# [ambiente

more than underfloor

Customer:
Project:
Project Reference:
Date:

## Installation Guide

**AmbiClip Systems** 





#### **SCREED AND INSULATION**

Normally the specification of the screed and insulation will be stated by the architect, if you need any assistance or recommendations, please call one of our technical team today on **01707 64 91 18**.





## Ambiente goes beyond just simply the supply of underfloor heating systems.

At every stage in the project, we offer advice to all parties, in order to assist in the swift, safe and supportive implementation of your project.

From project initiation to final commissioning, ambiente have every stage of underfloor heating covered.

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Visit us online at **ambienteufh.co.uk** for case studies, product resources and more information.



For any installation questions speak to our installation team today on **01707 64 91 18** or email **info@ambienteufh.co.uk**.



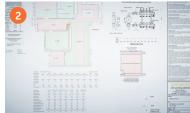
For any information regarding our products and support call our highly trained sales team today on **01707 64 91 18**.

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## INSTALLATION METHOD

- Lay the cliprail lengths at approximately one metre intervals and at right angles to the direction the pipe is to be laid. Our cliprail has an adhesive backing strip and can also be secured further using cliprail clips provided. Lengths of cliprail can be clipped together end-to-end.
- 2 Check the system plans to see the number and length of each loop required. Note:
  Ambiente pipe is marked every metre to help you calculate loop lengths.
- 3 Starting on one side of the manifold, connect to the manifold flow bar. Make a note of which zone the loop serves on the manifold tag supplied.
- 4 Lay the pipe out, navigating the most efficient route between the manifold and the zone. Start laying the pipe into the cliprail, as per the system designs.
- 5 Individual cliprail clips can be used to hold the pipe to the insulation in between the cliprails and on tight bends.
- On completion of the loop, follow the same route back to the manifold and connect to the return bar (bottom bar with blue caps), making a clear note of the actual loop length installed on the manifold tag.
- 7 Follow the same procedure for all loops until the area is evenly covered with pipe.
- 8 Once all loops are installed and connected to the manifold, the system can be pressure tested.















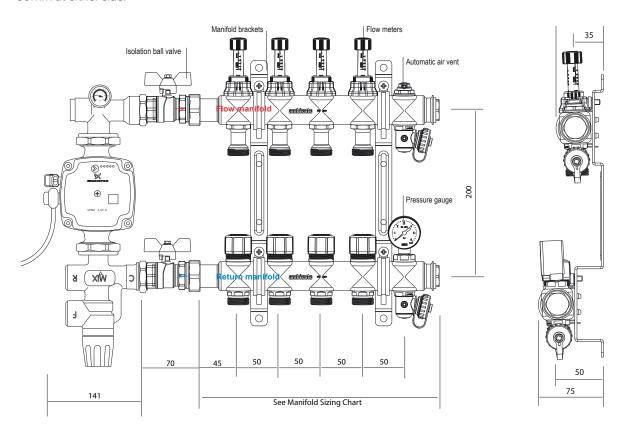


## MANIFOLD POSITIONING

### Ambiente manifolds are supplied ready assembled and simply need mounting on brackets prior to installation.

Note that the two manifold bars are offset so that the pipes can pass behind the lower bar for connection to the top bar – we recommend using the top bar as the flow and the bottom bar as the return. The manifold comes left-handed as standard, but can be changed, see opposite for 'how to change the handing of Ambiente manifolds'.

Manifolds should be positioned where they are easily accessible to allow for future servicing and commissioning. We recommend allowing at least 200mm between the finished floor level and the bottom of the manifold, with 75mm clearance above and at least 50mm at either side.



Note: It is recommended that a 2 port motorized zone valve be installed on the primary flow before each manifold to prevent excess water pressure.

#### Manifold Sizing Chart

Number of ports	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Manifold length (mm)	142	192	242	292	342	392	442	492	542	592	642	692	750	805

Please Note: Recommended minimum installation clearances: 200mm between the finished floor level (FFL) and bottom of the manifold, 100mm above the manifold. 50mm to either side of the manifold and allow an extra 100mm for the supply pipe work.

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# COMMISSIONING THE SYSTEM STEP BY STEP CHECKLIST

Filling and flushing the system								
Sequence	Checklist	Completed						
1	Close the isolating ball valves that are connected to the manifold on both bars.							
2	Isolate all zones by screwing down the blue caps on the bottom (return) bar and the flow meters on the top (flow) bar.							
3	Open the first flow meter (start furthest away from the filling valve) on the top (flow) bar (use the red collar to turn the black section fully anti-clockwise, do not use grips – hand tight only). Ensure that all other flow meters are closed, except the loop that you are flushing.							
4	Remove the black plastic blanking cap from the filling valve on the top (flow) bar and fit the hose connection/hose which should be connected to the mains water supply. Open the filling valve using the key on the reverse of the drain valve cap.							
5	Fix a suitable hose to the drain valve on the bottom bar.							
6	Fully loosen the blue protection cap on the bottom bar on the first zone to be filled.							
7	Open the tap on the mains water supply and open the drain valve on the bottom bar using the key on the reverse of the blanking cap.							
8	Run water through the loop until air is removed from the system, closing down the blue caps on each loop as it is purged.							
9	This can now be repeated for each zone by opening the next zone, closing the flushed zone and repeating steps 3-8.							
10	At this point the system can be pressure tested if required by closing the drain valve and unscrewing all the blue protection caps – the pressure should rise slowly – allow it to rise to 4 bar and then close the filling valve and close off the mains water. This should be left for 24 hours to check for any significant drops in pressure.							
-								
Pressure to	esting using an air compressor							
Camuanaa		Commissed						
Sequence	Checklist	Completed						
1	Checklist  Close the isolating ball valves that are connected to the manifold on both bars.	Completed						
•	Checklist	Completed						
1	Checklist  Close the isolating ball valves that are connected to the manifold on both bars.  Open all zones by unscrewing the blue caps on the bottom (return) bar.  Open all flow meters on the top (flow) bar – use the red collar to turn the black section fully anti-clockwise.	Completed						
1 2	Checklist  Close the isolating ball valves that are connected to the manifold on both bars.  Open all zones by unscrewing the blue caps on the bottom (return) bar.  Open all flow meters on the top (flow) bar – use the red collar to turn the black section fully anti-clockwise.  Open the filling valve using the key on the front of the blanking cap and connect the compressor hose up to it. Make sure the drain valve is closed.	Completed						
1 2 3	Checklist  Close the isolating ball valves that are connected to the manifold on both bars.  Open all zones by unscrewing the blue caps on the bottom (return) bar.  Open all flow meters on the top (flow) bar – use the red collar to turn the black section fully anti-clockwise.  Open the filling valve using the key on the front of the blanking cap and connect the compressor hose up to	Completed						
1 2 3 4	Checklist  Close the isolating ball valves that are connected to the manifold on both bars.  Open all zones by unscrewing the blue caps on the bottom (return) bar.  Open all flow meters on the top (flow) bar – use the red collar to turn the black section fully anti-clockwise.  Open the filling valve using the key on the front of the blanking cap and connect the compressor hose up to it. Make sure the drain valve is closed.  Turn on the air compressor and allow the pressure to rise to 4 bar. Once the desired level has been reached, close the filling valve using the key on the blanking cap. This should be left for 24hrs to check for any significant drops in pressure.	Completed						
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# PRESSURE TEST CERTIFICATE

Site details									
Site name			Date						
Address			Reference						
			Technician						
			Floor level						
			Pipe reference						
			Manifold reference						
Please tick the appropriate boxes									
Installation		Re-pressurise		Repair					
Test method Hydraulic (W.	ater) (		Period of test	Min 30 mins					
Test method Co <sup>2</sup> (air)			Test pressure	Min 4 bar					
Sufficient room to attach pumpset (I	minimum 2	250mm required)		Yes	N/A				
Has the manifold label been fitted?									
Description Y	⁄es	No Comments							
System left drained									
System left full of water									
System left under pressure									
Signature of tester		Print name		Date					

Signature of witness Print name Date

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