## **INSTALLATION INSTRUCTIONS**

## DURA-VANE II COMMERCIAL FINNED TUBE RADIATION JDV3/JDV4

- 1. Determine quantities of enclosure and accessories required per wall or run. If installation is wall-to-wall, run backplate to within ½" of adjoining wall(s). If run ends with end cap, extend backplate beyond end of required enclosure 1-1/2" for 4" end.
- Mount backplate (full or partial) to wall at prescribed height (Refer to Submittal Drawing) making sure that it is level. If valve compartments are being used, make sure that an equivalent amount of backplate is installed.
- Hot Water Systems: Water brackets are used to support 3A. the enclosure and a single tier of element. Water brackets do not provide pitch for the element. If a second tier of element is to be installed, mount bracket mounted hangers to the water bracket using the 5/16-18 carriage bolt and nut supplied before installation of the brackets to the wall. Install two (2) water brackets per enclosure length up to 6'-0" of length. Three (3) water brackets per cover 6'-6" up to 8'-0" of length. Valve compartments should have a minimum of one (1) bracket (Accessories do not require brackets). If using Full Backplate, insert top of the bracket into 'V' bend of backplate. If using Partial Backplate, insert top of bracket into 'V' bend and insert horizontal flange into horizontal slots of bracket. Secure brackets to wall using fasteners (as specified) by others. Supply/Return Pipe hangers (if required) can be mounted to the wall adjacent to the water bracket (every other one).
- 3B. Steam Systems (Two Pipe): Attach bracket-mounted hangers to steam bracket (one per each tier of element per steam bracket) with 5/16-18 carriage bolt and nut supplied before the installation of the steam brackets to the wall. Install two (2) brackets per enclosure length up to 6'-0" of length. Three (3) brackets per cover 6'-6" up to 8'-0" of length. Valve compartments should have a minimum of one (1) bracket (Accessories do not require brackets). If using Full Backplate, insert top of the bracket into 'V' bend of backplate. If using Partial Backplate, insert top of bracket into 'V' bend and insert horizontal flange into horizontal slots of bracket. Secure brackets to wall using fasteners (as specified) by others. Valve compartments should have minimum of one (1) bracket (Accessories do not require brackets). Supply/Return Pipe hangers (if required) can be mounted to the wall adjacent to the steam bracket (every other one).

- 4. Lay out heating element as required. Place slide cradle onto the bottom of element at each bracket location. The element cradle has two legs that angle out slightly. Position the legs between the fins so there is tension against the legs. This holds the cradle in position. For Two Pipe Steam systems adjust element pitch by raising the bracket mounted hanger and tighten nut to secure hanger into position. Second tier elements mounted on the bracket-mounted hangers can be adjusted up or down. Check submittal drawing for correct position of element fin. For copper tube elements, flush the loop or series with system water after soldering to neutralize the remaining flux material and prevent corrosive action and resulting pinhole leaks.
- 5. The enclosure can now be installed. Start enclosure at left end of run working clockwise. Tap alignment pin into left front end of grille. The rear of the enclosure grille engages directly into the 'V' bend of the backplate. Firmly push next piece of cover into slip joint tabs and alignment pin of piece on left until run is completed. Secure bottom of enclosure into brackets. Tighten the posi-loc clamps to secure the enclosure.
- 6. Install overlapping accessories as indicated on room schedule. All accessories are overlapping. Install the accessory so that the bottom flanges touch the enclosure first. The top of the accessory will then be moved to the rear of the enclosure so that the top, rear back bend is slipped behind the aluminum grille and between the wall and the backplate. When the accessory has been located to its correct position, bend the bottom tabs up and inward, securing it to the enclosure. Valve Compartments are installed the same as enclosure.

## MAINTENANCE

Before each heating season, remove accessories and enclosure panel to inspect finned tube elements for accumulation of dust or other debris that may accumulate and block airflow between fins. Remove dust and debris from coil fins with a vacuum cleaner or compressed air. Inspect for leaks or areas of corrosion. It should not be required, but if necessary, place a drop of lubricant (machine oil) onto each ball bearing (where applicable) located in the water brackets or bracket mounted hangers. Replace cover and accessories.



260 NORTH ELM ST., WESTFIELD, MA 01085 TEL: (413) 568-9571 FAX: (413) 564-5661 www.vulcanrad.com







