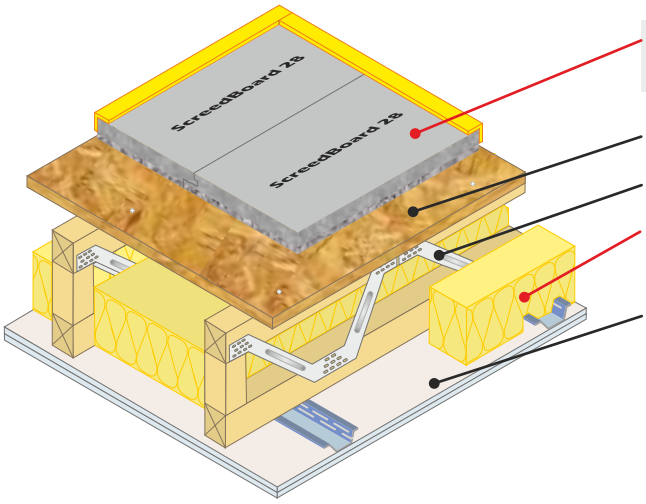
# Separating floor - Metal web joists

## Robust Detail E-FT-6

**CELLECTA ScreedBoard 28 laid on timber sub-deck**
**Use with timber frame walls only**




| | |
|---|---|
| **Floating floor treatment** | **CELLECTA ScreedBoard 28**<br>Ultra high performance, dense acoustic composite overlay board |
| **Floor decking** | 15mm[(1)] (min) thick wood based board |
| **Joists** | 253mm (min) metal web joists |
| **Absorbing material** | o 50mm CELLECTA **FIBREfon Micro 50**<br>● 100mm (min) quilt insulation (10-36kg/m$^3$) |
| **Ceiling** | See Table WA9.tf09b for ceiling treatment |

[(1)] 18mm(min) required for Robust detail applications

Fig. WA9.tf09

FASTRACKCAD ARCHITECTURAL CAD DATABASES

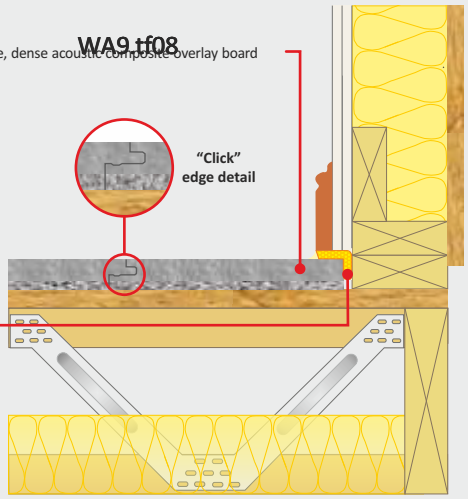
NBSPlus

Table WA9.tf09a

### Installation Options

**Resilient overlay platform floor system**

**ScreedBoard 28** Ultra high performance, dense acoustic composite overlay board
**Dimensions:** 28mm x 600mm x 1200mm
**Weight:** 26kg/m$^2$ / 18.72kg/board




**YELOfon FS50**
Profiled perimeter flanking strip
**Dimensions:** 6mm x 50mm x 30mm x 2m

**Additional items required**
CELLECTA **PRO joint adhesive** - 1Litre / 33m$^2$ coverage
CELLECTA **ScreedBoard fixing tools**
Sound absorbing quilt laid between joists:
o 50mm CELLECTA **FIBREfon Micro 50** non-itch polyester wool
100mm (min) Mineral wool 10-33kg/m$^3$

**Construction notes**
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments MUST be isolated from the floating floor with **YELOfon FS50** flanking strip. Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

Table WA9.tf09b

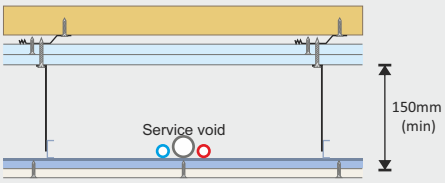
### Ceiling Treatment Options

**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$^2$) fixed with 32mm screws and 12.5mm (nominal 10kg/m$^2$) fixed with 42mm screws, with all joints staggered.

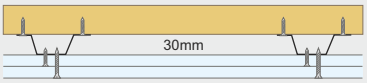
**CT2**-Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m$^2$) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m$^2$) fixed with 42mm screws, with all joints staggered.

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




### Acoustic Performance

| | | Building Regulations |
|---|---|---|
| **Airborne:** | 53dB $D_{nT,w} + C_{tr}$ | |
| **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

SYSTEM CERTIFICATION BMTRADA ISO 9001 — ISO 9001: 2015

CLASS B*fl*,S1 BS EN13501-1

### Environmental Credentials

GWP <5

100% Recycled Gypsum



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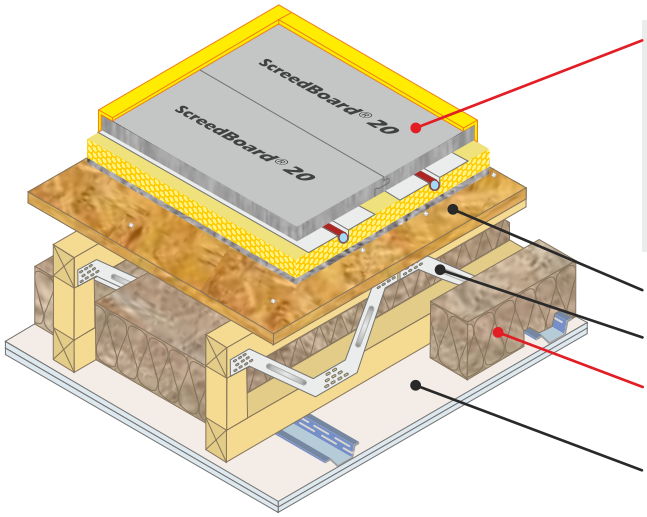
# Separating floor - Timber I-joists

## Robust Detail E-FT-6

**CELLECTA ScreedBoard 20 laid on under floor heating insulation board**
**FIBREfon 8 resilient layer laid on timber sub-deck**
**Use with timber frame walls only**




| | |
|---|---|
| **Floating floor treatment** | **CELLECTA ScreedBoard 20**<br>Highly conductive interlocking floorboard<br>**CELLECTA ULTRAplate 0.5**<br>Aluminium heat diffuser plate manufactured to suit pipe diameter<br>**CELLECTA XFLO 250/300/500**<br>High compressive strength underfloor heating insulation board<br>**CELLECTA FIBREfon 8** Resilient layer |
| **Floor decking** | 15mm[(1)] (min) thick wood based board |
| **Joists** | 253mm (min) metal web joists |
| **Absorbing material** | ○ 50mm **CELLECTA FIBREfon Micro 50**<br>● 100mm (min) quilt insulation (10-36kg/m$^3$) |
| **Ceiling** | See Table WA9.tf010b for ceiling treatment options |

Fig. WA9.tf10

Table WA9.tf10a

### Installation Options

**Resilient overlay platform floor system**

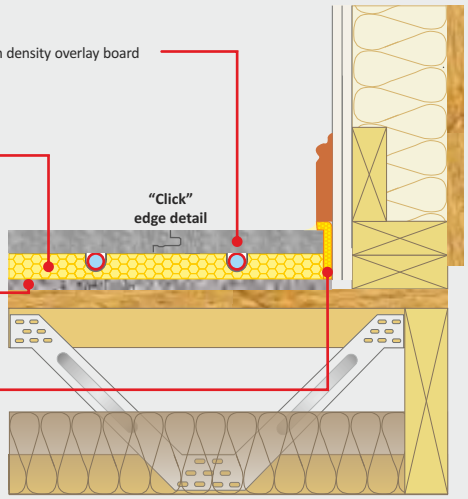
**ScreedBoard 20** Highly conductive, high density overlay board
**Dimensions:** 20mm x 600mm x 1200mm
**Weight:** 25kg/m$^2$ / 18kg/board
**Thermal resistance**: 0.05m$^2$K/W

**Under floor heating insulation board**

**XFLO** Routed high compressive strength XPS
**Dimensions**: 25-160mm x 600mm x 2500mm
**Pipe centres**: 150, 200, 300mm
**Pipe bore size (OD)**:10-20mm

**FIBREfon 8**
High performance resilient layer
**Dimensions:** 8mm x 600mm x 1200mm

**YELOfon ES5/100**
Perimeter edge strip
**Dimensions:** 5mm x 100mm x 50m

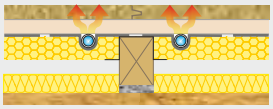



**Additional items required**
**CELLECTA ULTRAplate 0.5 heat diffuser plate** - 1000mm long
**CELLECTA PRO joint adhesive** - 1Litre / 33m$^2$ coverage
**CELLECTA ScreedBoard fixing tools**
Sound absorbing quilt laid between joists:
○ 50mm **CELLECTA FIBREfon Micro 50** non-itch polyester quilt 100mm (min) Mineral wool 10-33kg/m$^3$

**HIGH COMPRESSIVE**
**250-500kPa**
**STRENGTH XPS**

**Screedboard 20** is 5x more thermally conductive than a **FFT1** floor treatment (18 chipboard +19mm plasterboard plank), allowing heat pumps and boilers to run at maximum efficiency and the UFH system to be more responsive.

**R-value: 0.237m$^2$K/W**



**R-value: 0.050m$^2$K/W**

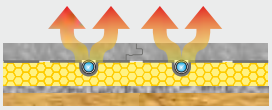


Table WA9.tf10b

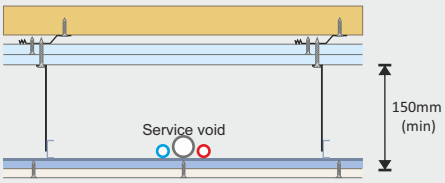
### Ceiling Treatment Options

**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$^2$) fixed with 32mm screws and 12.5mm (nominal 10kg/m$^2$) fixed with 42mm screws, with all joints staggered.

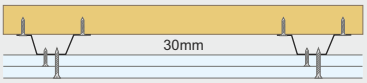
**CT2**-Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m$^2$) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m$^2$) fixed with 42mm screws, with all joints staggered.

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




**Construction note**
Services must not puncture primary ceiling lining (except cables, which should be sealed with flexible sealant).

### Acoustic Performance

| | | |
|---|---|---|
| **Airborne:** | 54dB $D_{nT,w} + C_{tr}$ | Building Regulations |
| **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

SYSTEM CERTIFICATION BMTRADA ISO 9001
ISO 9001: 2015

CLASS B*fl*,S1
BS EN13501-1

### Environmental Credentials

GWP <5

100% Recycled Gypsum



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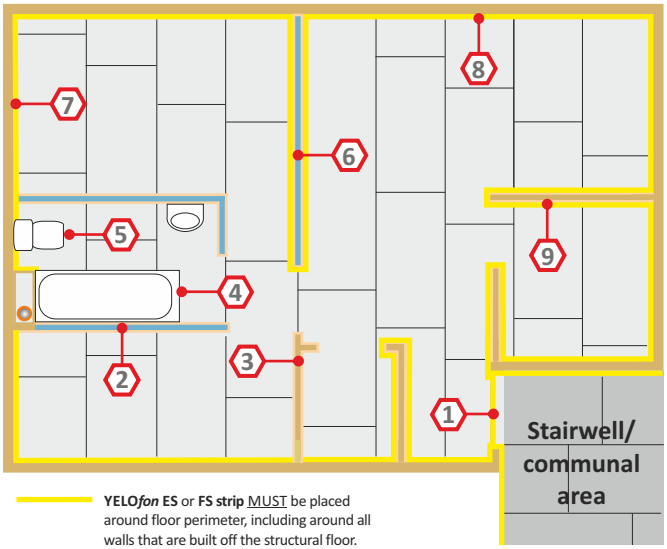
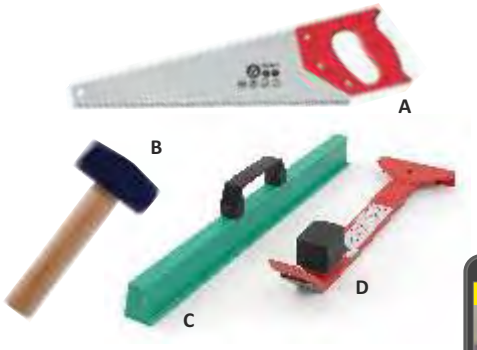
# Design & installation details - CELLECTA ScreedBoard

The acoustic performance of the floor structure will be compromised if the **ScreedBoard**'s are not completely isolated from the sub-floor, soil pipes, door frames, surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

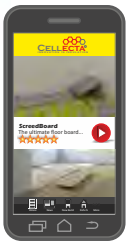



**YELO*fon* ES** or **FS strip** MUST be placed around floor perimeter, including around all walls that are built off the structural floor.



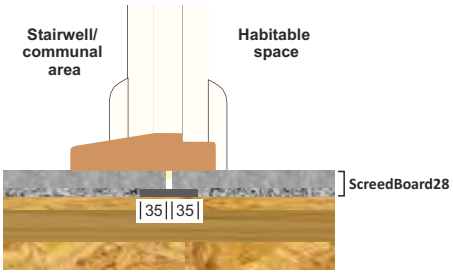

**Fixing tools required**

**A.** Hand or skill saw
**B.** Club hammer
**C. ScreedBoard** "Fixing batten"
**D. ScreedBoard** "Pull bar"
Packing shims (not shown)



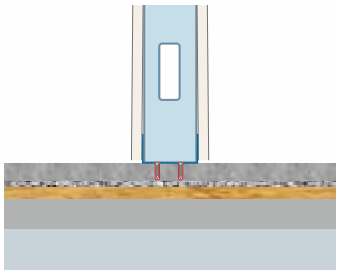
Installation video on the CELLECTA app

## 1 Door threshold



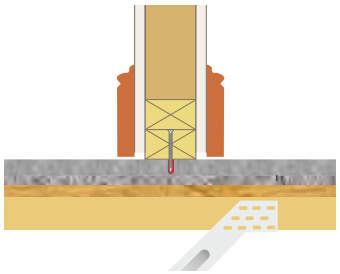

To add additional support, trim off 35mm of the resilient later from the leading edges and install a 75mm wide **RUBBER*fon* Treashold Support Strip** (**TTS**).

## 2 Metal frame partition built off the floor treatment



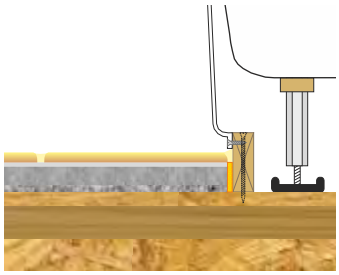
Non-load bearing metal frame walls can be built directly off the **ScreedBoard 20/28**. Care should be taken to ensure screws DO NOT penetrate the resilient layer.

## 3 Timber stud partition built off the floor treatment



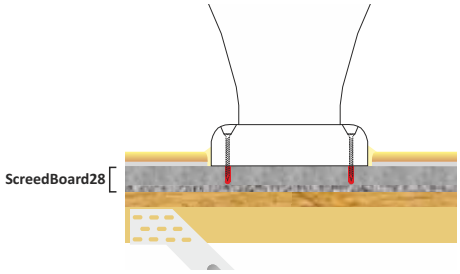
Non-load bearing timber stud walls can be built directly off the **ScreedBoard 20/28**. Care should be taken to ensure screws DO NOT penetrate the resilient layer.

## 4 Baths, shower trays and sanitary ware built off the structural floor



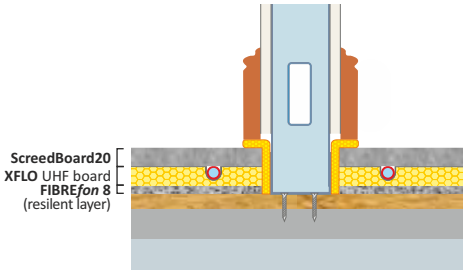
Baths. shower trays and sanitary ware built off the structural floor should be isolated from the **ScreedBoard 28** and any floor finished.

## 5 Baths, shower trays and sanitary ware built off the floor treatment.



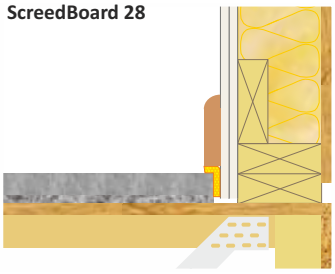

Baths, shower trays and sanitary ware can be built directly off the **ScreedBoard 28**. Ensure the screws do not penetrate the resilient layer.

## 6 Metal frame partition built off the structural floor



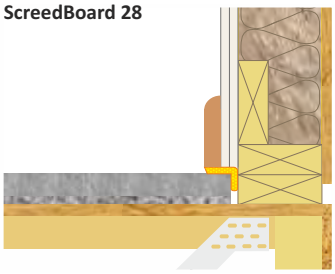

Lightweight partition walls built off the structural floor MUST be isolated from the **ScreedBoard** with **YELO*fon* FS50** or **ES5/100** flanking strip.

## 7 Wall treatment installed before the ScreedBoard 28



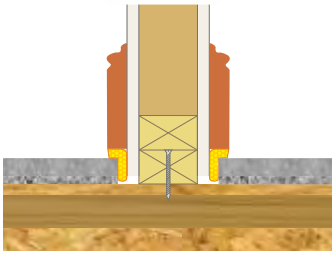
Wall treatments MUST be isolated from the **ScreedBoard 28** with **YELO*fon* FS50** strip.

## 8 Wall treatment installed after the ScreedBoard 28



Wall treatments MUST be isolated from the **ScreedBoard 28** with **YELO*fon* FS50** strip.

## 9 Timber stud partition built off the structural floor



Lightweight internal walls built off the structural floor MUST be isolated from the **ScreedBoard** with **YELO*fon* FS** strip.



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