Separating floor - Concrete

Robust detail E-FC-2

In-situ concrete slab
Only use with reinforced concrete frame construction

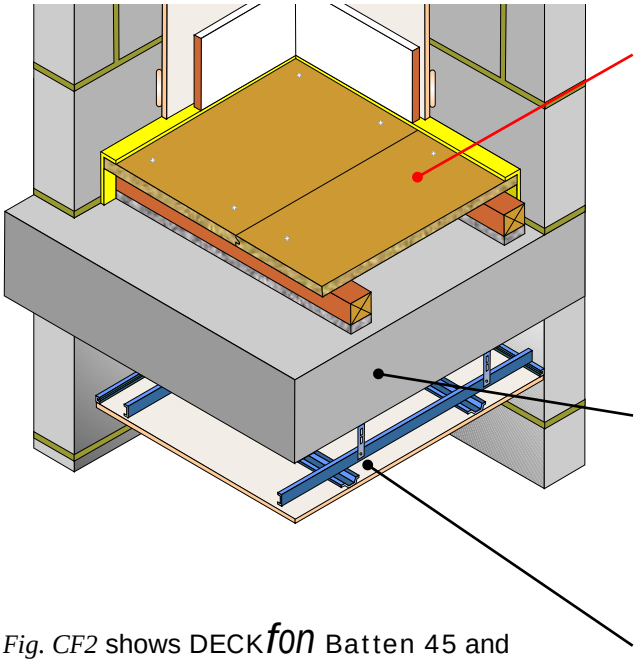


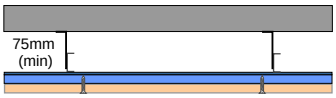
Fig. CF2 shows DECK*fon* Batten 45 and ES5/100 flanking strip

Floating floor treatment options	**FFT1** - DECK*fon* Batten 70 **FFT2** - DECK*fon* Craddles **FFT3** - DECK*fon* Batten 45 **FFT4** - DECK*fon* ScreedBoard 28 **FFT5** - YELO*fon* CHiP 23/28 - FIBRE*fon* MDF 12 - FIBRE*fon* CHiP 21/25 (See *Table CF2b* for full details)
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 CF2a* for ceiling treatment options

Table CF2a

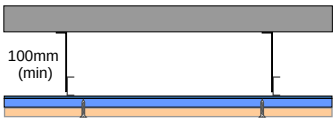
Ceiling treatment options for E-FC-2 (can be used with any FFT detailed in Table CF2b)

Any ceiling system - 75mm void



One layer of nominal 10kg/m^2 gypsum-based board

Any ceiling system - 100mm void



One layer of nominal 8kg/m^2 gypsum-based board

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 ES or FS flanking strip.

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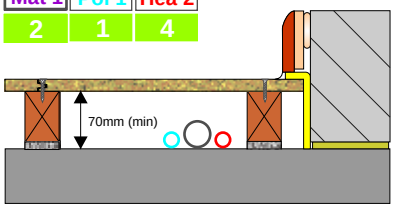
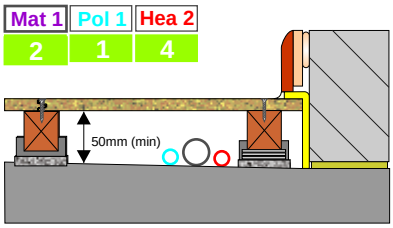
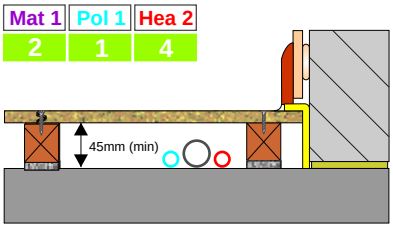
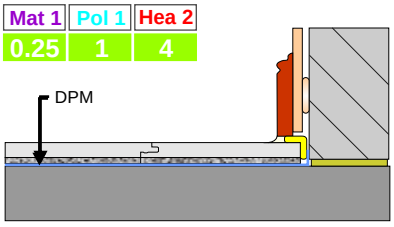
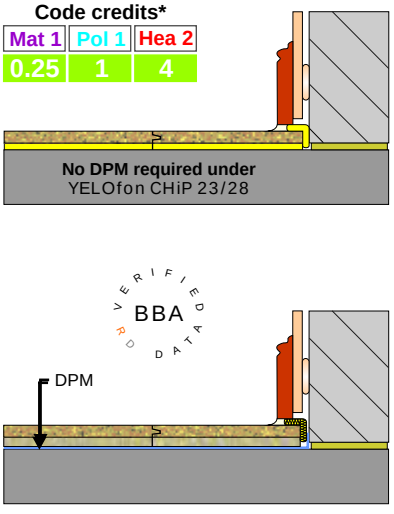
Table CF2b

Robust Detail E-FC-2 compliant floating floor treatment options	Construction detail	Robust detail performance [1]	Perimeter edge strip required	Typical PCT performance [2] (Treatment used as a PCT Solution)
FFT1 - **Resilient composite deep batten system** DECKfon® Batten 70 0 GWP **Additional layer required to complete treatment** 18mm (min) tongue & groove flooring board **Notes** Void dimension indicated is when floor is loaded to 25kg/m² Batten dimensions: 75mm (h) x 45mm (w) x 2400mm (l)	Code credits* Mat 1 Pol 1 Hea 2 2 1 4 	*rd* DL_w = 27dB VERIFIED BBA DATA	YELOfon® ES5/120 Polyethylene foam flanking strip: 5mm (t) x 120mm (h) x 50m (l) placed around the perimeter of the flooring board to isolate floor from walls and skirting.	$D_{nt,w} + C_{tr}$ = 57dB $L_{nt,w}$ = 43dB
FFT2 - **Resilient cradle and batten system** DECKfon® Cradles 0 GWP **Additional components required to complete treatment** 18mm (min) tongue & groove flooring board 40mm (min h) x 45mm (w) timber batten **Note** Void dimension indicated is when floor is loaded to 25kg/m²	Code credits* Mat 1 Pol 1 Hea 2 2 1 4 	*rd* DL_w = 25dB VERIFIED BBA DATA	YELOfon® ES5/120 Polyethylene foam flanking strip: 5mm (t) x 120mm (h) x 50m (l) placed around the perimeter of the flooring board to isolate floor from walls and skirting.	$D_{nt,w} + C_{tr}$ = 55dB $L_{nt,w}$ = 45dB
FFT3 - **Resilient composite standard batten system** DECKfon® Batten 45 0 GWP **Additional layer required to complete treatment** 18mm (min) tongue & groove flooring board **Notes** Void dimension indicated is when floor is loaded to 25kg/m² Batten dimensions: 50mm (h) x 45mm (w) x 2400mm (l)	Code credits* Mat 1 Pol 1 Hea 2 2 1 4 	*rd* DL_w = 25dB VERIFIED BBA DATA	YELOfon® ES5/100 Polyethylene foam flanking strip: 5mm (t) x 100mm (h) x 50m (l) placed around the perimeter of the flooring board to isolate floor from walls and skirting.	$D_{nt,w} + C_{tr}$ = 55dB $L_{nt,w}$ = 45dB
FFT4 - **Resilient overlay platform floor system** ScreedBoard® 28 0 GWP **Notes** No services to be installed in the floor system Dimensions: 600mm x 1200mm Edge profile: Interlocking tongue & groove	Code credits* Mat 1 Pol 1 Hea 2 0.25 1 4 	*rd* DL_w = 24dB VERIFIED BBA DATA	YELOfon® FS50 Pre-formed polyethylene flanking angle: 6mm (t) x 30mm (w) x 50mm (h) x 2m placed around the perimeter of the flooring board to isolate floor from walls and skirting.	$D_{nt,w} + C_{tr}$ = 53dB $L_{nt,w}$ = 45dB
FFT5 - **Resilient overlay shallow platform floor systems** YELOfon® CHiP 23, 28 0 GWP *(Water resilient acoustic layer option)* FIBREfon® MDF 12 0 GWP *(100% recycled, high compressive strength, ultra-thin* FIBREfon® CHiP 21, 25 0 GWP *(100% recycled, high compressive strength option)* **Notes** No services to be installed in the floor system Dimensions (all treatments): 600mm x 2400mm Edge profile (all treatments): Tongue & groove	Code credits* Mat 1 Pol 1 Hea 2 0.25 1 4 	23 = *rd* DL_w = 19dB	YELOfon FS30 Pre-formed polyethylene flanking angle: 6mm (t) x 30mm (w) x 30mm (h) x 2m	$D_{nt,w} + C_{tr}$ = 53dB $L_{nt,w}$ = 51dB
		28 = *rd* DL_w = 19dB	YELOfon FS30 Pre-formed polyethylene flanking angle: 6mm (t) x 30mm (w) x 30mm (h) x 2m	$D_{nt,w} + C_{tr}$ = 53dB $L_{nt,w}$ = 51dB
		12 = *rd* DL_w = 21dB	YELOfon ES5/60 Polyethylene foam flanking strip: 5mm (t) x 60mm (h) x 50m (l)	$D_{nt,w} + C_{tr}$ = 52dB $L_{nt,w}$ = 49dB
		21 = *rd* DL_w = 18dB	YELOfon ES5/60 Polyethylene foam flanking strip:- 5mm (t) x 60mm (h) x 50m (l)	$D_{nt,w} + C_{tr}$ = 53dB $L_{nt,w}$ = 49dB
		25 = *rd* DL_w = 21dB	YELOfon FS30 Pre-formed polyethylene flanking angle: 6mm (t) x 30mm (w) x 30mm (h) x 2m	$D_{nt,w} + C_{tr}$ = 53dB $L_{nt,w}$ = 49dB

* Code for Sustainable Homes (CSH) credits quoted are typical. Mat 1 value taken from the BRE Green Guide. Pol 1 credit is only awarded if all the other insulation products used have a GWP of <5. Hea 2 credits are based on the floor being pre-completetion tested and the separating wall performing to at least the same acoustic standard. Credits subject to relevant category weighted value. See page 5 for further information.

Acoustic values

[1] RD impact performance values quoted were conducted at Sound Research Laboratories, Sudbury, 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).

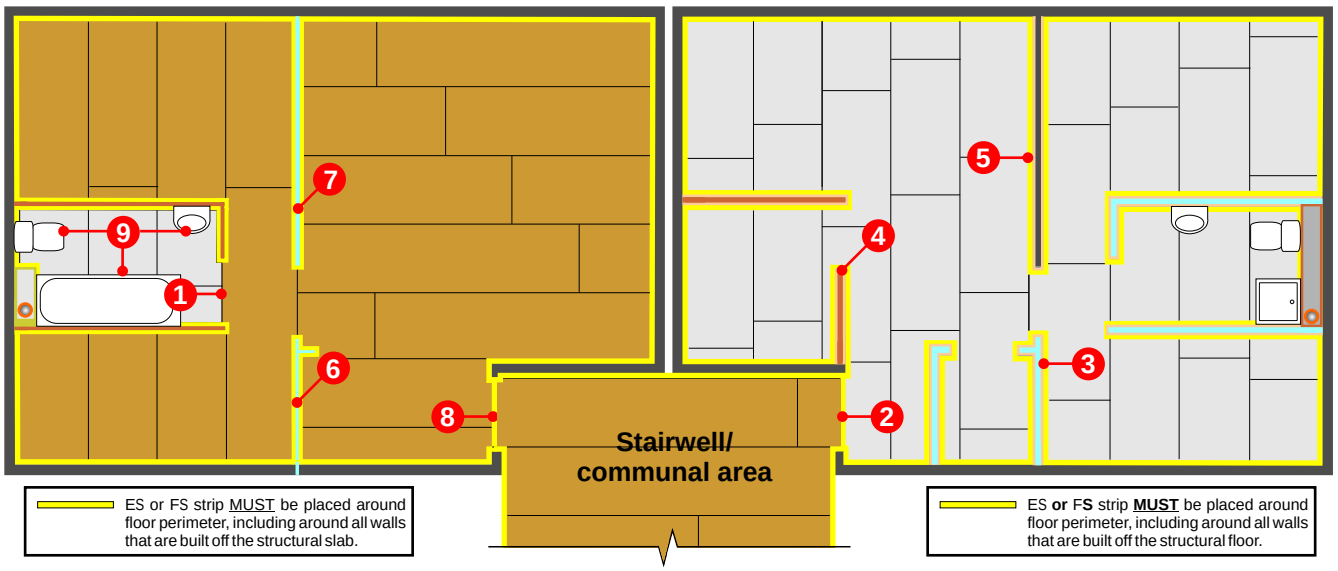
[2] Values quoted are typical, based on the treatment being installed correctly and pre-completion tested, with airborne performance tested in accordance with BS EN ISO 140-4:1998 and impact performance tested in accordance with BS EN ISO 140-7: 1998.

Design & installation details - Robust detail FFT1, 2, 3, 4 and 5

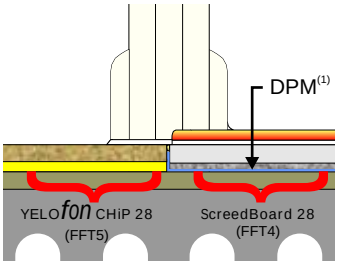
The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

Partitions built off the floating floor treatment

Partitions installed before the floor finish is laid

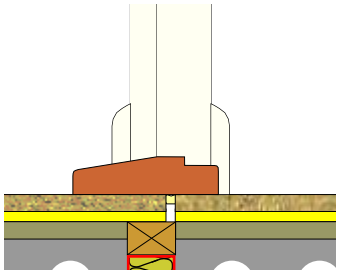


1 Junction detail: Non-tiled area meeting a tiled area



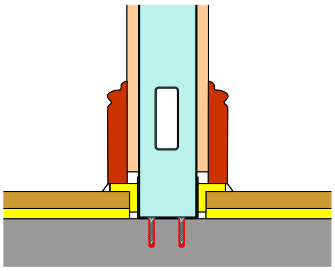
(1) Install a DPM below ScreedBoard 28, FIBREfon CHiP and MDF acoustic treatments.

2 Door threshold (FFT4 or 5)



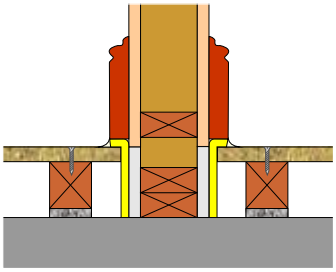
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

3 Metal frame partition built off the structural floor



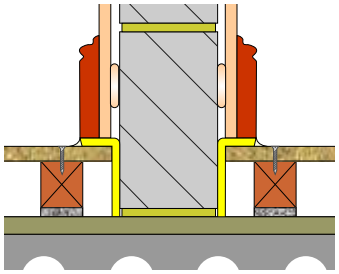
Lightweight Internal walls built off the structural floor must be isolated from the floating floor treatment (FFT4 or 5) with YELOfon FS strip.

4 Timber stud partition built off the structural floor



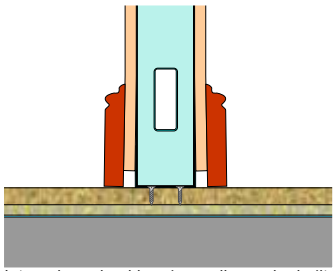
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment (FFT1, 2 or 3) with YELOfon ES strip.

5 Internal blockwork wall built off the structural floor



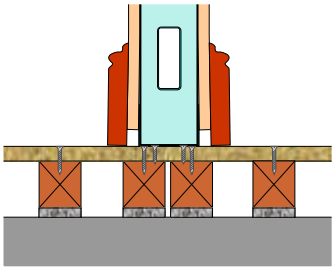
Internal block work walls built off the structural floor must be isolated from the floating floor treatment YELOfon ES strip (FFT1, 2 or 3) or YELOfon FS strip (FFT4 or 5) .

6 Metal frame partition built off FFT4 or 5



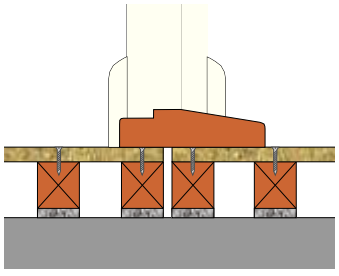
Internal non-load bearing walls can be built directly off the floor treatment (FFT4 & 5). Fixings MUST NOT penetrate the resilient layer.

7 Metal frame partition built off FFT1, 2 or 3



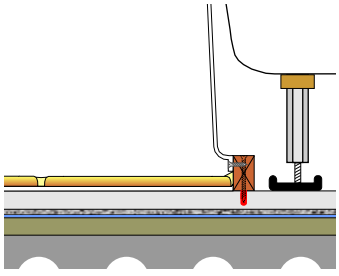
Double up battens under internal non-load bearing walls.

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 set out in a 300mm x 300mm grid under the sanitary ware.