Separating floor - UltraBEAM Metal Joists

Robust Detail E-FS-2

Hadley Group UltraBEAM metal joists
Use with lightweight metal frame walls only

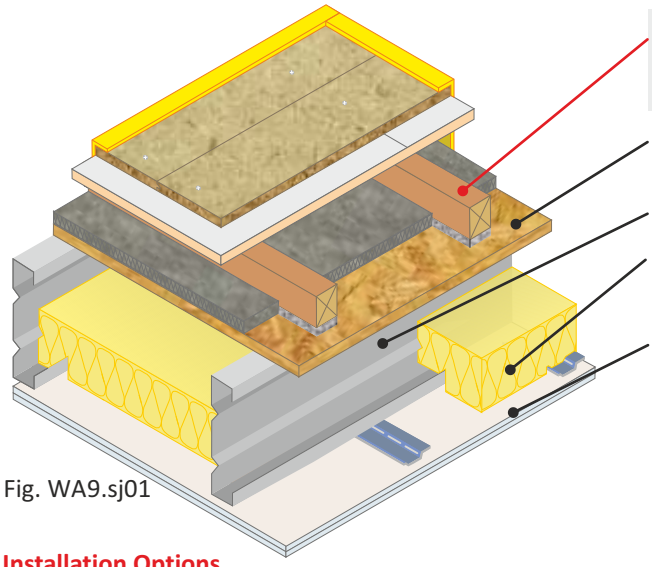


Fig. WA9.sj01

Floating floor	**FFT1 - CELLECTA DECKfon Batten 70** (See Table WA9.sj01a/b for full details)
Floating decking	22mm thick (min) wood based board, density 600kg/m³ (mm)
Joists	225mm (min) deep UltraBEAM metal joists
Absorbing material	○ 50mm CELLECTA FIBREfon Micro 50 ● 100mm (min) quilt insulation (10-36kg/m³)
Ceiling	See Table WA9.sj01c for ceiling treatment options

Robust Detail option, change to E-FS-3

Refer to page 5 on how to change a registered Robust Detail

Installation Options

Table WA9.sj01a

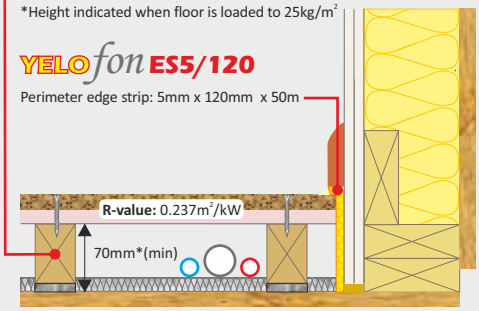
FFT1 Resilient composite deep batten system

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 50m



Airborne	51dB $D_{nT,w}+C_{tr}$ *rd* DR_w = 19dB
Impact	52dB $L_{nT,w}$ *rd* DL_w = 16dB
Building Regs	≥+5dB

BBA VERIFIED RD DATA

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

Table WA9.sj01b

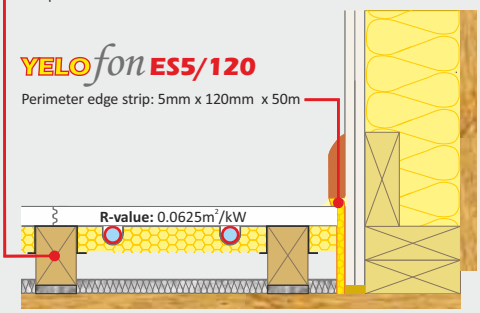
FFT1 Resilient composite deep batten system with high density floor board and optional UFH system

DECKfon Batten 70

Deep acoustic batten: 75mm x 45mm x 2400mm

YELOfon ES5/120

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



Airborne	52dB $D_{nT,w}+C_{tr}$ *rd* DR_w = 18dB
Impact	52dB $L_{nT,w}$ *rd* DL_w = 16dB
Building Regs	≥+5dB

CLASS A1

Additional layers required to complete treatment
25, 28 or 30mm tongue & groove CELLECTA **HiDECK Structural** floor board
Sound absorbing quilt laid between batten:
○ 15mm CELLECTA **FIBREfon Micro 15** non-itch polyester quilt
25mm (min) 10 - 33kg/m³ or 13mm (min) 33 - 36kg/m³ mineral wool

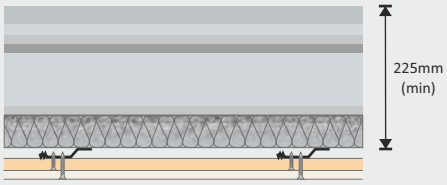
Table WA9.sj01c

Ceiling Treatment

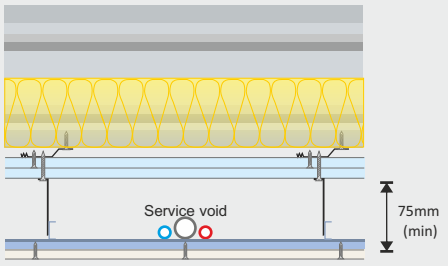
Ceiling boards must not penetrate or touch joists
16mm (min) metal resilient bars mounted at right angles to the joist at 400mm centres.

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 -10-33kg/m³

Acoustic Performance

rd impact performance value quoted were conducted at a UKAS accredited laboratory in accordance with BS EN ISO 140-3: 1995 and rated in accordance with BS ISO 717-1: 1997. Impact tested in accordance with BS EN ISO 140-6: 1998 and rated in accordance with BS ISO 717-2: 1997 as detailed in Appendix C of the Robust Details handbook (minimum values required *rd* $DR_w + C_{tr}$ = 13dB and *rd* DL_w = 15dB). [2] DR_w value quoted includes C_{tr}.
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.

RD Compliant Treatment · BBA VERIFIED RD DATA · GWP <5 · 100% Recycled Gypsum · zero ODP

01634 29-66-77 · cellecta.co.uk · technical@cellecta.co.uk