

# Separating floor - Steel-concrete composite **Robust Detail V-SF-1 / E-FS-1**

In-situ concrete slab supported by profiled metal deck

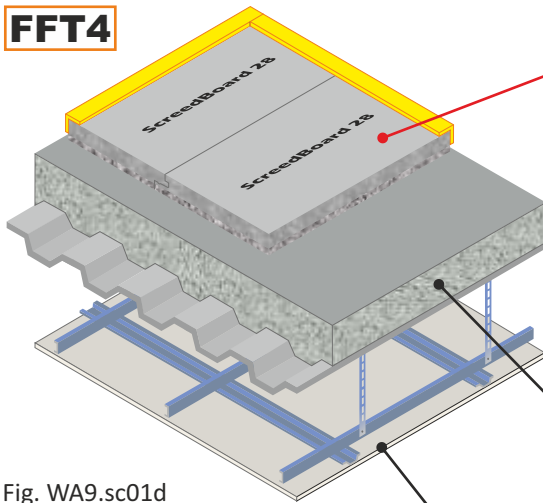


Fig. WA9.sc01d

**Floating floor treatment options**

- FFT 1 - CELLECTA **DECKfon Batten 70**
- FFT 2 - CELLECTA **RUBBERfon Cradles**
- FFT 3 - CELLECTA **DECKfon Batten 45**
- FFT4** - CELLECTA **ScreedBoard 28**  
 - CELLECTA **ScreedBoard 20**  
 + CELLECTA **XFLO** routed XPS underfloor heating insulation board  
 + CELLECTA **FIBREfon 8, 10** or **RUBBERfon 8** resilient layer
- FFT5 - CELLECTA **FIBREfon 12C/21C/28C**

**Structural floor**

In-situ concrete slab supported by profiled metal decking:

- “Shallow” or “deep” profiled metal decking
- Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min)
- Concrete thickness 80mm (min) at shallowest point and 130mm (min) at deepest point
- Concrete density 2200kg/m<sup>3</sup> (min)

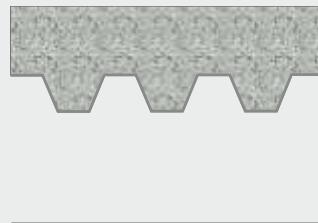
**Ceiling**

See Table WA9.sc01 for ceiling treatment options



Table WA9.sc01

## Ceiling Treatment Options



**Any ceiling system**  
 One layer of nominal 8kg/m<sup>2</sup> gypsum-based board  
 300mm (min)

### Construction notes

Ceiling treatments detailed can be used with any FFT listed in Table 85.01b-g. 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 ES** or **FS** perimeter flanking strip.

## Acoustic Performance

*rd* impact performance values quoted were conducted at Sound Research Laboratories, UKAS ref. 0444 in accordance with BS EN ISO 140-6: 1998 and rated in accordance with BS ISO 717-2: 1997 as detailed in Appendix D of the Robust Details handbook (minimum value required *rd* DL<sub>w</sub> = 17dB).  
 PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

## Third Party Accreditation and Approvals



## Environmental Credentials

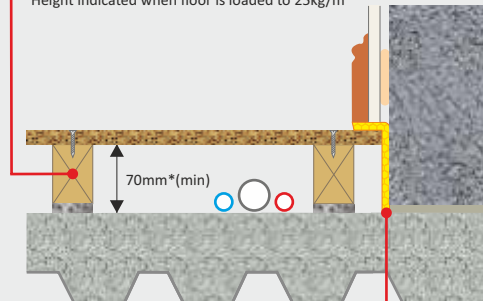


Table WA9.sc01a

### FFT1 Resilient composite deep batten system

#### DECKfon Batten 70

Deep acoustic batten: 75mm x 45mm x 2400mm  
\*Height indicated when floor is loaded to 25kg/m<sup>2</sup>



#### YELOfon ES5/120

Perimeter edge strip: 5mm x 120mm x 50m  
Additional layer required to complete treatment:  
18mm (min) tongue & groove flooring board

**Airborne**  
56dB  $D_{nT,w} + C_{tr}$

**Impact**  
42dB  $L_{nT,w}$   
 $rd DL_w = 27dB$

**Building Regs**  
≥+8dB

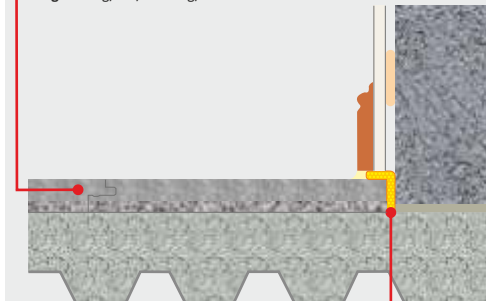
**BBA VERIFIED RD DATA**

Table WA9.sc01d

### FFT4 Resilient overlay platform floor system

#### ScreedBoard 28

Ultra high performance, dense acoustic composite overlay board  
Dimensions: 28mm x 600mm x 1200mm  
Weight: 26kg/m<sup>2</sup> / 18.72kg/board



#### YELOfon FS50

Preformed flanking strip: 6mm x 50mm x 30mm x 2m

**Airborne**  
53dB  $D_{nT,w} + C_{tr}$

**Impact**  
43dB  $L_{nT,w}$   
 $rd DL_w = 26dB$

**Building Regs**  
≥+8dB

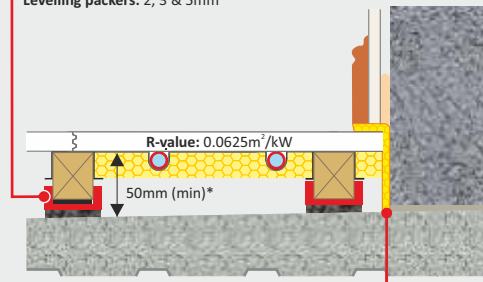
**CLASS B/F, S1 BS EN13501-1**

Table WA9.sc01b

### FFT2 Resilient cradle and batten system

#### RUBBERfon Cradles

Dimensions: 12mm high x 80mm x 80mm  
Levelling packers: 2, 3 & 5mm



#### YELOfon ES5/120

Perimeter edge strip: 5mm x 120mm x 50m  
Additional layer required to complete treatment:  
18mm (min) tongue & groove flooring board (CELLECTA HiDECK Structural 25 shown)  
40mm (min) x 45mm timber batten  
\*Height indicated when floor is loaded to 25kg/m<sup>2</sup>

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

**Impact**  
44dB  $L_{nT,w}$   
 $rd DL_w = 25dB$

**Building Regs**  
≥+8dB

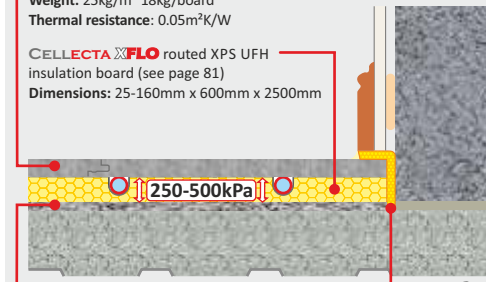
**BBA VERIFIED RD DATA**

Table WA9.sc01d2

### FFT4 Resilient overlay platform floor system incorporating UFH

#### ScreedBoard 20

High conductivity overlay board  
Dimensions: 20mm x 600mm x 1200mm  
Weight: 25kg/m<sup>2</sup> 18kg/board  
Thermal resistance: 0.05m<sup>2</sup>K/W



Resilient layer options (see page 73 for full details)

- FIBREfon 8: 8mm x 600mm x 1200mm
- RUBBERfon 8 (Tiled areas): 8mm x 1m x 6m
- FIBREfon 10 (All areas): 8mm x 600mm x 1200mm

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

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

**Impact**  
41dB  $L_{nT,w}$   
 $rd DL_w = 28dB$

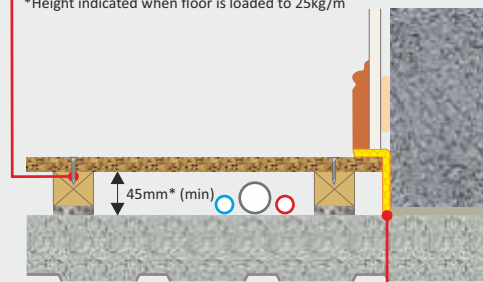
**Building Regs**  
≥+8dB

Table WA9.sc01c

### FFT3 Resilient composite standard batten system

#### DECKfon Batten 45

Standard acoustic batten: 50mm x 45mm x 2400mm  
\*Height indicated when floor is loaded to 25kg/m<sup>2</sup>



#### YELOfon ES5/100

Perimeter edge strip: 5mm x 100mm x 50m  
Additional layer required to complete treatment:  
18mm (min) tongue & groove flooring board

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

**Impact**  
44dB  $L_{nT,w}$   
 $rd DL_w = 25dB$

**Building Regs**  
≥+8dB

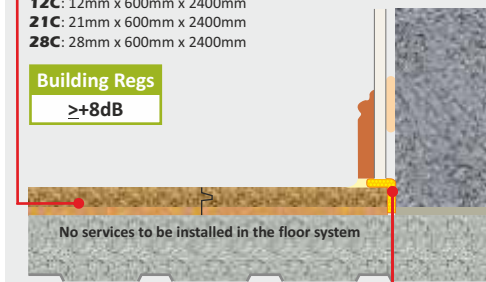
**BBA VERIFIED RD DATA**

Table WA9.sc01e

### FFT5 Resilient shallow overlay platform floor system

#### FIBREfon 12C, 21C, 28C

Dimensions:  
12C: 12mm x 600mm x 2400mm  
21C: 21mm x 600mm x 2400mm  
28C: 28mm x 600mm x 2400mm



12C/21C = YELOfon ES5/60  
Perimeter edge strip: 5mm x 60mm x 50m  
28C = YELOfon FS50  
Preformed flanking strip: 6mm x 50mm x 30mm x 2m

**12 Airborne**  
51dB  $D_{nT,w} + C_{tr}$

**12 Impact**  
48dB  $L_{nT,w}$   
 $rd DL_w = 21dB$

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

**21 Impact**  
51dB  $L_{nT,w}$   
 $rd DL_w = 18dB$

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

**28 Impact**  
48dB  $L_{nT,w}$   
 $rd DL_w = 21dB$

## Acoustic Performance

rd impact performance values quoted were conducted at Sound Research Laboratories, UKAS ref. 0444 in accordance with BS EN ISO 140-6: 1998 and rated in accordance with BS ISO 717-2: 1997 as detailed in Appendix D of the Robust Details handbook (minimum value required rd DL<sub>w</sub> = 17dB).

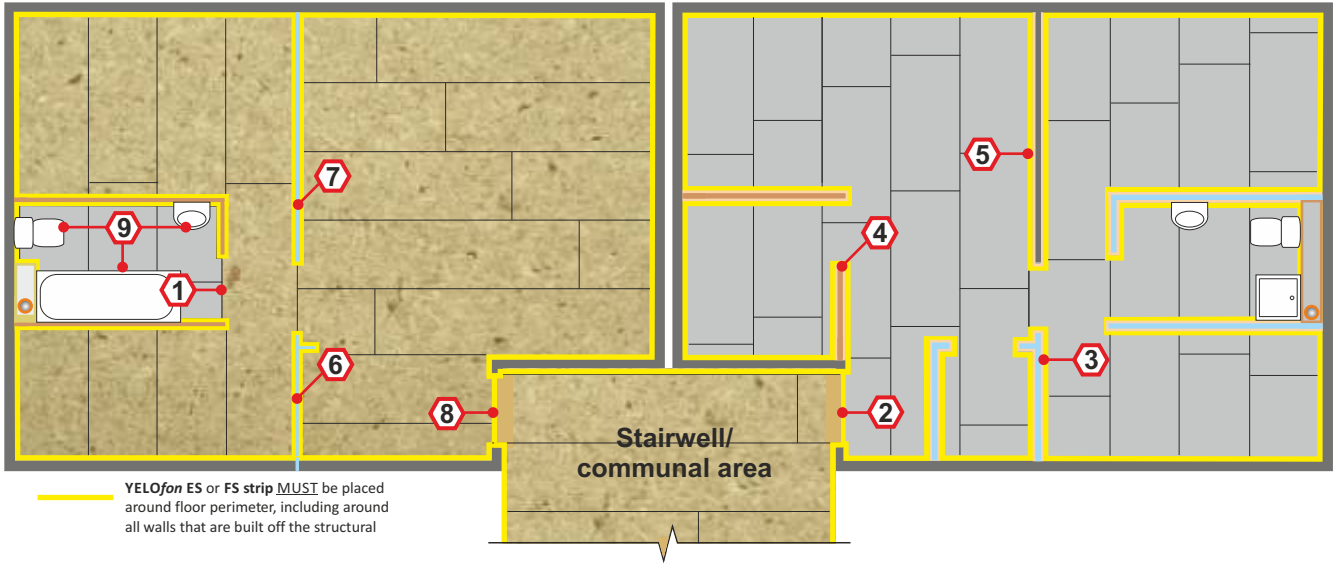
PCT values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

# Robust Detail floating floor treatment design & installation details

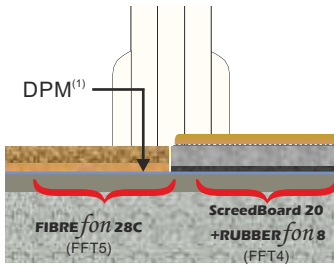
The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

Partitions built off the floating floor treatment

Partitions installed before the floor finish is laid

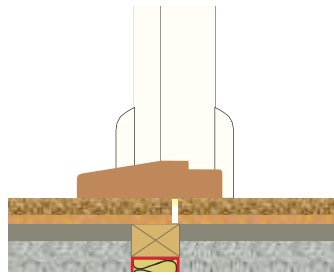


1 Junction detail: Non-tiled area meeting a tiled area



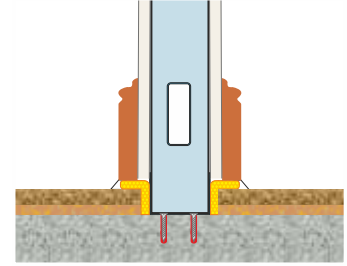
<sup>(1)</sup> On recently laid screeded floor, install a DPM below FIBREfon 12C, 21C, 28C and ScreedBoard based acoustic treatments.

2 Door threshold (FFT4 or 5)



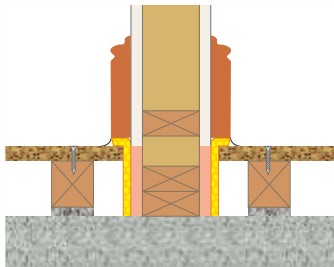
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

3 Metal frame partition built off the structural floor (FFT4 or 5)



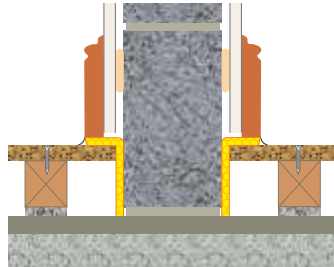
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment with YELOfon ES/FS strip.

4 Timber stud partition built off the structural floor



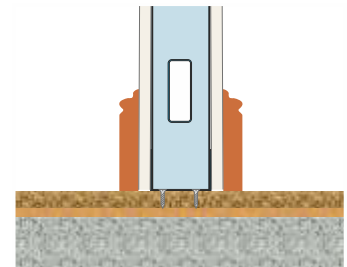
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (FFT1, 2 or 3) with YELOfon ES strip.

5 Internal blockwork wall built off the structural floor



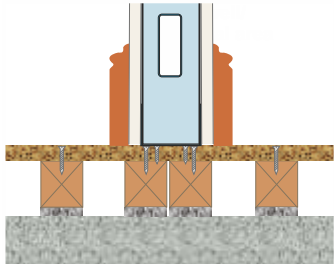
Internal block work walls built off the structural floor must be isolated from the floating floor treatment with YELOfon ES or FS strip.

6 Metal frame partition built off FFT4 or 5



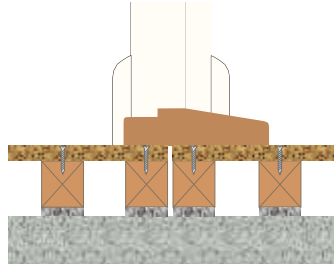
Internal non-load bearing walls can be built directly off the floor treatment. Fixings **MUST NOT** penetrate the resilient layer.

7 Metal frame partition built off FFT1, 2 or 3



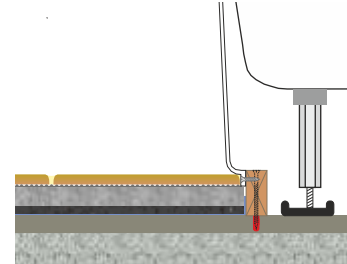
Double up battens under internal non-load bearing walls.

8 Door threshold (FFT1, 2 or 3)



At the door threshold, place one batten under the leading edge of the apartment's floor deck and one under the communal area's floor deck, leaving a 5mm (min) gap between the acoustic battens.

9 Bath surrounds and sanitary ware



Sanitary ware can either be built directly off the structural floor or off the floor treatment. For FFT1, 2 or 3 battens should be laid in a 300mm x 300mm grid under the sanitary ware.