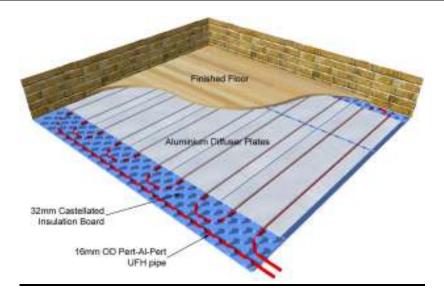


## **Technical Submittal - Castellated UFH system**



32mm, 48mm or 63mm Castellated Insulation boards will be supplied and laid by Underfloor Heating Technologies throughout the area to be heated. Aluminium Diffuser Trays measuring 395mm x 1000mm x 0.6mm with 2 channels pressed to a depth of 25mm at 200mm centres will be laid on to the Castellated boards. The 25mm depth of the pressed channels in the Aluminium trays sits between the "castles" of the insulation board. The 16mm OD Pert-Al-Pert UFH pipe is then run along the pressed channels in the Aluminium diffuser plates in continuous, unbroken, loops from the UFH manifold. The final floor covering can then be floated across the area by others.

The Castellated UFH system will provide and output of 76 Watts/m<sup>2</sup> when running on a flow temperature of 55°C.

Technical Data	32mm	48mm	63mm
	Castellated	Castellated	Castellated
Type	EPS 250	EPS 200	EPS 200
Density	40 kg/m <sup>3</sup>	30 kg/m <sup>3</sup>	30 kg/m <sup>3</sup>
Compression Resistance at 10% of crushing	<u>&gt;</u> 250 kPa	≥200 kPa	<u>≥</u> 200 kPa
Thermal Conductivity	0.034 W/mK	0.035 W/mK	0.035 W/mK
Thermic Resistance RD	0.45m <sup>2</sup> K/W	0.75m <sup>2</sup> K/W	1.05m <sup>2</sup> K/W
Thermal Resistance (Sins/λins)	0.29m <sup>2</sup> K/W	0.57m <sup>2</sup> K/W	0.86m <sup>2</sup> K/W
Class of reaction to fire	Euroclass E	Euroclass E	Euroclass E
Water Absorbtion	<4%	<4%	<4%
Useful thickness Sins	10 mm	20 mm	30 mm
Total Length	1135 mm	1135 mm	1135 mm
Total Width	635 mm	635 mm	635 mm
Total Thickness	32 mm	48 mm	63 mm
Film Thickness	0.16 mm	0.16 mm	0.16 mm
Pipe Spacing	50 mm	50 mm	50 mm
External Ø of UFH pipework	16-17 mm	16-17 mm	16-17 mm
Pack coverage	14.52 m <sup>2</sup>	7.92 m <sup>2</sup>	6.6 m <sup>2</sup>