



OgeeBoard Installation Guide

TI 5015

OgeeBoard Insulation for Screeded Floor Constructions

INTRODUCTION

OgeeBoard is manufactured from polystyrene insulation and potentially replacing the insulation needed to comply with building regulations. The polystyrene boards are routed with channels into which the pipe is installed. With the pipe installed a screed is laid over.

The OgeeBoard Insulation panels are designed to hold the pipe within the thickness of the insulation reducing the possibility of damage from site traffic. No other fixings, staples or plates are needed to hold the underfloor heating pipe in place. The OgeeBoard Insulation panels are available in 35mm, 50mm and 75mm thicknesses enabling very fast installation of the screed underfloor heating, with assured pipe centres.

INSTALLATION

1. With the sub floor even lay the edge foam around the perimeter of the room
2. Lay the OgeeBoards over the floor making sure there are no gaps between panels and ensure the plastic layer lies on top of the OgeeBoard
3. When using a liquid screed make sure the joints between panels are taped
4. Starting at the manifold, lay the pipe into the OgeeBoards according to the supplied design
5. Lay the screed to the required thickness
6. Pressure test and keep under pressure while the screed is being laid
7. Do not use the underfloor heating to dry the screed

Note: Please refer to the installation guide for full installation instructions

SPECIFICATION

Timoleon OgeeBoard insulation panels using 16mm PE-RT pipe. The OgeeBoards are 35/50/75mm thick for a 65mm screed to be laid over. The system is to be designed, installed and commissioned to BS1264.

TECHNICAL INFORMATION

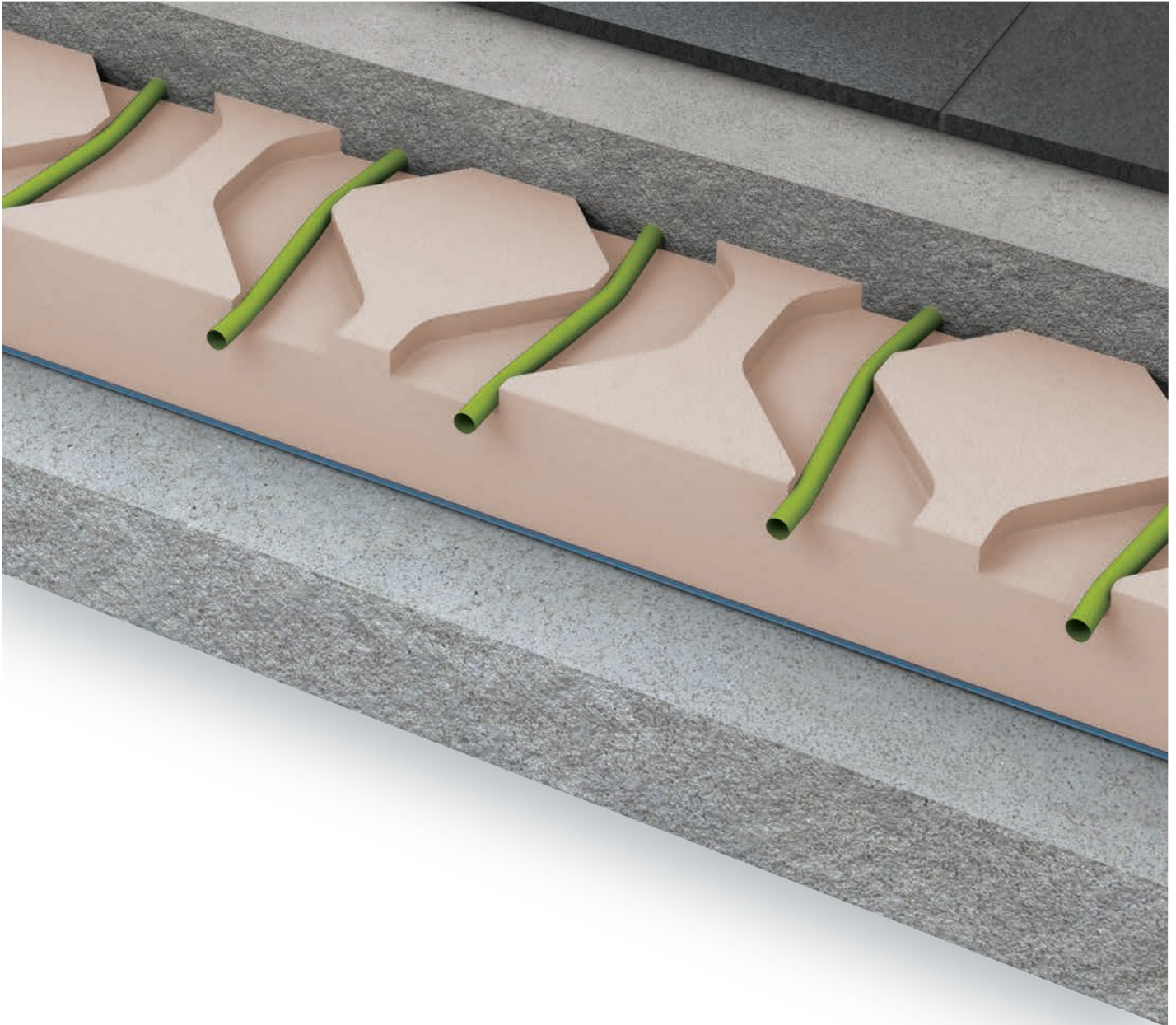
Timoleon panel – XPS extruded polystyrene panels with routed channels to hold pipe ($k=0.033W/mK$). Panels dimensions 1200x600mm.

Heat outputs are dependent on the water temperature, floor construction, system dimensioning, floor finish & design conditions. Please call 01392 363605 for advice.

Heat Output Table (W/m ²)		Flow & return water temperature (°C)		
		50/40	45/35	40/30
Floor Finish	Tile Finish (0.01m ² K/W)	118	94	69
	15mm Wood Finish (0.1m ² K/W)	83	66	48
	Carpet & Underlay (0.15 m ² K/W)	70	55	41

Based on 16mm PE-RT pipe at 150mm centres with 65mm sand/cement screed laid over. 0.15 m²K/W = 1.5 TOG.
Air Temperature = 20°C

OgeeBoard Installation guide TI5015



OgeeBoard has been purposely designed to protect the pipe in the floor and to speed up the installation of underfloor heating system.

Ogee panels are a series insulation panels that can replace the insulation used in the construction. The panels provide grip for the pipe, whilst also providing protection from site traffic and the screed being laid.

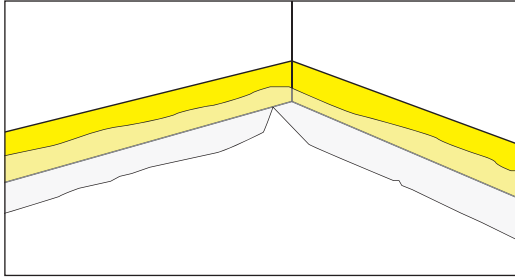
The panel is designed to allow pipes to be installed at exact 200mm or 150mm centres and with 90° bends.



PRIOR TO INSTALLATION

If it is necessary to store the system once you have taken delivery ensure it is kept dry, out of direct sunlight and away from sharp objects or possible chemical spillage. Ensure the area is weather tight.

1

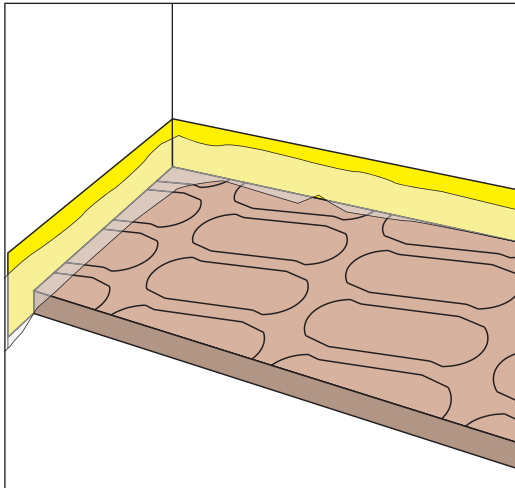


Lay the expansion foam around the perimeter of the room ensuring the gaiter is facing into the room.

2

Lay any additional insulation in accordance with Building Regulation requirements. Insulation should be laid so that there are no gaps and is installed hard up against the expansion foam.

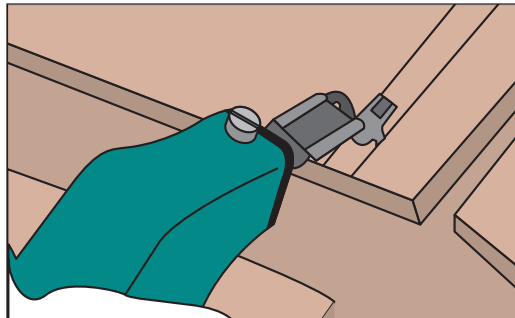
3



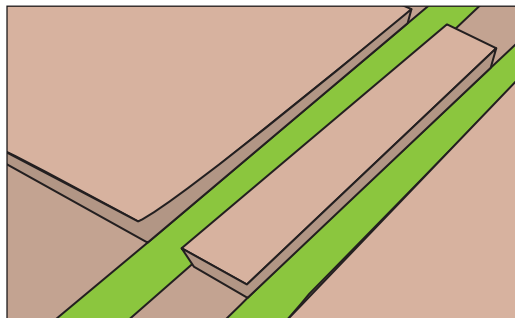
With the edgefoam gaiter lying on top of the panels, starting from one corner lay the first OgeeBoard panel.

Continue to lay the panels across the floor.

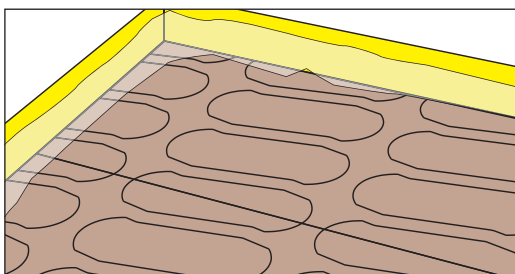
4



Cut channels where flows and returns are needed. A hot blade cutter is recommended to reduce mess and create a tight channel.

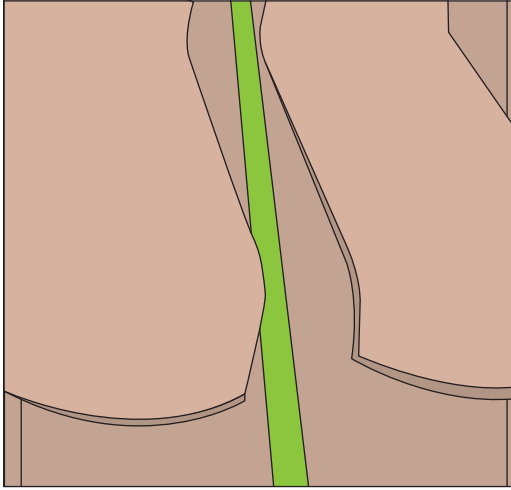


5



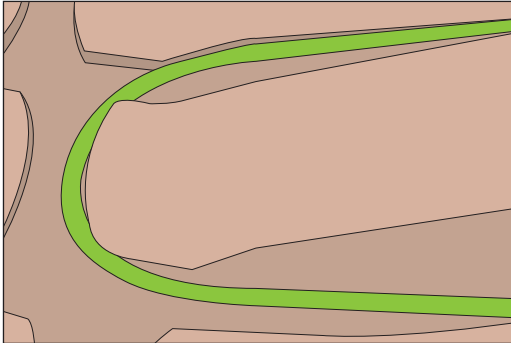
Once the panels are in place tape the joints if necessary.

6



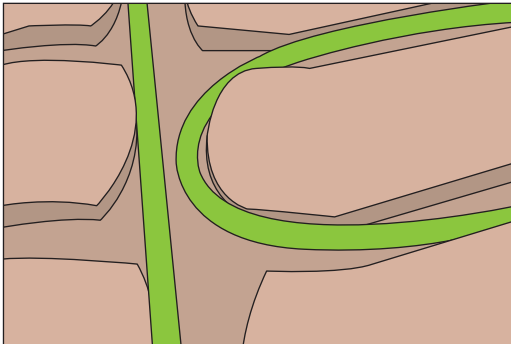
Starting at the manifold insert the pipe into the channels following the underfloor heating design.

7



When making a loop make sure that the pipe is tight against the insulation so it is held in place.

This also leaves room for a return pipe to run in the channel (use staples if the returns do not use a cut channel and need to be held down).



8



Pressure Test each circuit and keep under pressure whilst screed is being laid.



WARNING

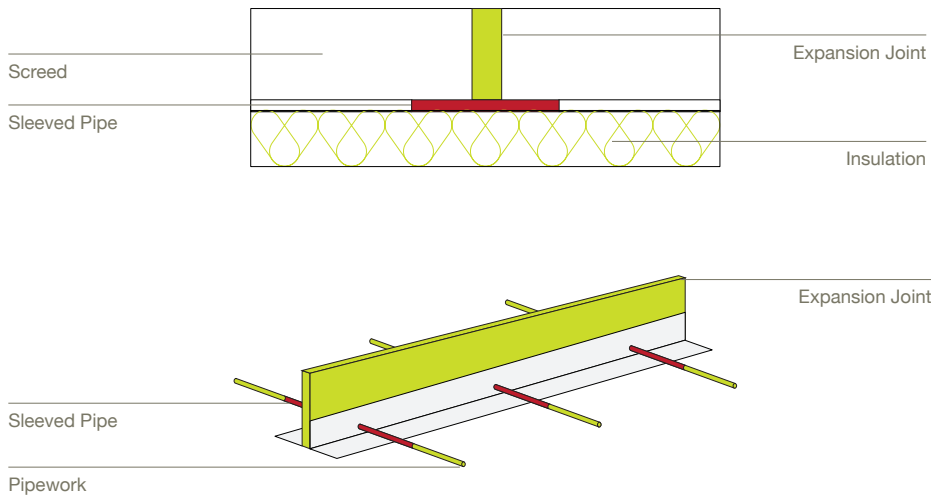
If the pipe work is kinked during the installation, the coil must be replaced.
No connections should be made unless accessible.

Note on expansion joints

For heating screeds intended for the application of stone or ceramic coverings, joint areas shall not exceed 40m² with a maximum length of 8m. In the case of rectangular rooms, joint areas can exceed these dimensions but maximum to the length relation of 2 to 1.

If induced contraction joints are placed in heating screeds, these may be cut a depth of not more than one third of the screed thickness taking into account the location of pipes and shall be sealed after heating up.

Only flow and return pipe should pass through expansion joints. Where this is the case the connecting pipes shall be covered with a flexible insulation tube of some 0.3 m in length spanning the expansion joint.



Please refer to the construction specification for details.

Filling/pressure testing

1. If the manifold is being used to pressure test all circuits at once close both primary isolation valves.
2. Connect a pressure tester to any drain valve, vent the system of air and increase the pressure to 6 bar.
3. Once at this pressure, leave for 60 minutes. If the pressure has dropped examine the pipework. It may be necessary to pressure test individual circuits to determine if there has been damage to the pipe.
4. If the pressure is maintained and passes the test record the results on the pressure test certificate. Have the test witnessed and certified by a third party.
5. Maintain this test pressure whilst the screed is being laid.

Screeding

It is advisable to keep the system under pressure when laying the screed at a minimum of 6 bar using water.

It is essential that the concrete or screed is allowed to fully cure before the underfloor heating system is first put into operation. Any operation of the heating system prior to curing will reduce the moisture content of the screed or concrete and may result in failure of the floor.

Initial warm up should only take place at least 21 days after the laying of the cement screed or in accordance with the manufacturer's instructions.

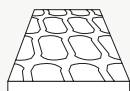
During the initial heat up, the mixing valve should be set to supply temperature between 20 °C and 25 °C which needs to be maintained for at least 3 days. After this period, the flow temperature can then be increased to the design maximum and should be held for a further 4 days to complete the process.



WARNING

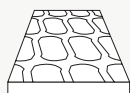
Under no circumstances should the underfloor heating system be used to increase the drying time for the screed, and always follow manufacturers instructions.

Accessories for this system



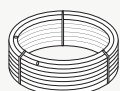
50mm OgeeBoard

Code	USC-OG050
Dimensions	1200 x 600 x 50



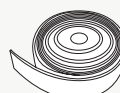
75mm OgeeBoard

Code	USC-OG075
Dimensions	1200 x 600 x 75



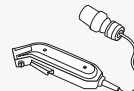
16mm Underfloor heating pipe

Code	UPI-16XXX
Dimensions	16mm



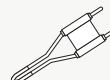
Roll of edgefoam

Code	USC-EF50M
Dimensions	50m



110 V Hot blade cutter

Code	UAC-HBCUT
Dimensions	-



Blade 16mm

Code	UAC-HBL16
Dimensions	16mm

