Separating floor - In-situ concrete slab

Robust Detail E-FC-2

Only use with reinforced concrete frame construction

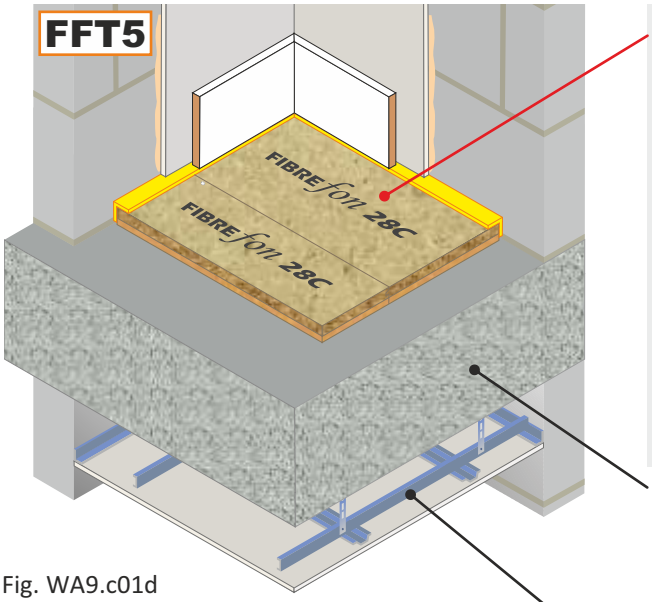


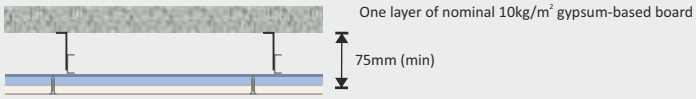
Fig. WA9.c01d

Floating floor treatment options	**FFT 1** - CELLECTA **DECKfon Batten 70** **FFT 2** - CELLECTA **RUBBERfon Cradles** **FFT 3** - CELLECTA **DECKfon Batten 45** **FFT 4** - CELLECTA **ScreedBoard 28** - CELLECTA **ScreedBoard 20** + + CELLECTA **XFLO** routed underfloor heating insulation board + CELLECTA **FIBREfon 8**, **10** or **RUBBERfon 8** resilient layer **FFT5** - CELLECTA **FIBREfon 12C/21C/28C**
Structural floor	• 250mm (min) in-situ concrete slab, 2400kg/m^3 density without screed • 200mm (min) in-situ concrete slab 2400kg/m^3 density with screed: 40mm sand & cement screed or 80kg/m^2 (min) proprietary screed directly applied to slab
Ceiling	See Table WA9.c01 for ceiling treatment options

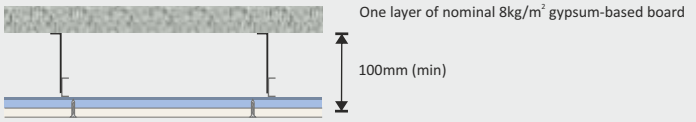
Table WA9.c01

Ceiling Treatment Options

Any ceiling system - 75mm void



Any ceiling system - 100mm void



Construction notes

Ceiling treatments detailed can be used with any **FFT** listed in Table 8C02b-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 **YELO*fon* 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_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 ISO 9001: 2015

Environmental Credentials

GWP <5
100% Recycled Foams
zero ODP

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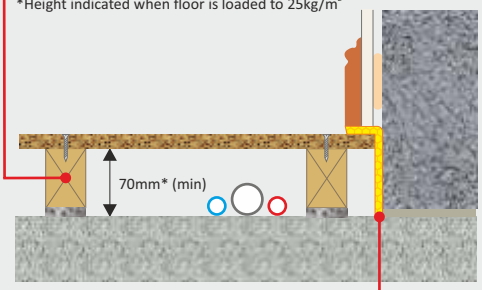
Table WA9.c01a

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/m²



Airborne 57dB $D_{nT,w}+C_{tr}$

Impact 43dB $L_{nT,w}$ *rd* DL_w = 27dB

Building Regs ≥+8dB

BBA VERIFIED RD DATA

YELOfon ES5/120

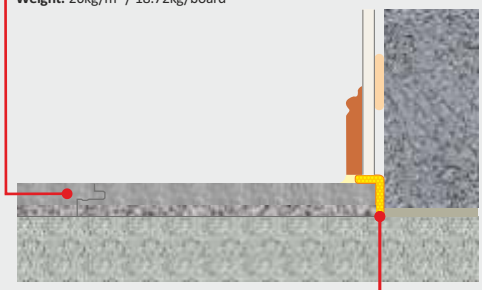
Perimeter edge strip: 5mm x 120mm x 50m

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

Table WA9.c01d

FFT4 Resilient overlay platform floor system

ScreedBoard 28 Ultra high performance, dense acoustic composite overlay board
Dimensions: 28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board



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

Impact 44dB $L_{nT,w}$ *rd* DL_w = 26dB

Building Regs ≥+8dB

BBA VERIFIED RD DATA

YELOfon FS50

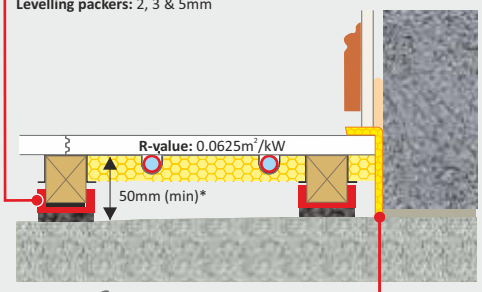
Profiled flanking strip: 6mm x 50mm x 30mm x 2m

Table WA9.c01a

FFT2 Resilient cradle and batten system

RUBBERfon Cradles

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



Airborne 55dB $D_{nT,w}+C_{tr}$

Impact 45dB $L_{nT,w}$ *rd* DL_w = 25dB

Building Regs ≥+8dB

BBA VERIFIED RD DATA

YELOfon ES5/120

Perimeter edge strip: 5mm x120mm x 50m

Additional layer required to complete treatment:
18mm (min) tongue & groove flooring board
40mm (min) x 45mm timber batten

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

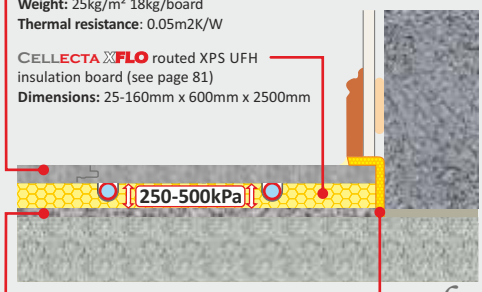
Table WA9.c01d2

FFT4 Resilient overlay platform floor system incorporating UFH

ScreedBoard 20 High conductivity overlay board

Dimensions: 20mm x 600mm x 1200mm
Weight: 25kg/m² 18kg/board
Thermal resistance: 0.05m2K/W

CELLECTA XFLO routed XPS UFH insulation board (see page 81)
Dimensions: 25-160mm x 600mm x 2500mm



Airborne 55dB $D_{nT,w}+C_{tr}$

Impact 42dB $L_{nT,w}$ *rd* DL_w = 28dB

Building Regs ≥+8dB

Resilient layer options (see page 75 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 1200m

YELOfon ES5/100

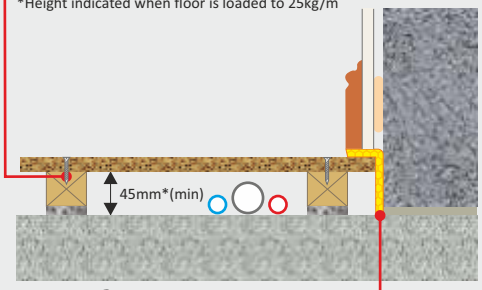
Perimeter edge strip: 5mm x 100mm x 50m

Table WA9.c01c

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/m²



Airborne 55dB $D_{nT,w}+C_{tr}$

Impact 45dB $L_{nT,w}$ *rd* DL_w = 25dB

Building Regs ≥+8dB

BBA VERIFIED RD DATA

YELOfon ES5/100

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

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

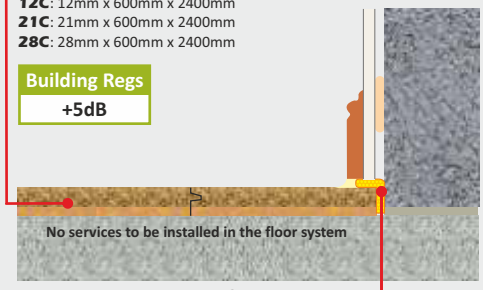
Table WA9.c01e

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

Building Regs +5dB



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

12 Impact 49dB $L_{nT,w}$ *rd* DL_w = 21dB

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

21 Impact 52dB $L_{nT,w}$ *rd* DL_w = 18dB

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

28 Impact 49dB $L_{nT,w}$ *rd* DL_w = 21dB

12C/21C= YELOfon ES5/60

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

28C= YELOfon FS50

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

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_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.

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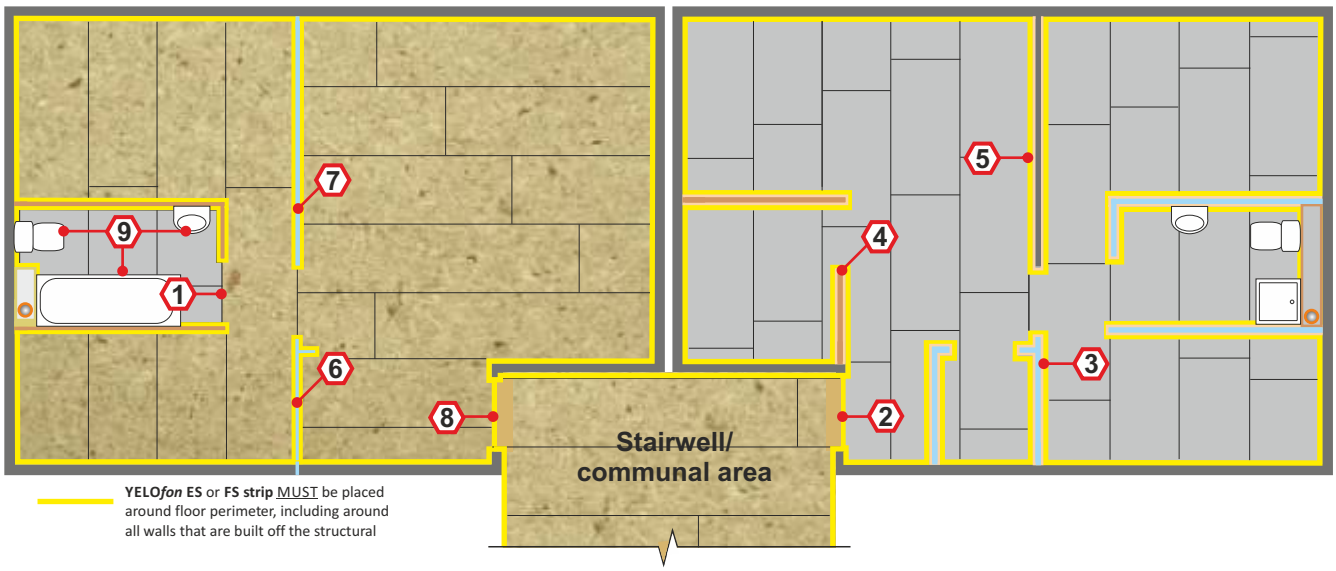
Robust Detail floating floor treatment design & installation details

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.

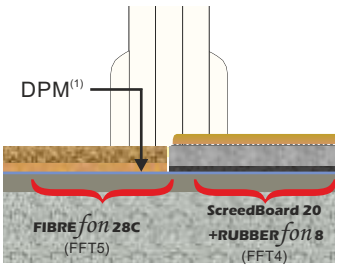
Partitions built off the floating floor treatment

Partitions installed before the floor finish is laid



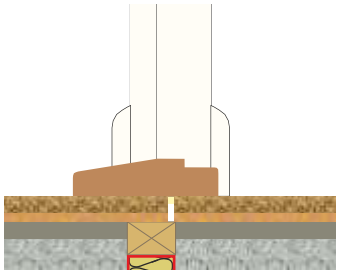
YELO*fon* ES or **FS strip** MUST be placed around floor perimeter, including around all walls that are built off the structural

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



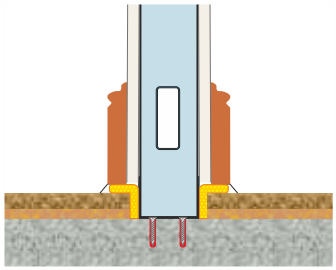
(1) On recently laid screeded floor, install a DPM below **FIBRE*fon* 12C**, **21C, 28C** and **ScreedBoard** based acoustic treatments.

2 Door threshold (FFT4 or 5)



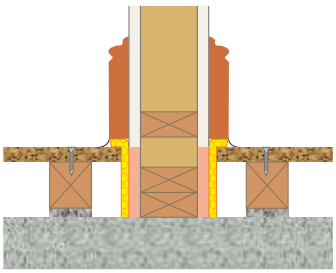
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

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



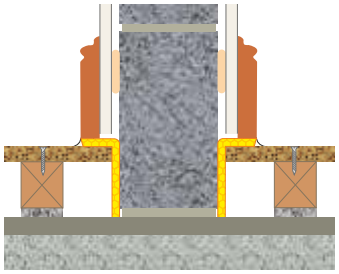
Lightweight Internal walls built off the structural floor must be isolated from the floating floor treatment with **YELO*fon* ES/FS strip**.

4 Timber stud partition built off the structural floor



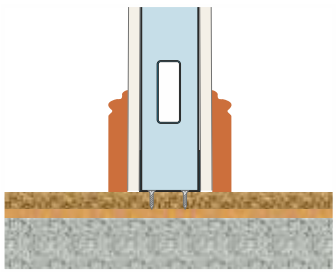
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (FFT1, 2 or 3) with **YELO*fon* ES strip**.

5 Internal blockwork wall built off the structural floor



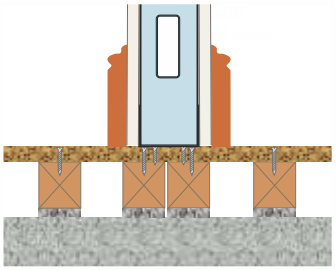
Internal block work walls built off the structural floor must be isolated from the floating floor treatment with **YELO*fon* ES** or **FS strip**.

6 Metal frame partition built off FFT4 or 5



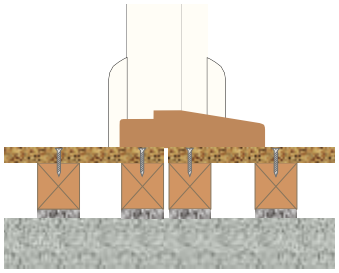
Internal non-load bearing walls can be built directly off the floor treatment. Fixings MUST NOT penetrate the resilient layer.

7 Metal frame partition built off FFT1, 2 or 3



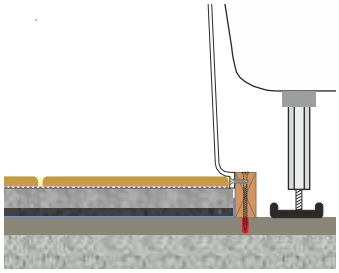
Double up battens under internal non-load bearing walls.

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.