

## **Model Type R**

### Detailed Specifications

#### **General:**

Provide steel panel radiator elements of lengths and in locations as indicated, and of capacities, style and having accessories as scheduled. The wall hung heating panel radiation shall be of one-piece all-welded steel construction, consisting of flattened water tubes welded to headers at each end. The radiator shall include an integral heavy gauge (0.09" minimum) all-welded perforated top grille (for curved radiators the grille is omitted).

The radiator's headers shall include all necessary inlet, outlet and vent connections as required. Standard connection sizes are ½" NPT tapered thread for supply and return piping, and 1/8" for the vent connection. Internal baffling is provided where required for proper water flow. Optional ¾" connections shall be available at an additional cost.

The radiant heating panels shall be available in lengths from 2'-0" to 29'-6" in two inch even increments without the need for splicing. The panel radiation shall be capable of being mounted to typical stud wall construction without additional blocking or strapping. Appropriate wall mounting brackets or optional floor post mounting shall be provided with the radiation. Panel radiation expansion shall not exceed 1/64" per foot of radiation at 215°F. The installer shall provide adequate expansion compensation for each radiator.

The panel radiation shall be manufactured in the USA.

#### **Pressure Ratings:**

Pressure ratings for the radiation shall be as follows:

STANDARD: Working pressure-56 PSI maximum, Test Pressure-74 PSI maximum

**OR**

MEDIUM: Working pressure-85 PSI maximum, Test Pressure-110 PSI maximum

**OR**

HIGH: Working pressure-128 PSI maximum, Test Pressure 184 PSI maximum

#### **Finishes:**

The panel radiation shall be cleaned and phosphatized in preparation for the powder coat finish. The radiation is then finish painted with a gloss powder coat finish, for a total paint thickness of 2-3 mils (0.002" - 0.003"). The color shall be selected from Runtal's ten Standard Colors; or Runtal Optional Colors shall be available at and additional cost.

#### **Warranty:**

All Runtal radiators are covered by a 5-Year Limited Warranty.

#### **Manufacturer:**

Subject to compliance with requirements, provide flat tube panel radiation as manufactured by Runtal North America, Inc.

#### **OPTIONAL ITEMS WHICH MAY BE ADDED TO THE SPECIFICATION:**

1. Ribbed pipe cover trims, finished to match the radiators shall be provided with the radiation.
2. The radiation manufacturer shall provide combination shutoff valve/union fitting of less than two inches in width for the supply and return to each panel radiator, to be field installed by others.
3. Runtal-Flex connectors shall be used where appropriate to provide expansion compensation for the radiators.