

## **Panel Radiator (PRC) Ceiling Mounted Installation Recommendations**

1. Radiators are boxed together in as few crates as possible. Inside the crates, each panel is wrapped in foam sheeting. Saving this foam to rewrap the panel, after it has been mounted, will protect it from construction site damage.
2. Each radiator is tagged with a label that indicates the project; name, model type, color, connection code, bracket type & quantity and tag number. The tag number will usually designate a floor level and room number for easier placement on the job. Locate each radiator as required.
3. PRC model ceiling radiators do not come with any mounting brackets. Typically, installers use threaded rod with locking nuts by others to secure the panel to the ceiling structure. There are two mounting holes per cross-member stiffener on the backside of the radiator. Each of these mounting points should be used to suspend the radiator, to avoid sagging. It is typically easier to attach the threaded rods to the radiator before raising the assembly to the ceiling for final mounting.
4. Once the radiator is securely fastened to the ceiling structure, adjust the nuts on the threaded rod to straighten and level the radiator. It is recommended to have at least 3 inches minimum from the face of the radiator to the finished ceiling above it. In cases where upward radiation from the backside of the radiator is undesirable, foil faced insulation can be placed in the cavities created by the perforated steel side channels.
5. Thread the supply and return fitting into the connections on the radiator. The sealing tape or pipe dope used is the installers' choice – make sure the connections are leak tight. One-quarter turn past hand tight is usually sufficient. Each radiator needs to be fitted with a 1/8" air vent prior to startup. Once the radiators are installed, the system can be tested to 50 psi. **DO NOT OVER-PRESSURIZE THE RADIATORS** as permanent damage may occur.

**Standard (Low) Pressure Panels – Maximum 56 psi**

**Medium Pressure Panels – Maximum 85 psi**

**High Pressure Panels – Maximum 128 psi**

6. Radiators expand a maximum of 0.016 inch per linear foot of length if heated to 215°F. Piping attached to the radiator must provide the necessary expansion compensation.
7. When the system has been shown to hold 50-PSI maximum air, the piping and radiators can be filled with water. As water fills the system and radiators, air is forced to the vent fittings. Vent as much air as possible before turning on the circulating pump(s).
8. With the system is filled, operate the circulator(s) to force the remaining air to the high points of the system. Turn off the circulator(s) to vent the panels. Each radiator should be individually bled of air. Once cold venting has been completed, heat the system to design temperature and repeat the venting procedure as many times as necessary to remove all air from the system.