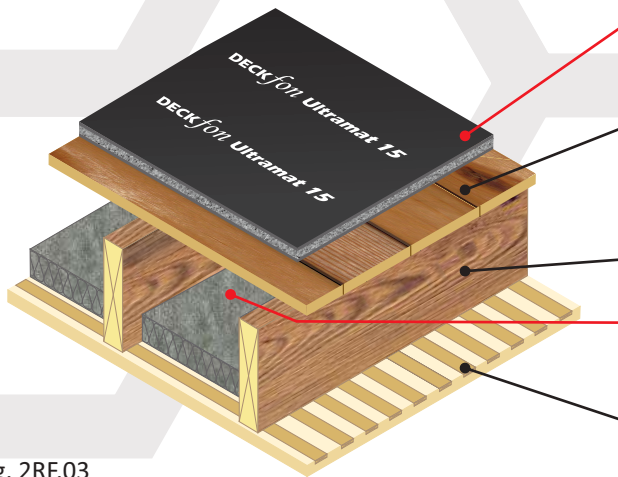


# Refurbishment and conversion timber separating floor

CELLECTA DECKfon® ULTRAmat 15 acoustic mat laid on timber sub-floor  
Existing timber decking, floor joists and ceiling retained or replaced



Floating floor treatment

CELLECTA DECKfon® ULTRAmat 15  
(See Table 2RF.03a for full details)

Floor decking

15mm thick (min) wood based board, density 600kg/m<sup>3</sup> (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)

Floor joist

200mm (min) solid timber joists

Absorbing material

- 50mm CELLECTA FIBREfon® Micro 50
- 100mm (min) mineral wool (45kg/m<sup>3</sup>)

Ceiling

See Table 2RF.03b for ceiling treatment

Fig. 2RF.03



Table 2RF.03a

### Installation Details

**Structural composite treatment laid directly on floor joists - Ceiling retained**

- DECKfon® ULTRAmat 15** High density composite acoustic overlay mat  
Dimensions: 15mm x 1200mm x 1200mm  
Weight: 15kg/m<sup>2</sup> / 21.6kg/mat
- YELOfon® ES5/15**  
Perimeter edge strip: 5mm x 15mm x 50m

Additional item required:

- 50mm CELLECTA FIBREfon Micro 50 non-itch polyester quilt
- 100mm (min) mineral wool 45kg/m<sup>3</sup>

<b>Airborne</b>	<b>Impact</b>
45dB R <sub>w</sub> + C <sub>tr</sub>	59dB L <sub>n,w</sub>

Table 2RF.03b

### Ceiling Treatment Options

**Ceiling treatment**  
Lath and plaster or plasterboard ceiling with minimum mass of 16kg/m<sup>2</sup>, fixed directly to floor joists.

**Ceiling boards must not penetrate or touch joists**

- 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
- 30mm CELLECTA HP30 resilient bars mounted at right angles to the joists at 600mm (max) centres, as shown.

**Ceiling treatment**  
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.

HP30 resilient bars set at 600mm (max) centres

### Structural composite treatment laid directly on floor joists - New ceiling

- DECKfon® ULTRAmat 15** High density composite acoustic overlay mat  
Dimensions: 15mm x 1200mm x 1200mm  
Weight: 15kg/m<sup>2</sup> / 21.6kg/mat
- YELOfon® ES5/15**  
Perimeter edge strip: 5mm x 15mm x 50m

Additional item required:

- 50mm CELLECTA FIBREfon Micro 50 non-itch polyester quilt
- 100mm (min) mineral wool 45kg/m<sup>3</sup>

<b>Airborne</b>	<b>Impact</b>
51dB R <sub>w</sub> + C <sub>tr</sub>	55dB L <sub>n,w</sub>

**Ceiling boards must not penetrate or touch joists**

- 16mm (min) metal resilient bars mounted at right angles to the joists at 400mm (max) centres.
- 30mm CELLECTA HP30 resilient bars mounted at right angles to the joists at 600mm (max) centres, as shown.

**Ceiling treatment**  
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.

30mm void  
HP30 resilient bars set at 600mm (max) centres

## Acoustic Performance

Performance values quoted were achieved using 50mm x 235mm solid timber joists and 16mm resilient bars installed at Sound Research laboratories, Sudbury. Tested in accordance with Approved Document E: Annex B: Procedures for sound insulation testing. Airborne results tested in accordance with BS EN ISO 140-3:1995 Impact results tested in accordance with BS EN ISO 140-6: 1998

## Third Party Accreditation and Approvals

