

Steel-concrete composite separating floor

Robust Detail E-FS-1 / V-FS-1

CELLECTA floating floor treatment laid on in-situ concrete slab supported by profiled metal deck

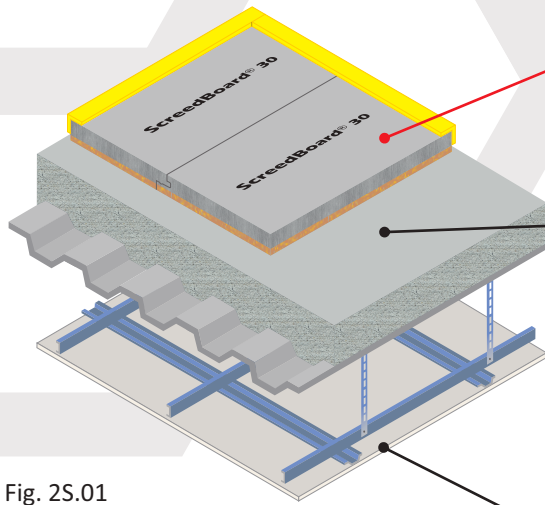


Fig. 2S.01

Floating floor
acoustic treatment
options

- FFT1 - CELLECTA DECKfon® Batten 70
- FFT2 - CELLECTA RUBBERfon® Cradles
- FFT3 - CELLECTA DECKfon® Batten 45
- FFT4 - CELLECTA ScreedBoard® 30
- 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/m³ (min)

Ceiling

See Table 2S.01a for ceiling treatment options

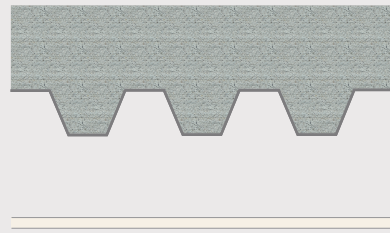
FASTRACKCAD
ARCHITECTURAL CAD DATABASES

n55Plus

Available on
bimstore.co

Table 2S.01a

Ceiling Treatment Options



Any ceiling system
One layer of nominal 8kg/m² gypsum based board
300mm (min)

Acoustic Performance

Rd impact performance values quoted were conducted at Sound Research Laboratories (UKAS ref. 0444) in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-2:2013 as detailed in Appendix D of the Robust Details hand book (minimum value required *rd ΔL_w* = 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

RD
Compliant
Treatments
BBA
VERIFIED
RD DATA

NHBC
LABC warranty
Premier Guarantee
Accepted

bmtrada
2015

GWP
<5

100%
Recyclable
Recycled

zero
ODP

Environmental Credentials



Table 2S.01b

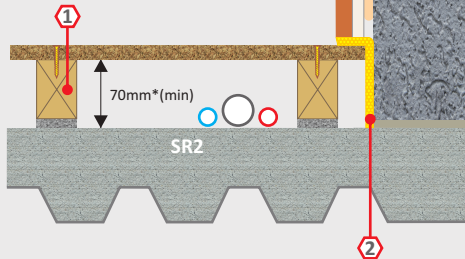
FFT1 Resilient composite deep batten system

1 DECKfon® Batten 70

Deep acoustic batten: 75mm x 45mm x 2400mm
*Height indicated when floor is loaded to 25kg/m²

2 YELOfon® ES5/120

Perimeter edge strip: 5mm x 120mm x 50m



Airborne

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

Impact

42dB $L_{nT,w}$

rd $\Delta L_w = 27dB$

Building Regs

≥+8dB

BBA

VERIFIED

RD DATA

Additional item required to complete treatment: 18mm (min) tongue & groove flooring board

Table 2S.01e

FFT4 Resilient overlay platform floor system

1 ScreedBoard® 30

high performance, dense acoustic composite overlay board

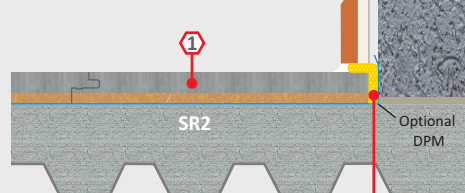
Dimensions: 30mm x 600mm x 1200mm

Weight: 27.20kg/m² / 19.58kg/board

2 YELOfon® FS50

Preformed flanking strip:

6mm x 50mm x 30mm x 2m



Airborne

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

Impact

47dB $L_{nT,w}$

rd $\Delta L_w = 22dB$

Building Regs

≥+8dB

BBA

VERIFIED

RD DATA

CELLECTA Pro Adhesive

ScreedBoard joint adhesive

Bottle size: 1L / 33m²

Additional item required: ScreedBoard fixing tools

Table 2S.01c

FFT2 Resilient cradle and batten levelling system

1 RUBBERfon® Cradles

10mm high x 100mm x 100mm

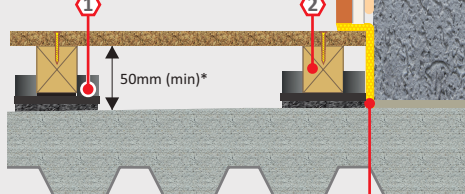
Levelling packers: 2, 3 & 5mm

Elevation blocks: 15 & 30mm

2 CELLECTA softwood timber batten

Standard dimensions: 40, 65mm⁽²⁾

x 45mm x 2400mm



Airborne

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

Impact

44dB $L_{nT,w}$

rd $\Delta L_w = 25dB$

Building Regs

≥+8dB

3 YELOfon® ES5/120

Perimeter edge strip: 5mm x 120mm x 50m

Additional item required to complete treatment: 18mm (min) tongue & groove flooring board.

⁽²⁾ Other height battens available upon request. *Height indicated when floor is loaded to 25kg/m²

Table 2S.01f

FFT5 Resilient shallow overlay platform floor system

1 FIBREfon® 12C, 21C, 28C

12C: 12mm x 600mm x 2400mm

21C: 21mm x 600mm x 2400mm

28C: 28mm x 600mm x 2400mm

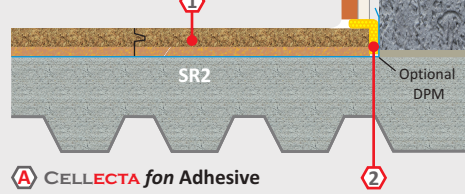
2 12C: YELOfon® ES5/60

Perimeter edge strip: 5mm x 60mm x 50m

21C, 28C: YELOfon® FS30

Pre-formed flanking strip:

6mm x 30mm x 30mm x 2m



12C Airborne

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

12C Impact

48dB $L_{nT,w}$

rd $\Delta L_w = 21dB$

21C Airborne

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

21C Impact

51dB $L_{nT,w}$

rd $\Delta L_w = 18dB$

28C Airborne

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

28C Impact

48dB $L_{nT,w}$

rd $\Delta L_w = 21dB$

CELLECTA fon Adhesive

Floorboard joint adhesive

Bottle size: 1L / 33m²

Building Regs

≥+8dB

Table 2S.01d

FFT3 Resilient composite standard batten system

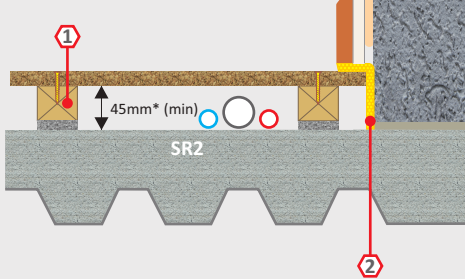
1 DECKfon® Batten 45

Standard acoustic batten: 50mm x 45mm x 2400mm

*Height indicated when floor is loaded to 25kg/m²

2 YELOfon® ES5/100

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



Airborne

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

Impact

44dB $L_{nT,w}$

rd $\Delta L_w = 25dB$

Building Regs

≥+8dB

BBA

VERIFIED

RD DATA

Additional item required to complete treatment: 18mm (min) tongue & groove flooring grade

Construction notes

Ceiling treatments detailed can be used with any FFT listed in Table 2S.01b-f.

Slab/levelling screed must be to SR2 Standard when adopting FFT1, 3, 4 or 5.

No services should be installed within the treatment when adopting FFT5.

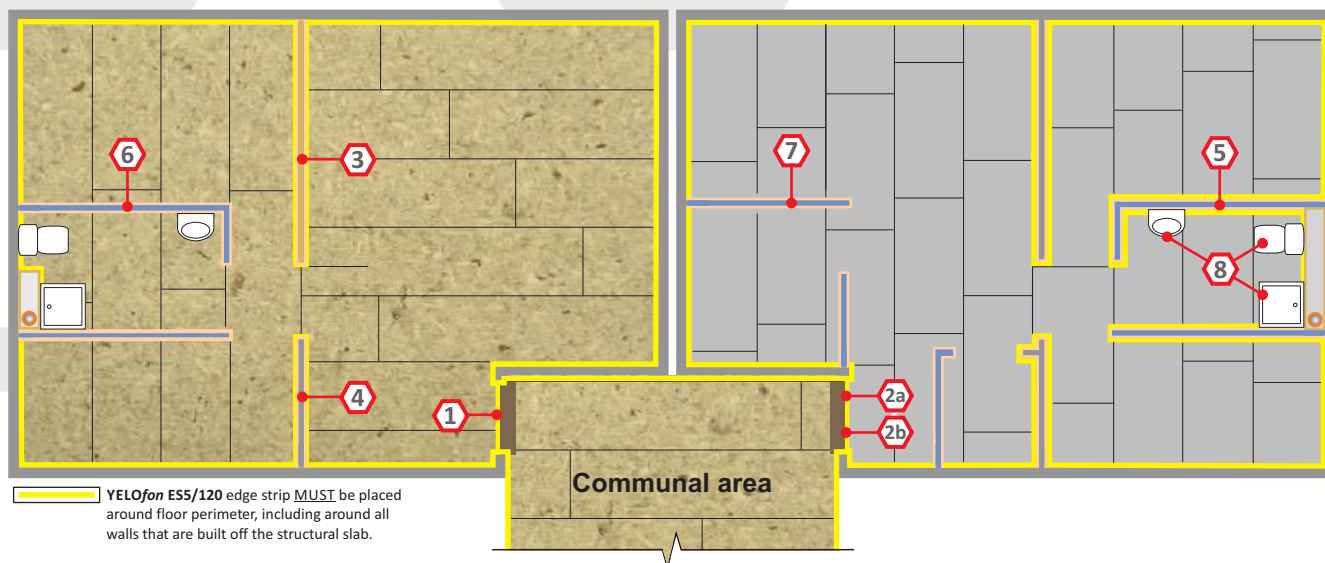
Materials must be installed in accordance with manufacturers' and Robust Detail instructions to achieve required acoustic performance values. Wall treatments MUST be isolated from the floating floor with YELOfon ES or FS perimeter flanking strip.

Floating floor treatment design & installation details: FFT1, 2, 3, 4 & 5

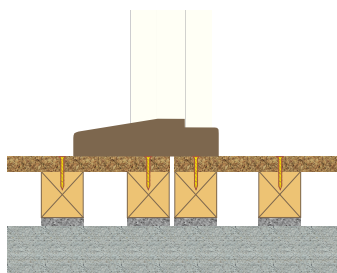
The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural floor, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

Batten based floating floor treatments

Overlay floating floor treatments

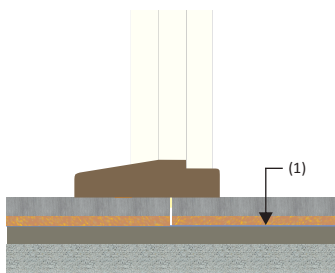


1 Door threshold FFT1, 2, 3



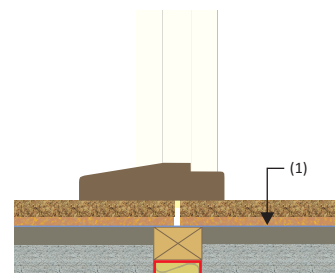
Double up battens each side of the door threshold to provide additional support. Refer to Part B and Section 2 fire safety regulations

2a Door threshold FFT4 (ScreedBoard 30)



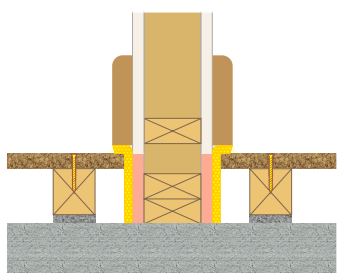
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

2b Door threshold FFT5



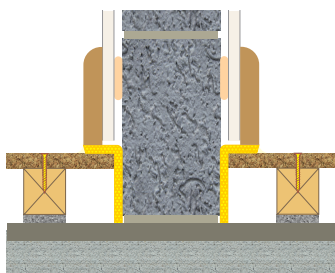
⁽¹⁾ On recently levelled floors, install a DPM below the FFT4, FFT5 floating floor treatment.

3 Timber stud partition built off the structural floor



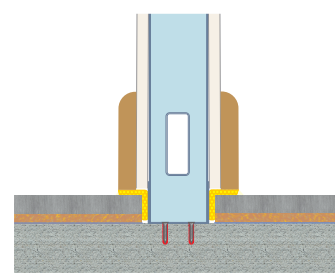
Lightweight internal walls built off the structural floor **MUST** be isolated from the floating floor treatment (FFT1, 2, 3) with YELOfon ES strip.

4 Internal blockwork wall built off the structural floor



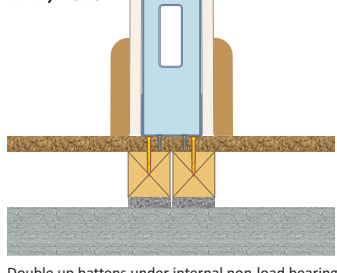
Internal block work walls built off the structural floor must be isolated from the floating floor treatment with YELOfon ES or FS strip.

5 Metal frame partition built off structural floor



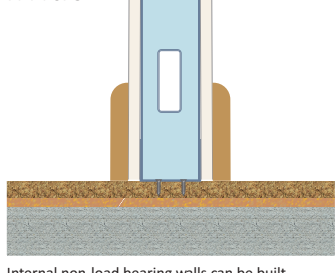
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (FFT4, 5) with YELOfon FS strip.

6 Non-load bearing partition built off FFT1, 2 or 3



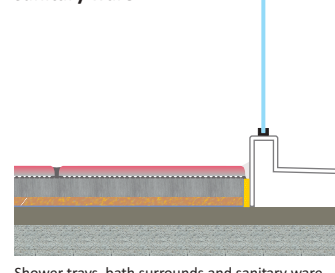
Double up battens under internal non-load bearing walls.

7 Non-load bearing 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.

8 Shower trays, bath surrounds and sanitary ware



Shower trays, bath surrounds and sanitary ware built off the structural floor should be isolated from the floor treatment and any floor finishes with YELOfon ES or FS edge strip.