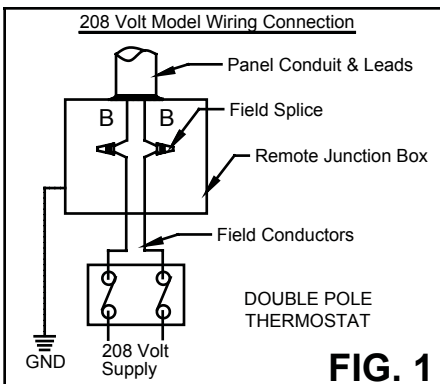
## WIRING INFORMATION

### IMPORTANT INFORMATION: READ BEFORE CONNECTING TO POWER SUPPLY

1. Disconnect branch circuit or power supply before connecting or servicing.
2. All wiring must be done in accordance with the N.E.C./C.E.C., or local code having jurisdiction.
3. Do not cover face of heater at any time with an object, other construction or furnishing as over heating could result and combustion of objects.
4. Check to determine that branch circuit voltage is the same as voltage shown on panel data label. Do not connect to a circuit having a higher voltage as a hazard can result. Connecting to a lower voltage will result in a lower operating wattage.

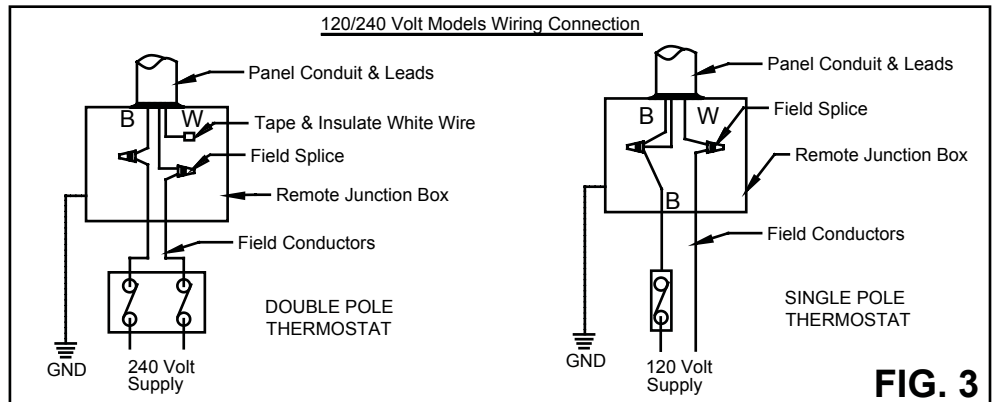
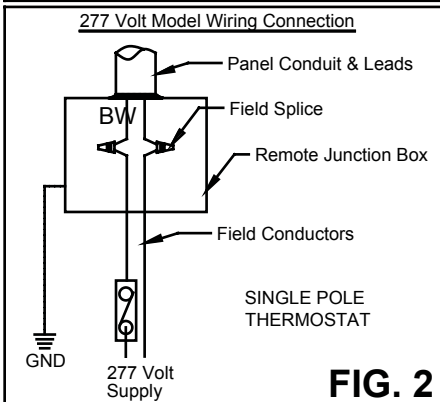
**NOTE:**

1. The 120 and 240 volt panels are furnished as dual rated 120/240 volt units. The operating volts determines which leads are to be connected. See Fig. 3
  - A. For 240 volt connection the two black leads are connected to the field power supply. The white lead is not used and is to be insulated by wrapping tape over the open conductor.
  - B. For 120 volt connection the two black leads are to be spliced together and connected to the black field power supply conductor. The white lead is to be connected to the white field power supply conductor.
- C.. Grounding: Connect the field supply grounding conductor to the panel ground conductor (green).
2. The 208 Volt panels are furnished as single rated units and have two black leads to be connected to the field supply power leads in the junction box. Reference Fig. 1 for grounding connection.
3. The 277 volt panels are furnished as single rated units and have one black and one white lead to be connected to the field supply power. The black lead must be connected to the black field power supply lead and the white panel lead must be connected to the white power supply lead. The single pole thermostat must be connected to the black power supply lead. Reference Fig. 2 for grounding connection.



**OPERATION**

1. Turn on the power supply to heater.
2. Rotate thermostat knob fully clockwise.
3. Allow the room to reach desired temperature, then rotate thermostat knob counter clockwise until the heater de-energizes.
4. For remote thermostat operation, thermostat wiring must be the same size as power supply wiring.



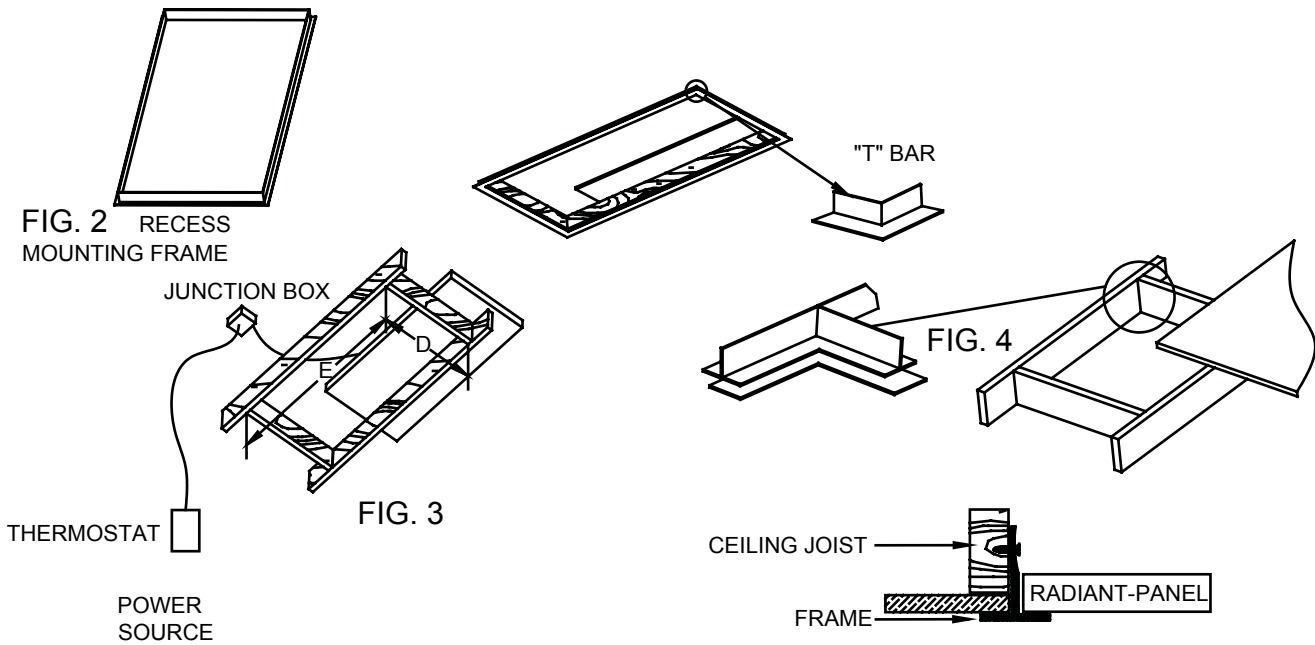
## RECESSED CEILING PANELS

The recessed ceiling panels are designed to be used with a recessed frame (included with recessed panels) designed to fit the cutout in the ceiling. Ref. Fig. 2. The cutout dimensions are as given in the specification table for the specific panel model in column D and E. Ref. Fig. 3. The frame must be secured to the framing members as shown in Fig. 4 using wood screws or nails.

The panel is to be placed through the frame opening and lowered into the frame and wired in accordance with the N.E.C./C.E.C. and local codes.

**WARNING: Adhere to all applicable building codes and regulations when installing or using ceiling heaters. Failure to do so could cause improper activation of fire suppression systems leading to property damage or bodily injury.**

If the junction box is mounted in the ceiling or allowed to be mounted above the upper surface of the ceiling and below the insulation, 75<sup>o</sup> C conductors must be used. If the junction box is mounted above the ceiling insulation, the supply conductors may be rated for 60<sup>o</sup> C.



Assemble surface mounting frame as shown below using the screws provided. Ref. Fig. 5. Secure the frame to the ceiling with appropriate hardware. Locate the frame so that the junction box will be covered when the ceiling panel is installed. Ref. Fig. 6. Remove one end of the frame, insert the ceiling panel and make electrical connections. Install the end of the frame.

If the junction box is mounted in the ceiling or allowed to be mounted above the upper surface of the ceiling and below the insulation, 75<sup>o</sup> C conductors must be used.

If the junction box is mounted above the ceiling insulation, the supply conductors may be rated for 60<sup>o</sup>C.

