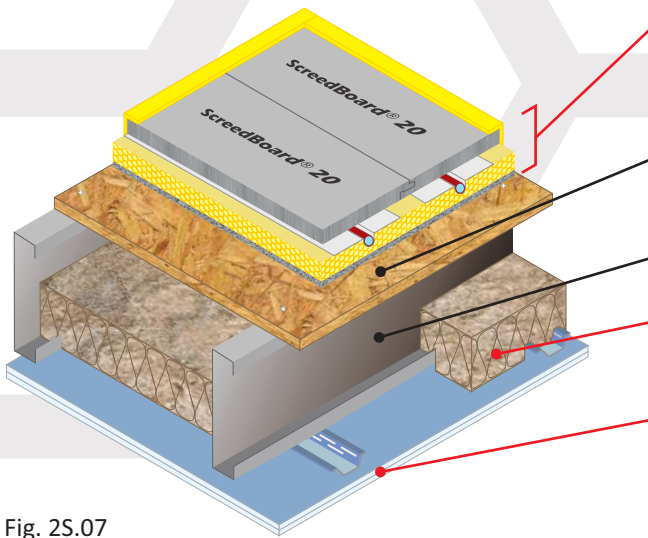


# Metal C-section joist separating floor

# Robust Detail E-FS-3 + UFH

CELLECTA Mojave® acoustic/UFH floating floor system laid on timber sub-deck  
Metal C-section joists and lightweight metal frame walls only



<b>Acoustic + UFH treatment</b>	CELLECTA Mojave® S1/8 acoustic treatment incorporating underfloor heating (see Table 2S.07a for full details)
<b>Floor decking</b>	18mm thick (min) wood based board, density 600kg/m <sup>3</sup>
<b>Joists</b>	200mm <sup>(1)</sup> (min) deep metal C-section joists
<b>Absorbing material</b>	50mm CELLECTA FIBREfon® Micro 50 100mm (min) quilt insulation (10-36kg/m <sup>3</sup> )
<b>Ceiling</b>	See Table 2S.07b for ceiling treatment options featuring 30mm deep CELLECTA HP30 resilient bars

(1) 254mm(min) required for Robust Detail applications

Fig. 2S.07



Table 2S.07a

### Installation Details

Resilient overlay platform floor system incorporating underfloor heating

**Mojave® S1/8**  
Dry laid acoustic treatment incorporating underfloor heating system

- ScreedBoard® 20**  
High conductivity overlay board  
Dimensions: 20mm x 600mm x 1200mm  
Weight: 25kg/m<sup>2</sup> / 18.00kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W
- CELLECTA Pro Adhesive**  
ScreedBoard joint adhesive  
Bottle size: 1L / 33m<sup>2</sup> coverage
- ULTRAplate**  
Aluminium heat diffuser plate (to suit pipe installed)  
Dimensions: 130mm x 1000mm
- XFLO® 250/300/500**  
High compressive strength routed XPS insulation board  
Dimensions: 15-75mm x 600mm x 2500mm  
Pipe centre: 150, 200, 300mm  
Pipe bore size (OD): 10 - 20mm (manufactured to suit)
- FIBREfon® 8**  
High performance resilient layer  
Dimensions: 8mm x 600mm x 1200mm  
Weight: 1kg/m<sup>2</sup> / 0.72kg/board
- YELOfon® ESS/100**  
Perimeter edge strip  
Dimensions: 5mm x 100mm x 50mm

UFH water pipe (by others)

Additional item required:  
CELLECTA ScreedBoard fixing tools

Table 2S.07b

### Ceiling Treatment Options

Ceiling board fixings must not penetrate or touch the floor joists 30mm CELLECTA HP30 Resilient Bars (3m long) mounted at right angles to the joists at 600mm (max) centres.

**CT1** Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m<sup>2</sup>) fixed with 32mm screws and 12.5mm (nominal 10kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

**CT2** Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

**Construction notes**  
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments **MUST** be isolated from the floating floor with YELOfon ESS/100 perimeter flanking strip.

## Acoustic Performance

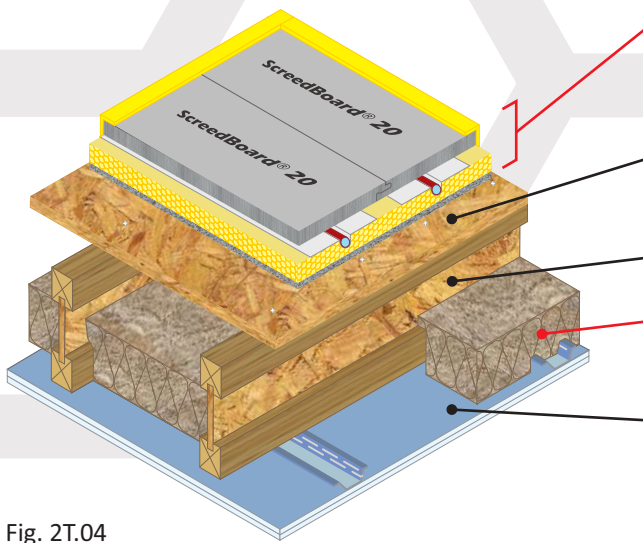
<b>Airborne:</b>	55dB $D_{nT,w} + C_{tr}$	<b>Building Regs</b>
<b>Impact:</b>	54dB $L_{nT,w}$	+ 5dB

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

## Environmental Credentials

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



**Acoustic + UFH treatment**  
CELLECTA Mojave® S1/8 acoustic treatment incorporating underfloor heating (see Table 2T.04a for full details)

**Floor decking**  
15mm<sup>(1)</sup> (min) thick wood based board, density 600kg/m<sup>3</sup> (min)

**Joists**  
235mm<sup>(2)</sup> (min) timber I-joint

**Absorbing material**  
 ○ 50mm CELLECTA FIBREfon® Micro 50  
 ● 100mm (min) quilt insulation (10-36kg/m<sup>3</sup>)

**Ceiling**  
See Table 2T.04b for ceiling treatment options featuring 30mm deep CELLECTA HP30 resilient bars

<sup>(1)</sup> 18mm(min) required for Robust Detail applications  
<sup>(2)</sup> 240mm (min) required for Robust Detail applications when adopting CT3 ceiling treatment

Fig. 2T.04



Table 2T.04a

Table 2T.04b

## 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/m<sup>2</sup> / 18.00kg/board  
 Thermal resistance: 0.05m<sup>2</sup>K/W

A **CELLECTA Pro Adhesive**

ScreedBoard joint adhesive  
 Bottle size: 1L / 33m<sup>2</sup> coverage

2 **ULTRApate**

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)

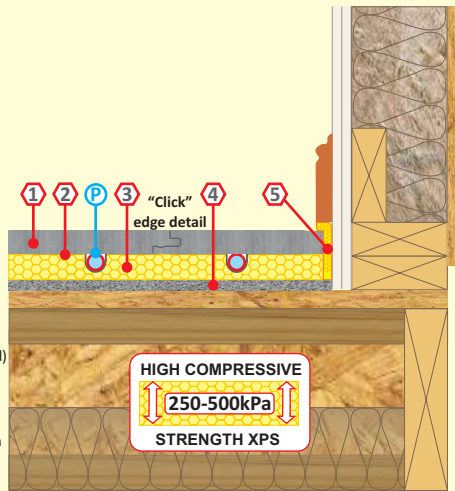
4 **FIBREfon® 8**

High performance resilient layer  
 Dimensions: 8mm x 600mm x 1200mm  
 Weight: 1kg/m<sup>2</sup> / 0.72kg/board

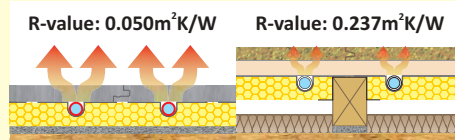
5 **YELOfon® ES5/100**

Perimeter edge strip  
 Dimensions: 5mm x 100mm x 50mm

P **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.



## Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists

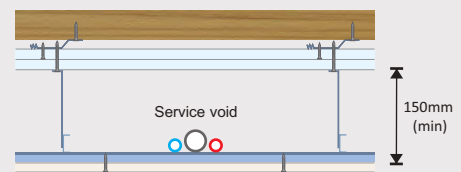
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m<sup>2</sup>) fixed with 32mm screws and 12.5mm (nominal 10kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) 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/m<sup>2</sup> 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/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.



## Acoustic Performance

**Airborne:** 52dB  $D_{nT,w} + C_{tr}$

**Impact:** 55dB  $L_{nT,w}$

Building Regs

+ 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 BSEN ISO 140-7: 1998

## Third Party Accreditation and Approvals



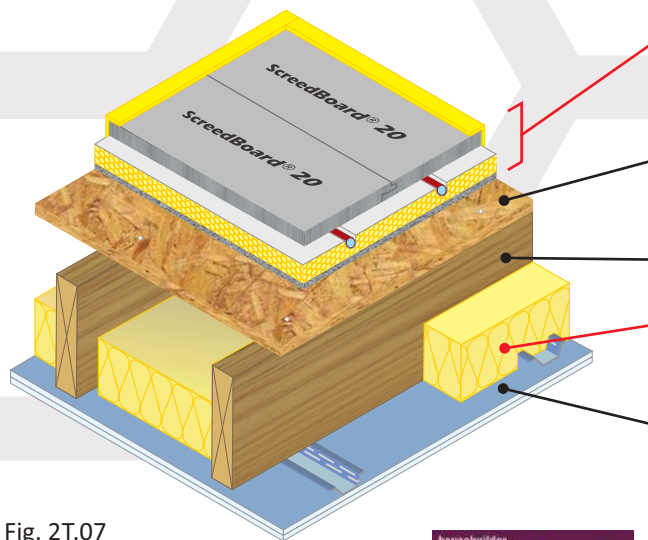
## Environmental Credentials



# 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



**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/m<sup>3</sup> (min)

**Joists**  
220mm (min) solid timber joists

**Absorbing material**  
 ○ 50mm CELLECTA FIBREfon® Micro 50  
 ● 100mm (min) quilt insulation (10-36kg/m<sup>3</sup>)

**Ceiling**  
See Table 2T.07b for ceiling treatment options featuring 30mm deep CELLECTA HP30 resilient bars

Fig. 2T.07



Table 2T.07a

Table 2T.07b

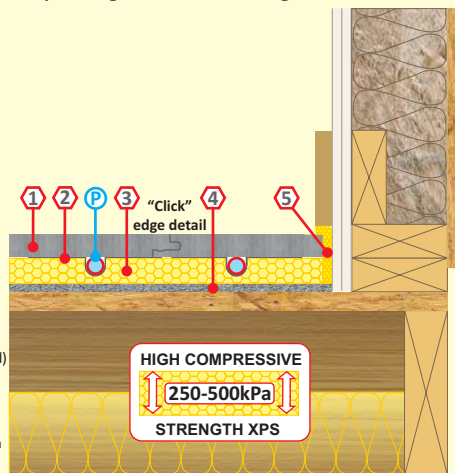
## Installation Details

Resilient overlay platform floor system incorporating underfloor heating

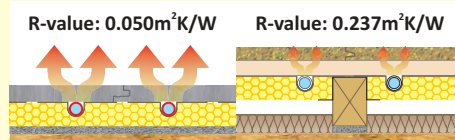
### CELLECTA Mojave® S1/8

Dry laid acoustic treatment incorporating underfloor heating system

- 1 **ScreedBoard® 20**  
High conductivity overlay board  
Dimensions: 20mm x 600mm x 1200mm  
Weight: 25kg/m<sup>2</sup> / 18.00kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W
- A **CELLECTA Pro Adhesive**  
ScreedBoard joint adhesive  
Bottle size: 1L / 33m<sup>2</sup> coverage
- 2 **ULTRApate**  
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 **FIBREfon® 8**  
High performance resilient layer  
Dimensions: 8mm x 600mm x 1200mm  
Weight: 1kg/m<sup>2</sup> / 0.72kg/board
- 5 **YELOfon® ES5/100**  
Perimeter edge strip  
Dimensions: 5mm x 100mm x 50m
- P **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.



## Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists

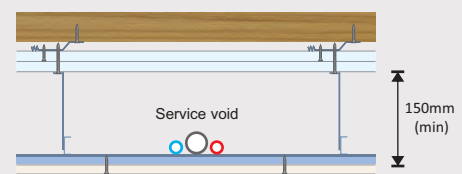
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m<sup>2</sup>) fixed with 32mm screws and 12.5mm (nominal 10kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

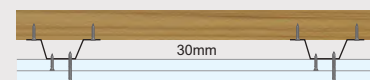
Plus sacrificial ceiling

Metal ceiling system with a 150mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m<sup>2</sup> 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/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.



## Acoustic Performance

<b>Airborne:</b>	52dB $D_{nT,w} + C_{tr}$	Building Regs
<b>Impact:</b>	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



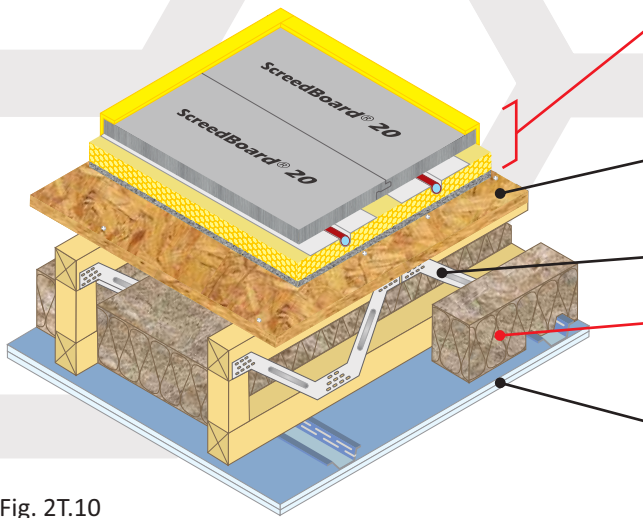
## Environmental Credentials



# Metal web joist separating floor

# Robust Detail E-FT-6 + UFH

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



**Acoustic + UFH treatment**  
CELLECTA Mojave® S1/8 acoustic treatment incorporating underfloor heating (see Table 2T.10a for full details)

**Floor decking**  
15mm<sup>(1)</sup> (min) thick wood based board, density 600kg/m<sup>3</sup> (min)

**Joists**  
253mm<sup>(1)</sup> (min) metal web joists

**Absorbing material**  
 ○ 50mm CELLECTA FIBREfon® Micro 50  
 ● 100mm (min) quilt insulation (10-36kg/m<sup>3</sup>)

**Ceiling**  
See Table 2T.10b for ceiling treatment options featuring 30mm deep CELLECTA HP30 resilient bars  
<sup>(1)</sup>18mm (min) required for Robust Detail applications

Fig. 2T.10



Table 2T.10a

Table 2T.10b

## 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/m<sup>2</sup> / 18.00kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W

A **CELLECTA Pro Adhesive**

ScreedBoard joint adhesive  
Bottle size: 1L / 33m<sup>2</sup> coverage

2 **ULTRApate**

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)

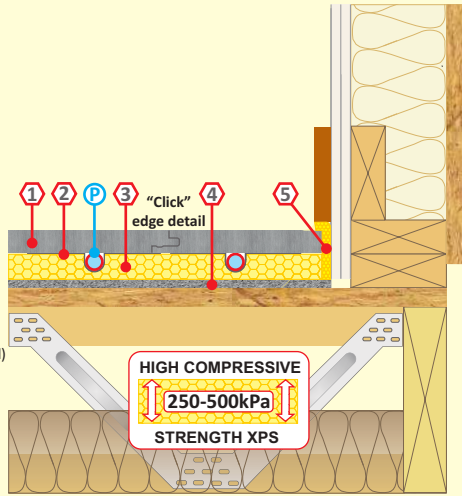
4 **FIBREfon® 8**

High performance resilient layer  
Dimensions: 8mm x 600mm x 1200mm  
Weight: 1kg/m<sup>2</sup> / 0.72kg/board

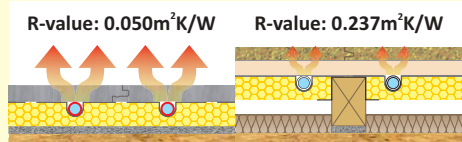
5 **YELOfon® ES5/100**

Perimeter edge strip  
Dimensions: 5mm x 100mm x 50mm

P **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.



## Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists

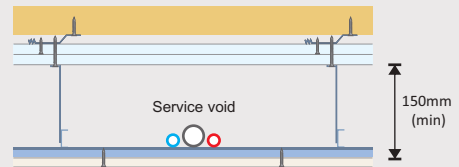
16mm (min) metal resilient bars mounted at right angles to the joists at 400mm centres.

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m<sup>2</sup>) fixed with 32mm screws and 12.5mm (nominal 10kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) 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/m<sup>2</sup> 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/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.



Additional items required:

CELLECTA ScreedBoard fixing tools

## Acoustic Performance

**Airborne:** 54dB  $D_{nT,w} + C_{tr}$

**Impact:** 55dB  $L_{nT,w}$

Building Regs

+ 5dB

## Third Party Accreditation and Approvals



## Environmental Credentials



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 BSEN ISO 140-7: 1998