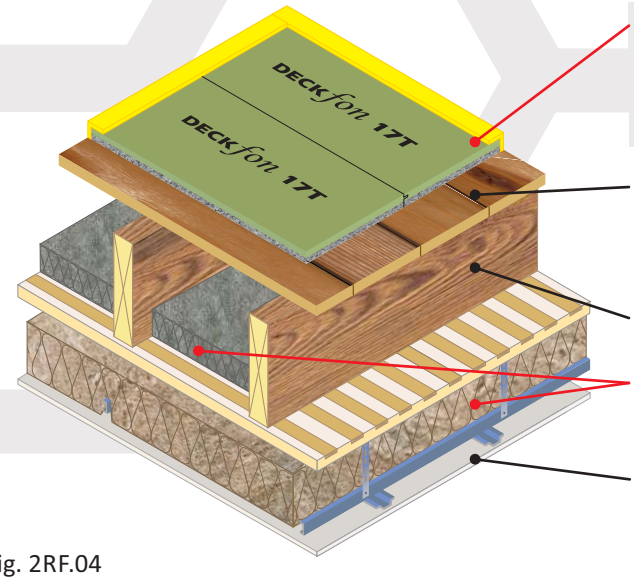
Refurbishment and conversion timber separating floor

CELLECTA acoustic treatment laid on timber sub-floor
Existing timber joists
Metal frame secondary ceiling hung off primary ceiling



Floating floor treatment options	**CELLECTA DECK*fon*® 17T** **CELLECTA DECK*fon*® 26T** **CELLECTA ScreedBoard® 28** (See Table 2RF.04a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (min) or existing floor boards (with all gaps sealed with suitable flexible mastic)
Floor joist	Solid timber joists
Absorbing material	○ 50mm CELLECTA FIBRE*fon*® Micro 50 ● 100mm (min) mineral wool (10kg/m³)
Ceiling	See Table 2RF.04b for ceiling treatment

Fig. 2RF.04

Table 2RF.04a

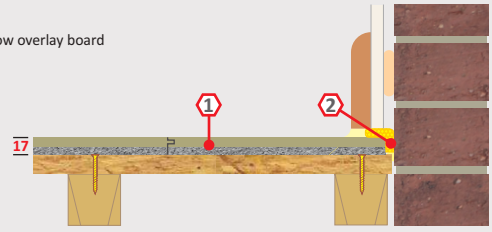
Installation Details

Resilient shallow overlay platform floor system

① **DECK*fon*® 17T** Composite acoustic shallow overlay board
17mm x 600mm x 2400mm
Weight: 7.25kg/m² / 10.44kg/board

Ⓐ **CELLECTA *fon* Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

② **YELO*fon*® FS15**
Preformed flanking strip:
6mm x 15mm x 30mm x 2m



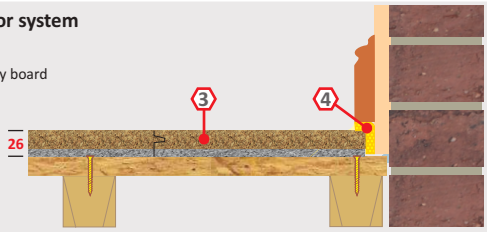
Airborne	Impact
51dB $R_w + C_{tr}$	55dB $L_{n,w}$

Resilient shallow overlay platform floor system

③ **DECK*fon*® 26T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 13.80kg/m² / 19.87kg/board

Ⓐ **CELLECTA *fon* Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

④ **YELO*fon*® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



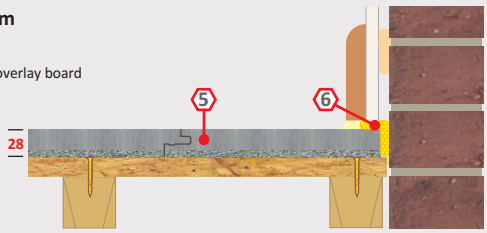
Airborne	Impact
52dB $R_w + C_{tr}$	56dB $L_{n,w}$

Resilient overlay platform floor system

⑤ **ScreedBoard® 28** High density acoustic overlay board
Dimensions: 28mm x 600mm x 1200mm
Weight: 26kg/m² / 18.72kg/board

Ⓐ **CELLECTA Pro Adhesive**
ScreedBoard joint adhesive
Bottle size: 1L / 33m2 coverage

⑥ **YELO*fon*® FS50**
Preformed flanking strip:
6mm x 50mm x 30mm x 2m



Airborne	Impact
52dB $R_w + C_{tr}$	55dB $L_{n,w}$

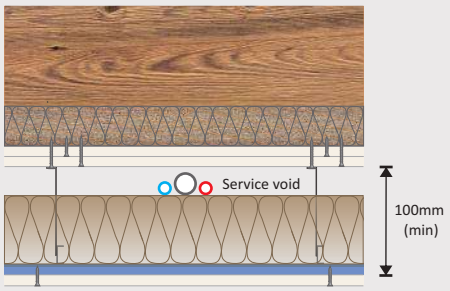
Table 2RF.04b

Ceiling Treatment Options

Primary ceiling fixed directly to joists with metal frame ceiling system, providing 100mm (min) ceiling void fixed to underside

Primary ceiling
- Retained lath and plaster ceiling with minimum mass of 16kg/m²
- Gypsum-based boarded ceiling with a nominal weight of 16kg/m² fixed directly to the joists

Sacrificial ceiling
Metal frame (MF) ceiling system with 100mm (min) void fixed to underside of primary ceiling, 50mm **FIBRE*fon* Micro 50** or 100mm mineral wool (10kg/m³) fitted between grid and one layer of 8kg/m² gypsum-based board



Additional item required:
- ○ 50mm CELLECTA **FIBRE*fon* Micro 50** non-itch polyester quilt
- ● 100mm (min) mineral wool 45kg/m³

Construction notes
Materials must be installed in accordance with manufacturers' instructions to achieve stated acoustic values. Wall treatments must be isolated from the floating floor with **YELO*fon* FS** flanking strip. Ensure services do not come into contact with the floor treatment. Once laid, **17T** boards should be covered with the final floor finish as soon as possible to eliminate the risk of mechanical damage to the edge detail.
Part B/Section 2 of Building Regulations/Standards must be adhered to ensure the ceilings fire performance meets legislative requirements.

Acoustic Performance

Performance values quoted were achieved using 50 x 235mm solid timber joists 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

SRL Performance Tested
bmtrada 2015

Environmental Credentials

GWP <5
100% Recyclable Foam
zero ODP

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

Refurbishment/conversion timber separating floor

CELLECTA acoustic treatment laid on timber sub-floor
Existing timber joists
Ceiling on resilient bars

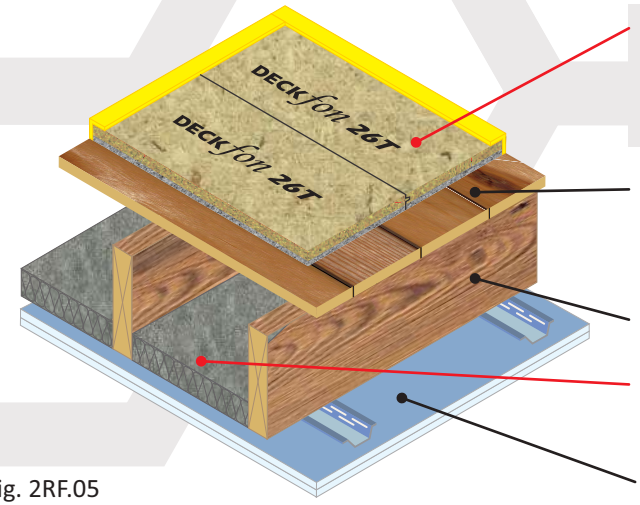


Fig. 2RF.05

Floating floor treatment options	**CELLECTA DECKfon® 17T** **CELLECTA DECKfon® 26T** **CELLECTA DECKfon® 30T** (See Table 2RF.05a for full details)
Floor decking	15mm thick (min) wood based board, density 600kg/m³ (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/m³)
Ceiling	See Table 2RF.05b for ceiling treatment

Table 2RF.05a

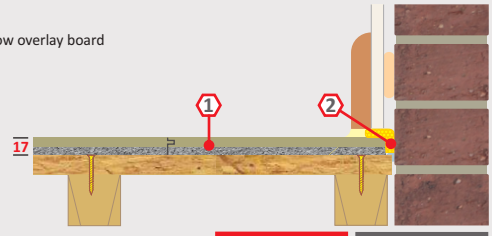
Installation Details

Resilient shallow overlay platform floor system

① **DECKfon® 17T** Composite acoustic shallow overlay board
17mm x 600mm x 2400mm
Weight: 7.25kg/m² / 10.44kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

② **YELOfon® FS15**
Preformed flanking strip:
6mm x 15mm x 30mm x 2m



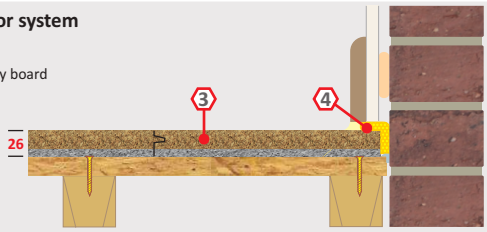
Airborne	Impact
50dB $R_w + C_{tr}$	56dB $L_{n,w}$

Resilient shallow overlay platform floor system

③ **DECKfon® 26T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 13.80kg/m² / 19.87kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m² coverage

④ **YELOfon® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



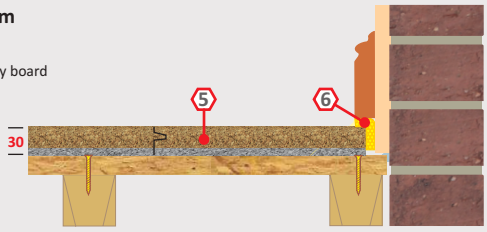
Airborne	Impact
51dB $R_w + C_{tr}$	57dB $L_{n,w}$

Resilient overlay platform floor system

⑤ **DECKfon® 30T** Composite acoustic overlay board
26mm x 600mm x 2400mm
Weight: 16.00kg/m² / 23.04kg/board

Ⓐ **CELLECTA fon Adhesive**
Acoustic board joint adhesive
Bottle size: 1L / 33m2 coverage

⑥ **YELOfon® FS30**
Preformed flanking strip:
6mm x 30mm x 30mm x 2m



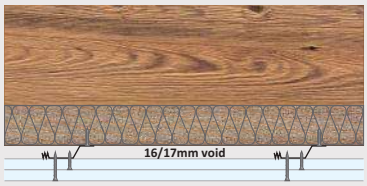
Airborne	Impact
51dB $R_w + C_{tr}$	56dB $L_{n,w}$

Table 2RF.05b

Ceiling Treatment Options

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.

Ceiling treatment
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 joints staggered.



Standard resilient bars set at 450mm (max) centres

HP30 resilient bars set at 600mm (max) centres

+ 3	dB $R_w + C_{tr}$ (1)
+ 2	dB $L_{n,w}$ (1)

(1) Typical dB improvement of **HP30** over 16mm resilient bars.

Acoustic Performance

Performance values quoted were achieved using 50 x 235mm solid timber joists 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

SRL Performance Tested

bmtrada 2015

Environmental Credentials

GWP <5

100% Recycled Foam

zero ODP