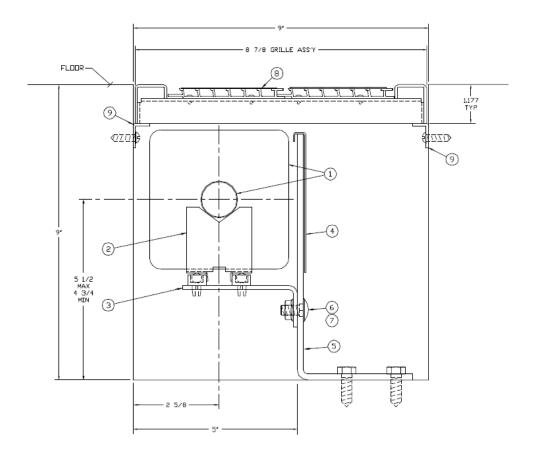
## **Installation Instructions for Trough Installations TRC**

- 1. If the Trough installation requires a sheet metal liner, install the liner per the mechanical drawings. Secure the liner to the sides and bottom as specified by the mechanical, submittal drawings or specifications. Make sure that it is plumb and level.
- 2. Per the mechanical and submittal drawings, layout the trough brackets based on the element lengths of the run. 3'-0" apart is typical (or as specified).
- 3. Once the bracket locations along the run have been determined, secure the element support bracket (detail 3) to the larger bracket (detail 5) place the 5/16-18 carriage bolt into the 1" vertical slot (for adjustment) and 5/16" serrated nuts as shown on submittal drawing. Depending on the flatness of the finished floor, it has to be determined which (if any) of the brackets need to be shimmed to allow for a level and straight element and baffle installation.
- 4. Locate finned tube element where identified on mechanical drawings. Place element slide cradle supports onto element where brackets are located. The legs of the element cradles are tapered slightly outward so that a friction or compression fit will occur and hold them in place when pressing the cradles into place between the element fins. Place element and element slide cradles onto the ball bearings in the element bracket. Once the elements are in position make sweat connections. For steel element, apply specified pipe dope, or sealing tape for threaded connections with the required threaded fittings. Check submittal drawings to confirm dimension out from the trough wall on the room side and the vertical center of element and up from bottom of the trough. Once the elements are connected into the heating system, a standard pressure leak test should be conducted as specified by the Mechanical Engineer. 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. When the elements have been installed, install the vertical baffle (detail 4) onto the top of the vertical leg of the trough brackets (detail 5) as required per the mechanical drawings.
- 6. If the trough grille is by others, install per the installation instructions provided. If the trough grille is supplied by Vulcan, install continuous support angle on each side of trough at location shown on the specific submittal drawing using fasteners by others. Locate grille lengths as indicated per the mechanical drawings or the room schedule provided by the Vulcan Representative. The grille is to rest on the support angles.
- 7. If access is needed to air vents or shut off valves, it is recommended that a two (2) foot piece of floor grille be installed in the run where the devices are located. This piece of floor grille will act as a valve compartment or access panel.

## MAINTENANCE

Before each heating season, remove floor grille 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 element 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 element brackets. Replace floor grille and secure it.



NOTE: The above drawing is for reference only. Each trough installation is based on individual job conditions. Also, make sure that the element is installed on the room side of the trough.



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