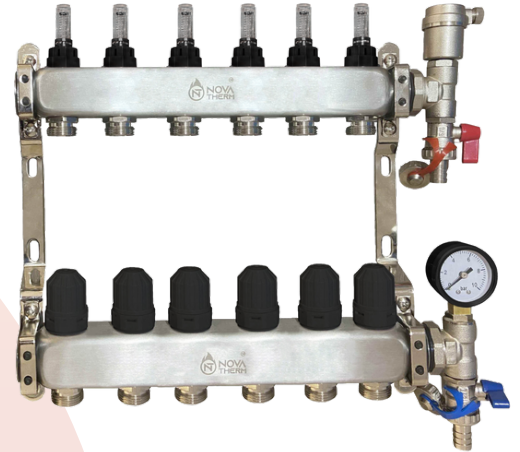


Manifold with Pressure Gauge and Auto Air Vent

The NovaTherm premium stainless-steel manifold is a preassembled unit for use within either underfloor heating systems or with wall hung radiator systems.

Key Features:

The unit is preassembled, complete with an auto air vent (AAV), 10 bar pressure gauge, flow metres with 0-5 l/m indicators and fill and drain valves. Compatible with various pipe sizes up to 20mm. Integrated filling and drain off valves ease long term maintenance.



Our manifold has a standard UK distance of 210mm between the flow and return bars. This makes the unit versatile with various mixing units. The unit has spacing of 50mm between each port from the centre point. This enables various pipe sizes and materials to be installed. For ease of installation we recommend no larger than 20mm pipe to be installed with the NovaTherm manifold connectors. The unit has 1" threaded inlets to house isolation valves. We recommend when installing with the NovaTherm mixing unit that a captive universal nut is used for fixing. The bottom rail has a modulating pin that can be either manually adjust with the white adjusting caps, or to achieve electronic control an actuator can be installed.

Mounting the Manifold

The NovaTherm premium stainless steel manifold can be wall mounted by using the brackets provided. Suitable wall fixings will need to be assessed. All componentry is supplied within the box unit.

PRODUCT CODE	LENGTH	DESCRIPTION
NMSS-1F-3/4X 2	180MM	NOVATHERM™ 2 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 3	230MM	NOVATHERM™ 3 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 4	280MM	NOVATHERM™ 4 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 5	330MM	NOVATHERM™ 5 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 6	380MM	NOVATHERM™ 6 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 7	430MM	NOVATHERM™ 7 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 8	480MM	NOVATHERM™ 8 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 9	530MM	NOVATHERM™ 9 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 10	580MM	NOVATHERM™ 10 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 11	630MM	NOVATHERM™ 11 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT
NMSS-1F-3/4X 12	680MM	NOVATHERM™ 12 PORT DUALMIX STAINLESS STEEL MANIFOLD ASSEMBLY INC PRESSURE GAUGE AND AIR VENT

Filling

We recommend filling each circuit separately, opening the return isolation valves and double regulating valves each time and closing them again when the circuit is full as per the instructions below:

1. Isolate the manifold via the ball valves.
2. Connect a hose to the return manifold (the bottom manifold bar) via the drain point. The discharge hose should be run to a bucket or drain age point.
3. Connect mains pressure water to the flow manifold (the top manifold bar) via the fill point. Close all of the return valves by turning the blue adjustable heads clockwise. Open Flowmeter valve and the corresponding return isolation valves. Begin filling the first circuit. Once the water flowing from the discharge hose is flowing smoothly all air has been removed from the circuit. Close this circuit and fill the next circuit following the same procedure.

Testing

1. Once filled, the system should be pressure tested in accordance with EN1264-4:2009 between 4-6bar.
2. The system should be left under pressure whilst fixing a floor or laying the screed.

Commissioning

1. In order to commission the system the heat source needs to be operating to deliver the required temperature water to the manifold and the primary and secondary pumps need to be operating.
2. To adjust the flow meters, follow the adjustment procedure above. The actual required flow will depend on the heat requirement of the room and the amount of pipe in the floor. Most modern buildings insulated to current building regulations will require around 50- 60W/m². As a general guide, we recommend that the following flow rates are set (when using 16mm pipe at 200mm centres).
3. Replace the red locking ring once the flow meters are set.
4. The underfloor heating pipework will not corrode in any way since it's plastic, however, it is recommended that a suitable inhibitor is added to avoid the corrosion of primary pipework, the heat source and any other towel rails or radiators on the system.
5. Initial setting of the thermostatic blending valve (after the initial system start-up/screed drying period) should provide the following temperatures: - Screeded/dry screed board floors: 35-45°C - Timber/floating floors: 45-55°C Depending on Design.

System Start Up

For screed floors, ensure a minimum of 21 days have elapsed since laying the concrete screed, or seven days if an anhydrite floor screed is utilised. Wooden floors can be switched on quite early, but should not be allowed to reach too high a temperature too soon.

Wood being a natural material requires that both the floor and deck and joists must be treated with care until temperature and humidity have stabilised. Where water temperature controls are utilised, ensure they are set the minimum setting (typically 25-30oC) and that room thermostats and flow meters are set to design condition, as this will aid gradual drying of the floor and structure.

System responses will be very slow on initial start-up. After the heating has been running for the recommended time at minimum setting (3 days for solid concrete floors and 1 day for wooden suspended floors), gradually raise the water temperature to the design setting for a further 4 days.

Once running normally there should be a 7-8oC temperature drop across the circuits. Once all action are complete, turn down all thermostats so that the system stops. Now turn up one thermostat and ensure the correct actuator or actuators have opened for that particular room. After its determined that the thermostat is controlling the correct actuator, turn the thermostat down and repeat the procedure.