Econna System

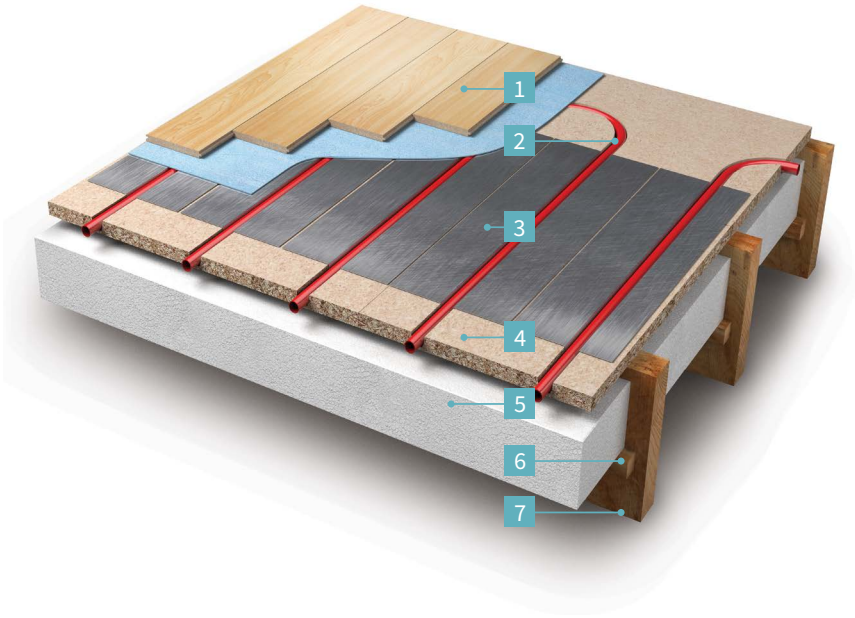
Overview

The Warmup Econna System is designed for use over both battened and joisted floors leaving the void between them free for other services. The profiled 22mm thick chipboard panels can be installed over battens or joists with spacings of up to 600mm centres.

The Econna System is ideal for new and old floors alike but when planning to refurbish an existing floor it can be difficult to know what you will find without lifting the floor up first. The Econna System is simply installed over the unknown in place of a standard floor deck rather than competing for space with the other services within the void beneath.

The space between the battens or joists is insulated to promote systems efficiency. The Econna panels are then glued and screwed to the battens or joists below to form a structural deck, first fitting the end panels over the first joist bay along opposing walls before laying the straight panels between them. The diffusion pipes and plates are then inserted into the channels before laying the floor covering.

FLOOR CONSTRUCTION
1 Floor finish
2 Warmup 16mm Pipework
3 Warmup Diffusion Plate
4 Warmup Econna Boards
5 Rigid Insulation
6 Supporting Battens
7 Timber Joist



Hydronic
Heating System

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

Features

- Diffusion plates are highly conductive and efficiently diffuse the heat across the underside of the floor deck to create an even surface temperature
- Ideal for old and new floors
- System promotes fast heat-up response times
- No wet trades involved and consequently no waiting for the installation to dry before the floor can be completed
- Diffusion plates are lightweight and easy to install
- Lifetime Warranty when PEX-A pipe is used / 50yr Warranty for PE-RT or AL/PE-RT pipes

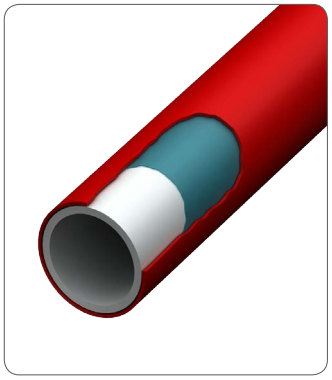
WARMUP COMPONENTS

Econna Boards & Diffusion Plates

The Econna boards are a composite wood load bearing slotted 22mm floor with return ends. The boards are designed to fit on top of standard wood joists of up to 600mm replacing the standard board in the floor construction. The diffusion plates and pipes are then slotted into the grooves.

ECONNA BOARDS - TECHNICAL SPECIFICATIONS			
CODE	DIMENSIONS	THICK-NESS	PIPE SIZE
WHS-EC-CB22A (Straight Board)	600 x 1800mm	22mm	16mm pipe
WHS-EC-CB22AE (Turning Board)	800 x 595mm	22mm	16mm pipe
DIFFUSION PLATE - TECHNICAL SPECIFICATIONS			
WHS-EC-PLT16 (Single groove plate)	190 x 1150mm	0.5mm	16mm pipe
WHS-TE-ALUDP4 (Single groove plate)	190 x 1000mm	0.6mm	16mm pipe
WHS-TE-ALUDP5 (Single groove plate)	190 x 1000mm	0.7mm	16mm pipe

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.

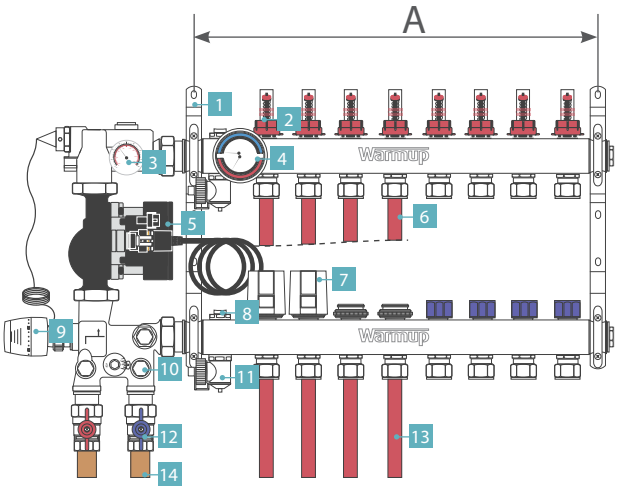
PEX-A PIPE - TECHNICAL SPECIFICATIONS						
CODE	DIMENSIONS	MAX. WORKING TEMPERATURE	MAX. OPERATING PRESSURE	COMPOSITION	THERMAL CONDUCTIVITY	WATER CAPACITY
WHS-P-PEXA-25	PEX-A 16mm x 2mm x 25m	95°C	6 Bar	PEX-A 70% cross linked	0.41 W/mK	16mm pipe - 0.113 l/m
WHS-P-PEXA-50	PEX-A 16mm x 2mm x 50m				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