# Separating floor - In-situ concrete slab

# **Robust Detail E-FC-2**

Underfloor heating pipe inserted into CELLECTA XFLO underfloor heating insulation boards CELLECTA ScreedBoard 20 laid over UFH boards CELLECTA FIBRE fon 8 resilient layer laid on levelled structural floor Interlocking **CELLECTA ScreedBoard 20** edge detail Highly conductive interlocking floorboard 0 CELLECTA ULTRAplate 0.5 Aluminium heat diffuser plate manufactured to suit pipe diameter CELLECTA XFLO 250/300/500 Routed UFH board manufactured to suit pipe diameter and centres CELLECTA FIBRE 10118/10 resilient layer UFH plastic pipe supplied by others Levelling screed applied to floor slab to **Compressive strength** SR2 (min) standard In-situ concrete slab laid to worse than SR2 ling 250 - 500kPa standard (To structural engineers' and RD specification) Ceiling treatment >+8dB

#### **Overlay Board**

FFT4

## ScreedBoard® 20

Interlocking high conductivity overlay board Thickness: 20mm Board size: 600 x 1200mm Weight: 25kg/m<sup>2</sup> / 18kg per sheet Thermal resistance: 0.05m<sup>2</sup>k/W

### Heat Diffuser

**ULTRA**plate 0.5

High performance pressed aluminium diffuser plate Plate thickness: 0.5mm Plate length: 1000m To suite pipe sizes: 10, 12, 14, 15, 16, 20mm

**Resilient Layer Options** 



High performance acoustic fleece / fibreboard

Dimensions: 8mm/10mm x 600mm x 1200mm Weight: 8mm - 1kg/m<sup>2</sup> / 10mm - 2.36kg/m<sup>2</sup>

**Perimeter Edge Strip** 



Closed-cell extruded polyethylene edge strip Thickness: 5mm x 120mm x 50m

### 3<sup>rd</sup> Party Approvals

#### **Environmental Credentials**



## WU9.sc2

**Typical Acoustic Performance** Airborne: 55dB *D*<sub>*nT*,*w*</sub> + *C*<sub>tr</sub> 42dB L<sub>nT,w</sub> Impact:  $rd DL_w = 28dB$ 



**UFH Insulation Board** 

**CELLECTA's XFLO** boards are manufactured to suit the pipe diameter and spacing required to achieve the desired thermal output. The board's high compressive strength enables it to withstand the rigours of the installation process as well as the long term loads imposed in residential and commercial applications.

### **Key Benefits**

- O High resistance to compression 250, 300 & 500kPa
- O Manufactured to suit pipe and spacing required
- O Works in conjunction with acoustic treatments
- Outstanding thermal output

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Physical Properties		XFLO		
		250	300	500
		High strength UFH board	High strength UFH board	Ultra strength UFH board
Strength at 10% compression	kPa	250	300	500
Thermal conductivity	W/mk	0.033	0.033 <u>&lt;</u> 80mm 0.034 >81mm	0.035
Temperature range	°C	-50/+75	-50/+75	-50/+75
Route sizes available (to suit pipe diameter)	mm	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20	10, 12, 14, 15, 16, 18, 20
Pipe centres	mm	150, 200, 300	150, 200, 300	150, 200, 300
Board size	mm	600 x 2500	600 x 2500	600 x 1200* 600 x 1250
Thickness' (other sizes manufactured to order)	mm	20, 25, 30, 35	40, 50, 60, 75	15*, 18*, 50, 60, 75



