

## RadiantPEX+™ Manifold Submittal

PROJECT NAME: \_\_\_\_\_

WATTS RADIANT REPRESENTATIVE: \_\_\_\_\_

Unit Tag No.: \_\_\_\_\_ Order No.: \_\_\_\_\_ Date: \_\_\_\_\_

Engineer: \_\_\_\_\_ Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_ Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### MANIFOLD DESCRIPTION

Watts Radiant's RadiantPEX+ & RadiantPEX Manifolds are manufactured in several styles for radiant floor heating and snowmelting applications: Custom Tubular, Swedged, CustomCut™, and Stainless Steel. Manifolds are constructed of either copper or stainless steel, as shown in the schedule below. All brass ribbed branches are constructed of solid brass to accept RadiantPEX+ & RadiantPEX tubing. Manifolds and manifold components are assembled by brazing and/or soldering. Ribbed branches are spaced at 2" on center (o.c.) on all Custom Tubular Manifolds. Branches on CustomCuts are spaced at either 3" or 4" o.c. Three inches are allowed on ends of manifolds, including union if supplied. Stainless Steel Manifolds have a branch spacing of 2-1/8" o.c. All manifolds have a maximum operating pressure of 100 psig at 200°F. Several options are available as described below.

or the supply and return manifold (BVSR) of Custom Tubular Manifolds. Swedged and CustomCut Manifolds are supplied either with or without MBVs.

**2.** Unions can be installed on Custom Tubular Manifolds for ease of installation and system maintenance. 1" all-brass unions are constructed entirely of solid brass and come with rubber O-rings to assure a tight seal. 1-1/4" to 3" unions are constructed of brass nuts with copper sleeves and an O-ring seal.

**3.** Vent-and-purge Assemblies or End Assemblies are available for purging air and/or water from the radiant zone(s). These assemblies are constructed of "key" type manual vent and brass shut-off valve with swivel female hose bib fitting.

**4.** Other specialized components as described and verified by manufacturer: \_\_\_\_\_

### OPTIONAL MANIFOLD FEATURES

**1.** Mini Ball Valves (MBVs) are supplied for system purging, balancing, and isolation. MBVs are made of brass construction with stainless steel ball and Teflon seats. Fittings are 1/2" x 1/2" sweat, except 3/4" which are 3/4" x 3/4" sweat. MBVs are installed on the return manifold (BVR),

Qty.	Manifold Model Name	Trunk I.D. (Nominal)	Trunk Material	RadiantPEX+ & RadiantPEX Barb Sizes	Optional Mini Ball Valves	Optional Trunk Ball Valves	Optional Unions	Optional Vent/Purge Assembly
	Custom Tubular	1"	Copper	3/8"-5/8"	BVR	BVSR	TBV	Brass
	Custom Tubular	1-1/4"-6"	Copper	3/8"-3/4"	BVR	BVSR	TBV	Copper/Brass
	Swedged	1"	Copper	3/8"-5/8"	MBV	N/A	N/A	Brass/Copper/SS
	CustomCut	1"-1-1/2"	Copper	3/8"-3/4"	MBV	N/A	N/A	Brass/Copper/SS
	Stainless Steel	1"-1-1/2"	Stainless	3/8"-3/4"	BVR	BVSR	TBV	Brass

\*The exact part number is based on the type of connection size and number of branches. Place a check in the appropriate column for optional components.

MBV = mini ball valves, BVR = mini ball valves on return manifolds, BVSR = mini ball valves on supply and return manifolds, TBV = trunk ball valves, and N/A = not available.

### MANIFOLD ACCESSORIES:

- Universal Manifold Brackets.
- Pressure Test Kits are manufactured of copper construction with integral pressure gauge, boiler drain, Schraeder air fitting and standard hose fitting. Sizes provided to match manifolds.
- Manifold Boxes.

### MANIFOLD FITTING/CONNECTION SYSTEM

Watts Radiant manifolds are constructed for connection to RadiantPEX+ & RadiantPEX tubing. Please specify connection/fitting system:

Fitting Type	3/8" PEX	1/2" PEX	5/8" PEX	3/4" PEX	1" PEX
CrimpRing	3/8"	1/2"	5/8"	3/4"	1"
CinchClamp™	3/8"	1/2"	5/8"	3/4"	1"
Compression	3/8"	1/2"	5/8"	3/4"	1"

### MANIFOLD FLUID FLOW CAPACITIES:

Nominal I.D.	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
Flow Capacity (maximum)	10 gpm	16 gpm	24 gpm	45 gpm	70 gpm	100 gpm

