

UltraBEAM metal joist separating floor

Robust Detail E-FS-2

CELLECTA DECKfon® Batten 70 floating floor system
 Hadley Group UltraBEAM metal joists
 Use with lightweight metal frame walls only

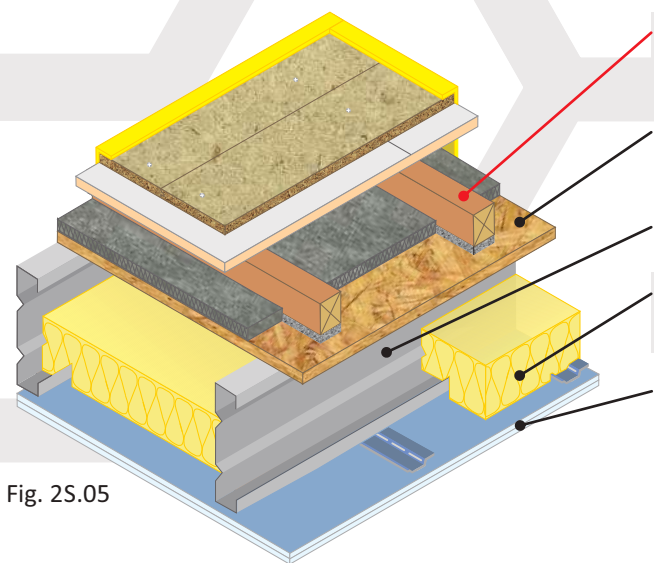


Fig. 2S.05

Floating floor treatment	FFT1 - CELLECTA DECKfon® Batten 70 (See Table 2S.05a/b for full details)
Floating decking	22mm thick (min) wood based board, density 600kg/m ³
Joists	225mm (min) deep UltraBEAM metal joists
Absorbing material	○ 50mm CELLECTA FIBREfon® Micro 50 ● 100mm (min) quilt insulation (10-36kg/m ³)
Ceiling	See Table 2S.05c for ceiling treatment options

Robust Detail option, change to E-FS-3
 Refer to page 7 on how to change a registered Robust Detail

Installation Options

Table 2S.05a

Table 2S.05c

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
- YELOfon® ES5/120**
Perimeter edge strip: 5mm x 120mm x 50mm

R-value: 0.237m²K/W
70mm* (min)

Additional component required to complete treatment
 18mm (min) tongue & groove flooring board
 19mm Gypsum-based board nominal 13.5kg/m²
 Sound absorbing quilt laid between battens:
 ○ 15mm CELLECTA FIBREfon Micro 15 non-itch polyester quilt
 ● 25mm (min) 10 - 33kg/m³ or 13mm (min) 33 - 36kg/m³ mineral wool

Airborne	51dB $D_{nT,w} + C_{tr}$ rd $\Delta R_w = 19dB$
Impact	52dB $L_{nT,w}$ rd $\Delta L_w = 16dB$
Building Regs	≥+5dB
BBA VERIFIED	RD DATA

Table 2S.05b

FFT1 Resilient composite deep batten system incorporating UFH

- HiDECK® Structural 25⁽¹⁾**
- CELLECTA Pro Adhesive**
- DECKfon® Batten 70**
- XFLO® JB-FF** foil faced XPS insulation brd
- YELOfon® ES5/120** edge strip
- UFH water pipe** (by others)

R-value: 0.062m²K/W
70mm* (min)
400mm (max)

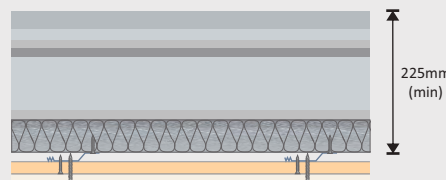
Additional component required to complete treatment
 Sound absorbing quilt laid between battens:
 ○ 15mm CELLECTA FIBREfon Micro 15 non-itch polyester quilt
 ● 25mm (min) 10-33kg/m³ or 13mm (min) 33-36kg/m³ mineral wool

Airborne	52dB $D_{nT,w} + C_{tr}$ rd $\Delta R_w = 18dB$
Impact	52dB $L_{nT,w}$ rd $\Delta L_w = 16dB$
Building Regs	≥+5dB
CLASS A1	

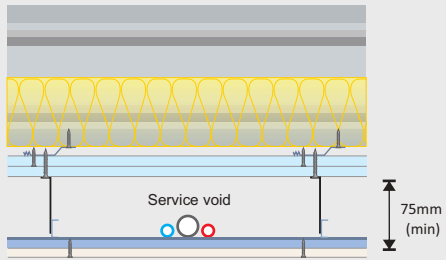
Ceiling Treatment Options

Ceiling boards must not penetrate or touch joists
 16mm (min) metal resilient bars mounted at right angles to the joist at 400mm centres.

Ceiling treatment
CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m²) fixed with 32mm screws and 12.5mm (nominal 10kg/m²) fixed with 42mm screws, with all joists staggered.
CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m²) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m²) fixed with 42mm screws, with all joists staggered.



Sacrificial ceiling (optional)
 Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m² gypsum based board.



Sound absorbing quilt fitted between joists
 ○ 50mm CELLECTA FIBREfon MICRO 50
 ● 100mm (min) mineral wool quilt -10-36kg/m³

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. Airborne performance tested in accordance with BS EN ISO 10140-2 and BS EN ISO 10140-4 and rated in accordance with BS EN ISO 717-1: 2013 as detailed in Appendix C of the Robust Details hand book (minimum value required rd $\Delta R_w + C_{tr} = 13dB$ rd $\Delta L_w = 15dB$). 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.

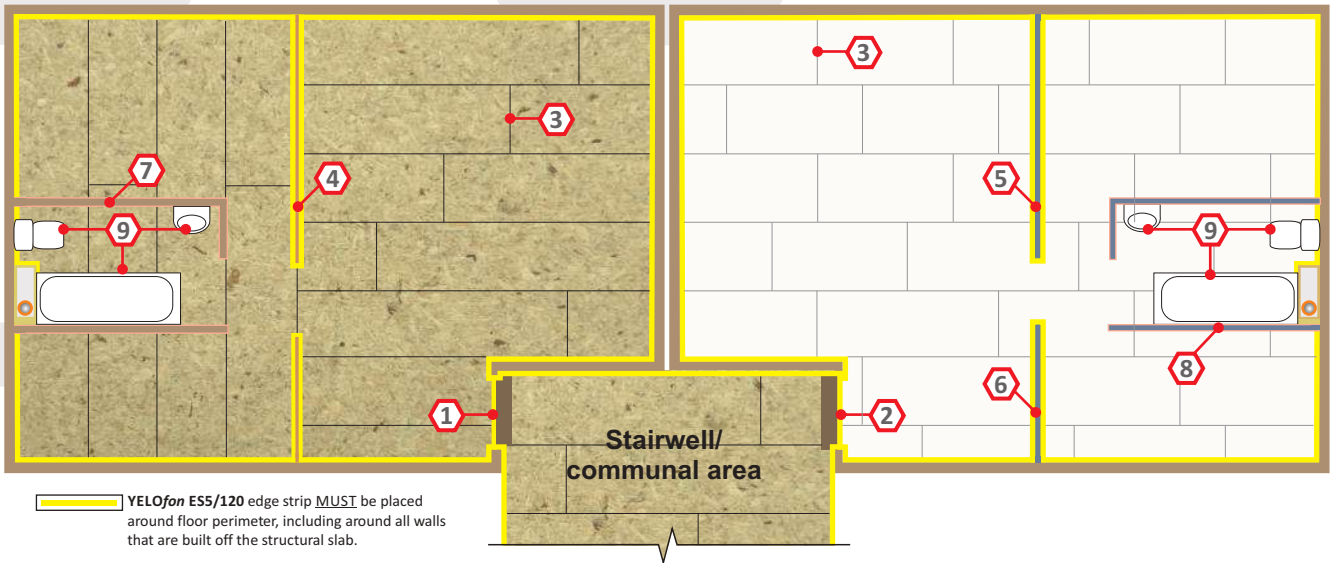


Batten system floating floor treatment design & installation details (FFT1)

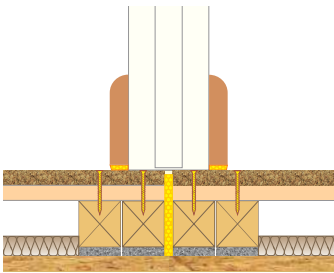
The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

Chipboard + plasterboard plank covered floor

CELLECTA HIDECK® Structural covered floor

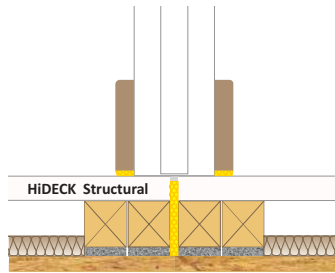


1 Door threshold - Chipboard + Plasterboard plank



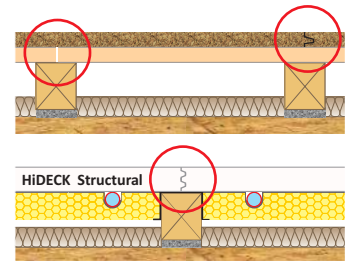
Double up batters each side of the door threshold to provide additional support. Refer to Part B and Section 2 for fire safety regulations

2 Door threshold - HiDECK Structural



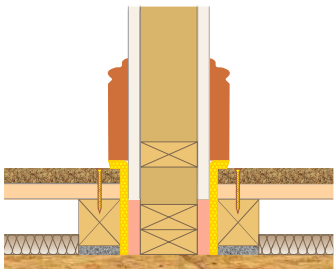
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

3 Joining floorboards



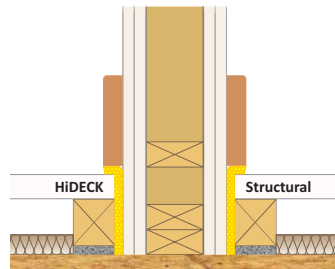
All floorboards must be laid in a staggered formation, with end joints meeting on a DECKfon Batten and be bonded together with appropriate adhesive.

4 Load-bearing timber stud partition built off the structural floor



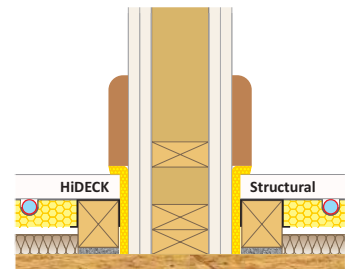
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment with YELOfon ESS/120 edge strip.

5 Load-bearing timber stud partition built off the structural floor

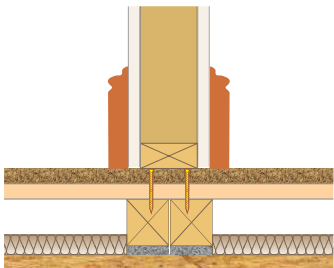


Where required, lightweight internal walls must meet Building Regulation Requirement E2.

6 Floor treatment + UHF - timber stud partition built off structural floor

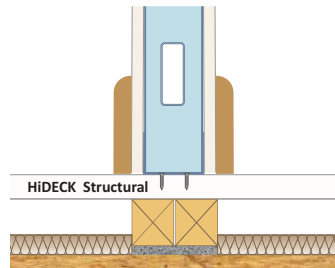


7 Timber stud partition built off FFT1



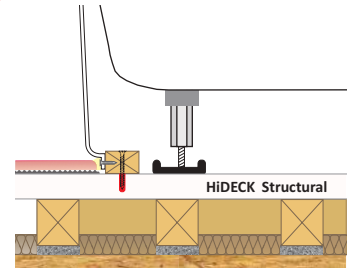
Double up batters under internal non-load bearing walls.

8 Metal frame partition built off FFT1



Double up batters under internal non-load bearing walls.

9 Bath surrounds and sanitary ware



Under sanitary ware areas, batters should be laid in a 300mm x 300mm grid formation.