Solid timber joist separating floor

Acoustic Treatment + UFH

CELLECTA Mojave® acoustic / UFH floating floor system laid on timber sub-deck
Use with timber frame walls only

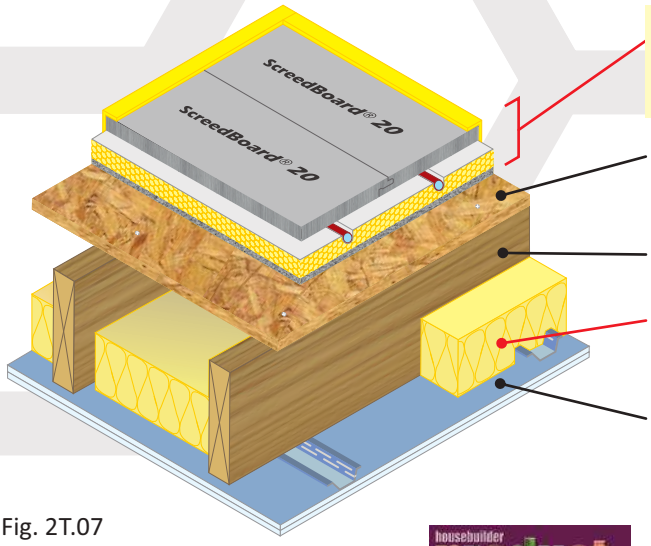


Fig. 2T.07

Acoustic + UFH treatment	**CELLECTA Mojave® S2/8** acoustic treatment incorporating underfloor heating (see Table 2T.07a for full details)
Floor decking	11mm (min) thick wood based board, density 600kg/m³ (min)
Joists	220mm (min) solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m3)
Ceiling	See Table 2T.07b for ceiling treatment options featuring 30mm deep CELLECTA **HP30** resilient bars

housebuilder product awards 2020 winner — Best Services Product

FASTRACKCAD ARCHITECTURAL CAD DATABASES

Available on bimstore.co

NBS Plus

Table 2T.07a

Installation Details

Resilient overlay platform floor system incorporating underfloor heating

CELLECTA Mojave® S1/8

Dry laid acoustic treatment incorporating underfloor heating system

① **ScreedBoard® 20**
High conductivity overlay board
Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² / 18.00kg/board
Thermal resistance: 0.05m²K/W

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m² coverage

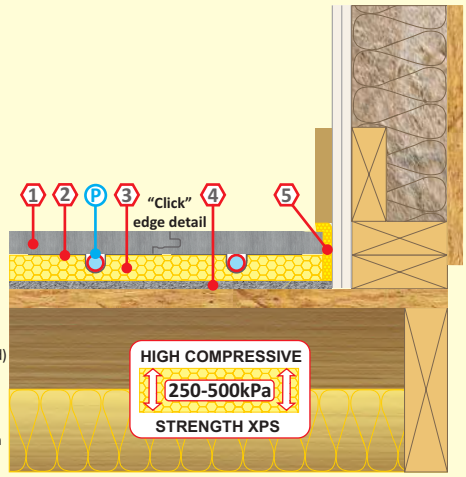
② **ULTRAplate**
Aluminium heat diffuser plate (to suit pipe installed)
Dimensions: 130mm x 1000mm

③ **XFLO® 250, 300, 500 (kPa)**
High compressive strength routed XPS insulation
Dimensions: 15-75mm x 600mm x 2500mm
Pipe centre: 150, 200, 300mm
Pipe bore size (OD): 10 - 20mm
(manufactured to suit)

④ **FIBRE*fon*® 8**
High performance resilient layer
Dimensions: 8mm x 600mm x 1200mm
Weight: 1kg/m² / 0.72kg/board

⑤ **YELO*fon*® ES5/100**
Perimeter edge strip
Dimensions: 5mm x 100mm x 50m

Ⓟ UFH water pipe (by others)



Screedboard 20 is **5x more thermally conductive** than an 18mm chipboard + 19mm plasterboard plank combination, enabling the underfloor heating system to be more responsive and the heat source to run more efficiently at a lower temperature.

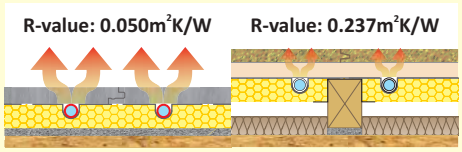


Table 2T.07b

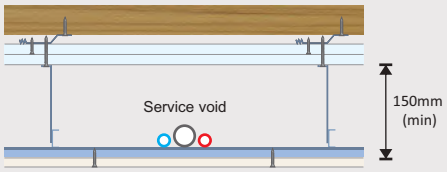
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Plus sacrificial ceiling
Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



CT3 30mm CELLECTA **HP30** resilient bars mounted at right angles to the joists at 600mm (max) centres.

Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joints staggered.

Acoustic Performance

Airborne:	52dB $D_{nT,w} + C_{tr}$	Building Regs
Impact:	55dB $L_{nT,w}$	+ 5dB

Values quoted are typical and based on the treatment being installed correctly and pre-completion tested (PCT).
Airborne performance tested in accordance with BS EN ISO 140-4:1998
Impact performance tested in accordance with BS EN ISO 140-7: 1998

Third Party Accreditation and Approvals

RD Proprietary Treatment

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada 2015

CLASS B*fl*,S1
BS EN13501-1
2017

Environmental Credentials

GWP <5

100% Recyclable Gypsum