

## Radiator Installation Instructions

1. Radiators are boxed together in as few crates as possible. A box of brackets is included as a separate piece, and it is marked by bright taping. Inside the crates, each panel is wrapped in foam sheeting. Saving this foam to re-wrap the panel once it is wall 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, 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. Carefully place each radiator face down on a smooth level surface. If possible, expose the top header at the selected mounting locations without unwrapping the radiator. Locate the correct number of K70 brackets at stud locations (approximately one bracket every 3 to 6 feet), with a bracket at each end of the radiator. Allow a minimum of 3 inches below each column radiator to facilitate cleaning and to assure proper output. Attach each K70 bracket with a lag screw or bolt. With the radiator still face down, snap the K72 offset bracket onto the bottom header pipe. Hang the panel onto the K70 brackets to determine if the K72 offset bracket bolts are properly adjusted. Check that the panel is level and plumb. Once the panel is adjusted to the correct position, remove it from the wall and tighten up the bracket bolts. Use 2 bolts per K70 bracket.
4. With the radiator face down, remove the plastic plugs from all tappings. Thread the supply and return fittings into the ½"NPT tappings on the column radiator. The sealing tape or pipe dope used is the installer's choice – make sure the connections are leak tight. Use the foam wrapping as a pad for the face of the radiator when tightening up the fittings. Each radiator needs to be fitted with a 1/8"NPT air vent prior to filling and startup.
5. For pedestal mounted column radiators, place the radiator in the proper position with respect to the window or wall and locate the bolt holes in the pedestal baseplates on the floor. After threading the needed piping adapters into the radiator and running the supply and return piping to the adapters, bolt down the pedestals to the floor and securely attach all the piping.
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. Flexible piping and elbowed piping are two simple ways to provide the flexibility required. Black iron pipe, copper tubing, coiled soft copper, and PEX piping (with 215°F Rating) can be used. A typical radiator connection usually incorporates a union (can be dielectric, but it is not required) and an isolation valve (radiator union valve, or union ball valve), but often they are "hard piped" in place. Paint any exposing piping as required with the touch-up provided.
7. Once the radiators are installed, the system can be tested to 50 psi. **DO NOT OVER-PRESSURIZE THE RADIATORS** as permanent damage may be occur.

Standard Column Radiators  
Maximum 56 psi

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. When the system is filled, operate the circulator(s) to force the remaining air to the high points of the system. With the system pressurized, 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.