

SharkBite[®] Radiant Heating Manifold

DESCRIPTION

The SharkBite Radiant Heating Manifold is designed to optimally distribute fluid throughout circuits in a closed loop heating system. The manifold ensures that flow to each circuit is precisely regulated and also controls the shut-off, displays temperature, and allows for the removal of air from the system. The fluid is heated by a water heater or boiler and distributed by the manifold throughout the different PEX Pipe circuits. The manifold has a 1" FNPT Inlet and features integrated ½" SharkBite connections on the loop ports. The SharkBite connections make connecting the loops to the manifold significantly easier and faster than alternative connection methods. SharkBite Radiant Heating Manifolds are available with 3 through 13 port configurations.

Installing underfloor heating with the SharkBite Radiant Heating Manifold along with SharkBite Oxygen Barrier PEX Pipe saves energy and money. The system achieves maximum energy efficiency with low temperature water that heats specific flood spaces to 87.5°F or below, ultimately conserving up to 15-20% in heating energy costs. Using the SharkBite Radiant Heating Manifold and Oxygen Barrier PEX Pipe also helps keeps the transfer of dust, pollen, germs, and other particles to a minimum which creates a cleaner, healthier, and allergy-free environment.



FEATURES AND BENEFITS

Integrated SharkBite connections: Reduce installation time and frustration, no fitting assembly required.

- Temperature gauges on supply and return manifolds: Ensure proper supply temperature and evaluate heat loss at the return manifold.
- Flow balancing valves and flow meters: Avoid any unnecessary waste and ensure an elevated level of thermal comfort.
- Integrated air vent and drain: No need for additional manifold components.
- Complete metal brackets with slim depth profile: Maximum installation flexibility for designers and installers.

SPECIFICATIONS

A radiant manifold assembly shall be installed to provide hydronic heating throughout a structure's floor by way of multiple zones. The manifold shall have stainless steel flow and return manifold, brass ball valves, temperature gauges, flow balancing valves and flow meters, bronze air vents and drains, and integral SharkBite push-to-connect fittings. The radiant manifold assembly shall be a **SharkBite Radiant Heating Manifold**.

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TYPICAL INSTALLATION

Closed-loop boiler application*.



*Please note that specific installation requirements will vary per system. Some components may have been removed for simplicity.

SPECIFICATION DATA

Performance:

Maximum operating temperature	. 158°F (70°C)
Flow meter precision	. +/- 10%
Maximum operating pressure	. 87 psi (6 bar)
Flow rate, minimum	. 0.34 gpm (1.3 l/min)
Flow rate, maximum	. 11 gpm (42 l/min)
Maximum Area (room size)*	approx. 665 ft ²

Materials:

Flow and return manifolds	. 304L Stainless Steel
Ball Valves	Nickel-Plated Brass
Air Vent and Drain	Nickel-Plated Brass
Brackets	Zinc-plated steel
Seals	
Piston	Engineered Polymer
Guide tube	. Noryl GFN2

*Max. Area estimated at total load 35 BTUh/ft2, setpoint 70°F (21°C), max. surface 87.5°F (30.8°C), supply/return differential 10°F (5.6°C), 30% glycol, loops: 6, total length 200' (61m) max. each (active length 165' (50.3m) each), installed 8" (20.3cm) on-center. Actual conditions will vary based on room size.

CONNECTIONS

Inlet FNPT	1"
SharkBite® Outlet	1⁄2"

Flow Meter





Ports	3	4	5	6	7	8	9	10	11	12	13
A (in.)	14.49	16.46	18.43	20.39	22.36	24.33	26.30	28.27	30.24	32.20	34.17
B (in.)	7.48	9.45	11.42	13.39	15.35	17.32	19.29	21.26	23.23	25.20	27.17

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