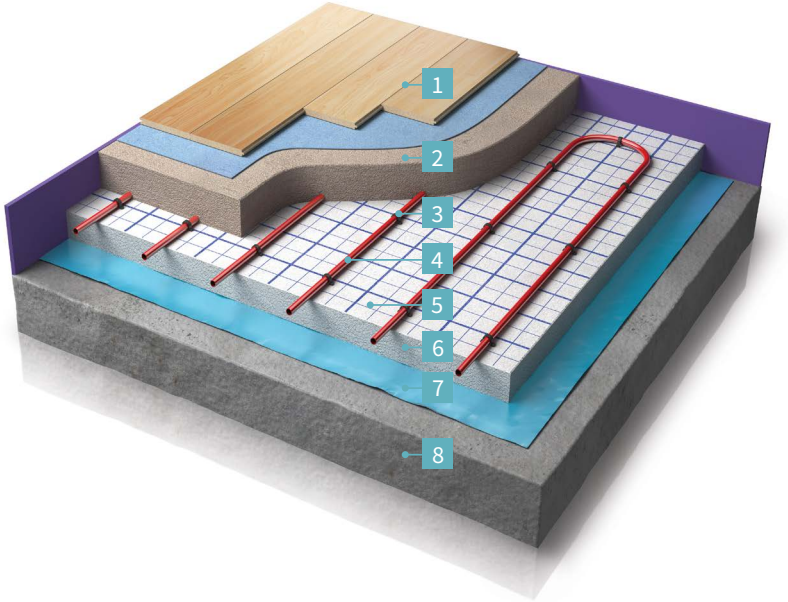
Clypso System

Overview

The Warmup Clypso System is designed for use within floating screeded floors. It comprises of insulation, pipework and plastic clips to secure the underfloor heating pipe to the laminated insulation panels. The panels are constructed from either PIR (polyisocyanurate) or EPS (expanded polystyrene) with a fabric reinforced PE top surface. The fabric on each panel comes with two flaps, for taping to the adjoining panel, thereby increasing water resistance and separating the insulation layer from the wet screed.

The fabric is printed with a grid pattern to make consistent pipe-spacing easier for the installer, especially when required to work around obstacles or a spiral installation pattern. Insulation must comply with Building Regulations in force at the time of approval and BS/EN1264. The Warmup Clypso System is suitable for almost any floor finish and in particular where the flooring (wood, carpet or vinyl) may be replaced from time to time.

FLOOR CONSTRUCTION
1 Floor finish
2 65-75mm Sand & Cement Screed or propriatary screed
3 Warmup 40/60mm Clypso Clip
4 Warmup 16mm Pipework
5 Moisture Control Layer
6 Rigid Insulation
7 DPM
8 Subfloor



Hydronic
Heating System

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www.warmup.co.uk

Warmup®
The world's **best-selling** floor heating brand™

Features

- Clypso system can be installed under either 65-75mm sand and cement screed or 35-45mm proprietary screed
- The insulation boards are lined in 50mm grids to assist the installer in quickly placing the pipes in the correct design format and helps speed-up the installation process
- Insulation fabric on the boards are reinforced with a PE woven layer to deliver extra security for retention of the pipe. This also makes it easier to install and provides additional protection against damage to the pipe prior to screed being laid
- Various compressive strengths are available, which safely allows the floor build-up to take imposed loads without damaging the integrity of the floor
- Insulation available in a variety of thickness from 25mm - 100mm
- Clypso Clips available in two lengths, 40mm & 60mm. 60mm clip offers greater fixing strength while the 40mm clip only requires a 25mm layer of insulation making them well suited for intermediate floors
- Lifetime Warranty when PEX-A pipe is used / 50yr Warranty for PE-RT or AL/PE-RT pipes

WARMUP COMPONENTS

Insulation Boards

Warmup supplies both Expanded Polystyrene (EPS) and foil faced Polyisocyanurate (PIR) insulation boards. The EPS boards come with a laminate woven top layer with grid markings to aid in pipe installation. The fabric on each panel comes with two flaps, for taping to the adjoining panel, thereby increasing water resistance and separating the insulation layer from the wet screed.

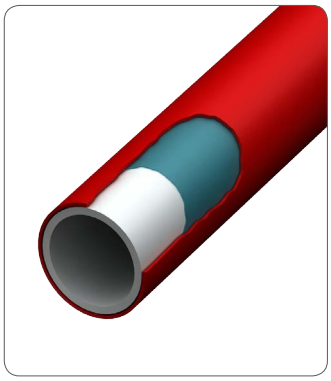
The PIR insulation boards have a tough woven aluminium foil composite grid on both sides. The foil face distributes the heat upward evenly. PIR insulation boards have a lower thermal conductivity making the boards much thinner than EPS insulation.

CLYPSO PIR INSULATION BOARDS- TECHNICAL SPECIFICATIONS						
CODE	DIMENSIONS	THICKNESS	COMPRESSIVE STRENGTH @10% (kPa)	THERMAL CONDUCTIVITY @ 10°C	R-VALUE (m^2 K/W)	FIRE CLASS EN 13501
WHS-CL-RB25	2.4m x 1.2m	25mm	150	0.022	1.14	E
WHS-CL-RB40	2.4m x 1.2m	40mm	150	0.022	1.82	E
WHS-CL-RB50	2.4m x 1.2m	50mm	150	0.022	2.27	E
WHS-CL-RB60	2.4m x 1.2m	60mm	150	0.022	2.73	E
WHS-CL-RB75	2.4m x 1.2m	75mm	150	0.022	3.41	E

CLYPSO EPS INSULATION BOARDS - TECHNICAL SPECIFICATIONS						
CODE	DIMENSIONS	THICKNESS	COMPRESSIVE STRENGTH @10% (kPa)	THERMAL CONDUCTIVITY @ 10°C	R-VALUE (m^2 K/W)	FIRE CLASS EN 13501
WHS-CL-B07025	2.4m x 1.2m	25mm	70	0.038	0.66	F
WHS-CL-B07050	2.4m x 1.2m	50mm	70	0.038	1.32	F
WHS-CL-B07075	2.4m x 1.2m	75mm	70	0.038	1.97	F
WHS-CL-B070100	2.4m x 1.2m	100mm	70	0.038	2.63	F
WHS-CL-B10025	2.4m x 1.2m	25mm	100	0.036	0.69	F
WHS-CL-B010050	2.4m x 1.2m	50mm	100	0.036	1.39	F
WHS-CL-B10075	2.4m x 1.2m	75mm	100	0.036	2.08	F
WHS-CL-B10100	2.4m x 1.2m	100mm	100	0.036	2.78	F
PREMIUM RANGE						
WHS-CL-B07025+	2.4m x 1.2m	25mm	70	0.030	0.83	E
WHS-CL-B07050+	2.4m x 1.2m	50mm	70	0.030	1.67	E
WHS-CL-B07075+	2.4m x 1.2m	75mm	70	0.030	2.5	E
WHS-CL-B070100+	2.4m x 1.2m	100mm	70	0.030	3.33	E
WHS-CL-B10025+	2.4m x 1.2m	25mm	100	0.030	0.83	E
WHS-CL-B010050+	2.4m x 1.2m	50mm	100	0.030	1.67	E
WHS-CL-B10075+	2.4m x 1.2m	75mm	100	0.030	2.5	E
WHS-CL-B10100+	2.4m x 1.2m	100mm	100	0.030	3.33	E

Warmup Insulation Boards have zero Ozone Depletion Potential (ODP) and a Global Warming Potential (GWP) of less than 5

Pipework



The Warmup PEX-A pipe is formed as a single extrusion with an adhesive layer and EVOH oxygen barrier. The EVOH layer restricts the ingress of oxygen into the heating system, reducing oxidation of critical components in the primary system and extending their service life.

The minimum 70% cross linking within the PE material provides superior mechanical properties to the pipe, with a maximum working temperature and pressure of 95°C and 6 bar respectively. The PEX-A pipe has a high thermal conductivity of 0.41W/mK, substantially greater than an equivalent polybutylene pipe at 0.22W/mK. This enables our systems to emit between 3% and 6% more heat from the same water temperature as equivalent systems using PB pipe.

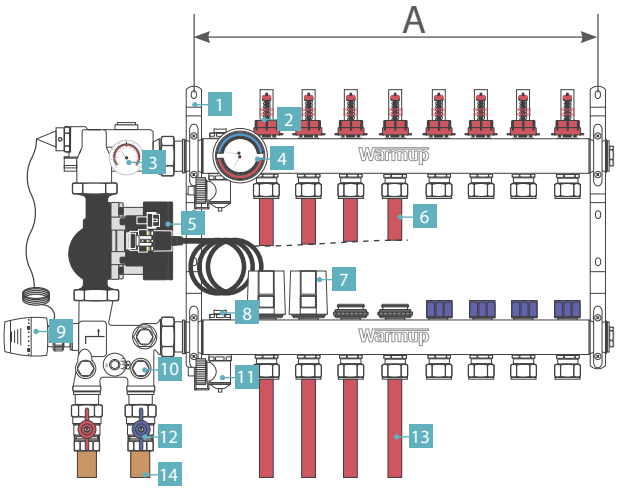
PEX-A PIPE - TECHNICAL SPECIFICATIONS						
CODE	DIMENSIONS	MAX. WORKING TEMPERATURE	MAX. OPERATING PRESSURE	COMPOSITION	THERMAL CONDUCTIVITY	WATER CAPACITY
WHS-P-PEXA-25	PEX-A 16mm x 2mm x 25m	95°C	6 Bar	PEX-A 70% cross linked	0.41 W/mK	16mm pipe - 0.113 l/m
WHS-P-PEXA-50	PEX-A 16mm x 2mm x 50m					
WHS-P-PEXA-60	PEX-A 16mm x 2mm x 60m					
WHS-P-PEXA-70	PEX-A 16mm x 2mm x 70m					
WHS-P-PEXA-80	PEX-A 16mm x 2mm x 80m					
WHS-P-PEXA-90	PEX-A 16mm x 2mm x 90m					
WHS-P-PEXA-100	PEX-A 16mm x 2mm x 100m					
WHS-P-PEXA-110	PEX-A 16mm x 2mm x 110m					
WHS-P-PEXA-120	PEX-A 16mm x 2mm x 120m					
WHS-P-PEXA-200	PEX-A 16mm x 2mm x 200m					
WHS-P-PEXA-300	PEX-A 16mm x 2mm x 300m					
WHS-P-PEXA-500	PEX-A 16mm x 2mm x 500m					

NOTE: Range of PE-RT & PE-RT/AL/PE-RT pipes also available. Please contact Warmup on 0845 034 8270 for further information

Manifold

The Warmup Stainless Steel Manifold range provides flexible zoning and water regulation for 2 to 12 underfloor heating circuits. Supplied complete with Taconova TopMeters, Fill/Drain Valves, Air Vents and a Thermomanometer, it is equipped with all the features needed to commission an underfloor heating system quickly and confidently.

MANIFOLD - TECHNICAL SPECIFICATIONS	
MATERIAL	304 Stainless Steel
PORTS AVAILABLE	2 - 12
TEMPERATURE RANGE	-5°C to +60°C
MAX OPERATING PRESSURE	6 Bar
MAX TEST PRESSURE	10 Bar
ADJUSTMENT RANGE	0 - 5 l/min
MEASURING ACCURACY	±10% (of highest nominal value)
MANIFOLD ARM DIMENSIONS	40 mm X 40 mm
PIPE FITTING CENTRES	50 mm / 55 mm
PIPE FITTING DIAMETERS	G-1/2" (20X1.5)



MANIFOLD & MIXING UNIT

1 Mounting Bracket
2 Flow Gauge
3 Thermometer - secondary
4 Thermomanometer
5 Grundfos UPM3 Circulator
6 Secondary - Flow
7 Electrothermic Actuator
8 Manual Air Vent
9 Capillary Thermostat
10 Mixing Unit
11 Fill/Drain Valve
12 Primary Isolation Valve
13 Secondary - Return
14 Primary pipework

Thermostat

4iE® SMART WIFI THERMOSTAT

For Central Heating and Underfloor Heating Systems

Connected to the internet by WiFi, it can be controlled from a smart phone, tablet or computer as well as its own touchscreen interface. It learns how homeowners use their heating and the unique way each zone reacts. It uses this knowledge to suggest ways to save energy, such as what temperature should be set when the area is not in use and when the heating can be turned off earlier with no noticeable impact on comfort.

Personalise your 4iE with uploadable photo backgrounds and changeable, textured overlays.

SmartGeo™

Always at the right temperature automatically, and up to 25% lower energy usage. Just like magic.

EasySwitch™

Always on the best tariff, automatically. Saving on average £210.

Easy to use

Simple and secure set up using WiFi, with 24/7 technical support.