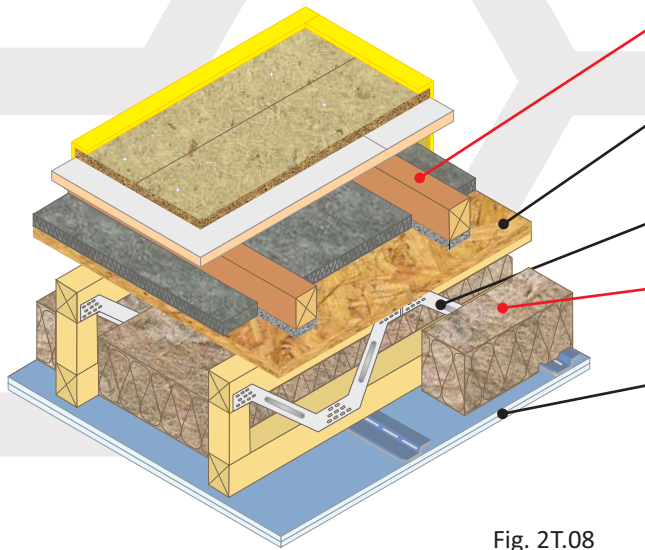


# Metal web joist separating floor

## Robust Detail E-FT-3

CELLECTA DECKfon® Batten 70 acoustic treatment laid on timber sub-deck

Use with timber frame walls only



- Floating floor treatment** FFT1 - CELLECTA DECKfon® Batten 70 (See Table 2T.08a & b for full details)
- Floor decking** 18mm (min) thick wood based board, density 600kg/m<sup>3</sup> (min)
- Joists** 253mm (min) metal web joists
- Absorbing material**
  - 50mm CELLECTA FIBREfon® Micro 50
  - 100mm (min) quilt insulation (10-36kg/m<sup>3</sup>)
- Ceiling** See Table 2T.08c for ceiling treatment options

Fig. 2T.08

### Alternative Robust Detail: E-FT-6

Refer to page 7 on how to change a registered Robust Detail

Tables 2T.08a & b

### 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/m<sup>2</sup>
- 2 YELOfon® ES5/120  
Perimeter edge strip: 5mm x 120mm x 50m

R-value: 0.237m<sup>2</sup>K/W  
70mm\* (min)

**Airborne**

55dB  $D_{nT,w} + C_{tr}$   
rd  $\Delta R_w = 19dB$

**Impact**

54dB  $L_{nT,w}$   
rd  $\Delta L_w = 16dB$

**Building Regs**

>+5dB

**BBA VERIFIED RD DATA**

**Additional components required to complete treatment:**  
 18mm (min) tongue & groove flooring board  
 Gypsum-based board nominal 13.5kg/m<sup>2</sup>  
 Sound absorbing quilt laid between batten:  
 ○ 15mm CELLECTA FIBREfon Micro 15 non-itch polyester quilt  
 ● 25mm (min) 10-33kg/m<sup>3</sup> or 13mm (min) 33-36kg/m<sup>3</sup> mineral wool

Table 2T.08c

### Ceiling Treatment

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

CT1 Two layers of gypsum-based board, composed of 19mm (nominal 13.5kg/m<sup>2</sup>) fixed with 32mm screws and 12.5mm (nominal 10kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

CT2 Two layers of gypsum-based board, composed of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 25mm screws and a second layer of 15mm (nominal 12.5kg/m<sup>2</sup>) fixed with 42mm screws, with all joints staggered.

253mm (min)

**Sacrificial ceiling (optional)**  
 Metal ceiling system with a 75mm (min) void fixed to underside of primary ceiling. One layer of nominal 8kg/m<sup>2</sup> gypsum based board.

253mm (min)

75mm (min)

**Service void**

**Sound absorbing quilt fitted between joists**  
 ○ 50mm CELLECTA FIBREfon MICRO 50  
 ● 100mm (min) mineral wool quilt -10-33kg/m<sup>3</sup>

### FFT1 Resilient composite deep batten system incorporating UFH

- 1 HiDECK® Structural 25<sup>(1)</sup>
- A CELLECTA Pro Adhesive
- 2 DECKfon® Batten 70
- 3 XFLO® JB-FF foil faced XPS insulation brd
- 4 YELOfon® ES5/120 edge strip
- P UFH water pipe (by others)

R-value: 0.062m<sup>2</sup>K/W  
70mm\* (min)  
400mm (max)

**Airborne**

54dB  $D_{nT,w} + C_{tr}$   
rd  $\Delta R_w = 18dB$

**Impact**

54dB  $L_{nT,w}$   
rd  $\Delta L_w = 16dB$

**Building Regs**

>+5dB

**CLASS A1**

**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/m<sup>3</sup> or 13mm (min) 33 - 36kg/m<sup>3</sup> mineral wool

### 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.

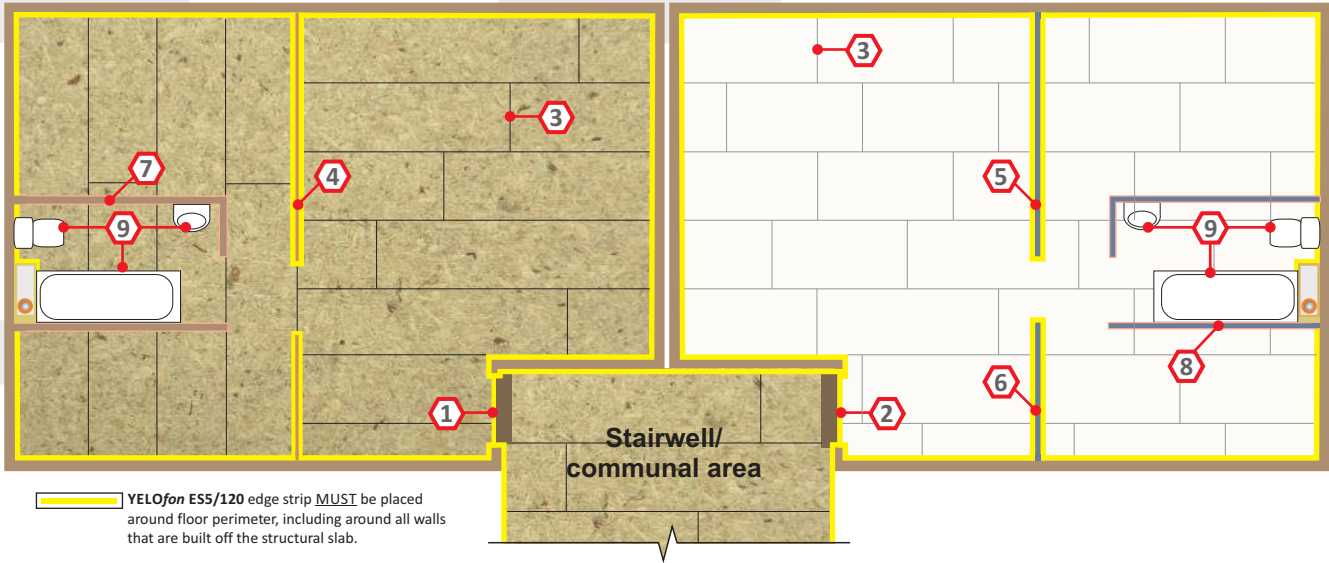


# Batten system floating floor treatment design & installation details (FFT1)

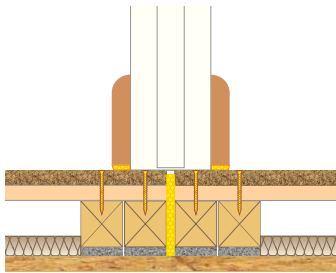
The acoustic performance of the floor will be compromised if the floating floor treatment is not completely isolated from the structural slab, soil pipes, door frames, the surrounding walls and their treatments. To address this risk, each potential problem area needs to be detailed accordingly.

## Chipboard + plasterboard plank covered floor

## CELLECTA HIDECK® Structural covered floor

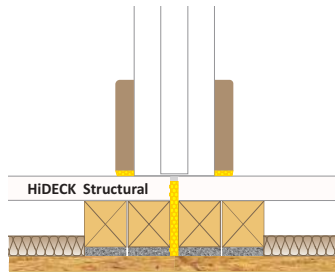


**1** Door threshold - Chipboard + Plasterboard plank



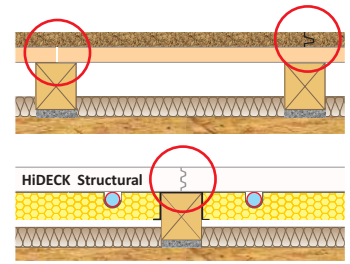
Double up battens each side of the door threshold to provide additional support. Refer to Part B and Section 2 for fire safety regulations

**2** Door threshold - HiDECK Structural



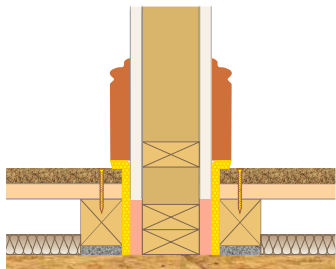
Leave a 5mm (min) gap between the habitable area treatment and the communal area treatment.

**3** Joining floorboards



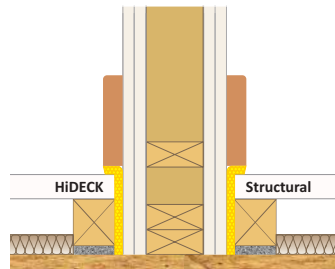
All floorboards must be laid in a staggered formation, with end joints meeting on a DECKfon Batten and be bonded together with appropriate adhesive.

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



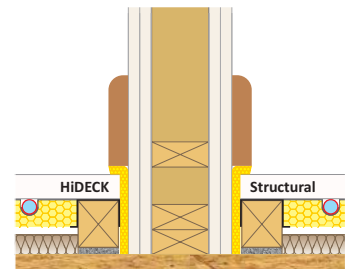
Lightweight internal walls built off the structural floor must be isolated from the floating floor treatment with YELOfon ESS/120 edge strip.

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

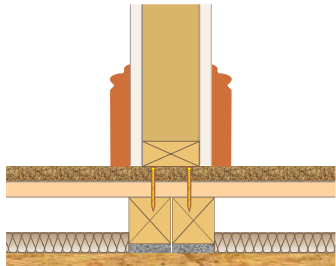


Where required, lightweight internal walls must meet Building Regulation Requirement E2.

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

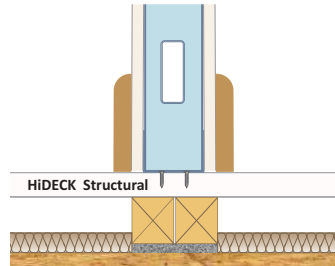


**7** Timber stud partition built off FFT1



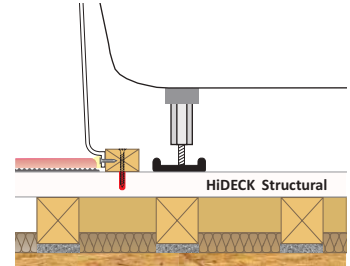
Double up battens under internal non-load bearing walls.

**8** Metal frame partition built off FFT1



Double up battens under internal non-load bearing walls.

**9** Bath surrounds and sanitary ware



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