

Acoustic Floor Products

A range of mineral wool insulation products in slab and roll form providing acoustic insulation for concrete base, steel-concrete base, and timber base separating floors, meeting Part E requirements (England and Wales), including Robust Details, and Section 5 (Scotland).



Description

ISOVER RD Acoustic Floor Slab

Rectangular mineral wool slab specifically developed to meet the generic description for a resilient layer in platform floor systems as described in the Robust Detail solutions manual that supplements Part E Building Regulations.

Robust Detail separating floors (concrete and steel-concrete composite) in new build houses and flats that incorporate **ISOVER RD Acoustic Floor Slab** do not need acoustic site tests.

ISOVER Sound Deadening Floor Slab - Rigid Grade

Rectangular mineral wool slab designed to provide impact sound deadening in Type 3.1A timber base separating floors, as described in Building Regulations Part E and Section 5 (Scotland).

This is a Part E site-tested solution.

ISOVER Sound Deadening Floor Roll

Specifically developed to satisfy the resilient layer specification for Type 2 concrete base intermediate separating floors, with either timber or screed floating layers, as described in Building Regulations Part E, and Section 5 (Scotland).

The product is composed of non-combustible glass mineral wool in roll form, faced on one side with kraft paper for additional tear strength, providing a strong, resilient and flexible insulation material, which is easy to handle, cut and install.

ISOVER APR 1200

Sound absorbing blanket, providing the required levels of airborne sound insulation in floors and ceilings.

Standards

All ISOVER acoustic floor products are manufactured under Quality Management Standard EN ISO 9001:2000.

Environmental

ISOVER acoustic floor products are made from naturally occurring minerals.

Benefits

- Ensures compliance with Part E Robust Detail constructions, and Part E and Section 5 (Scotland) descriptive constructions
- Durable – not easily damaged in storage, during transport or during installation on site
- Non-combustible
- Environmentally friendly – made from naturally occurring minerals in a process that does not involve environmentally damaging gasses
- Effective for the lifetime of the building
- Non-hygroscopic

Fire Performance

The base mineral wool of all ISOVER acoustic floor products is inherently non-combustible, with an A1 rating under the Euroclass fire classification system, the best attainable.

Party/Separating Floors meeting Building Regulations performance requirements

Robust Detail solutions - site testing not required*

*Applies to new build houses and flats only. Even if these Robust Detail floor constructions are used in rooms for residential purposes (hotels, nursing homes, student accommodation) then site testing may still be required. Please note: for all flooring solutions shown below, install flanking strips around the perimeter of the flooring board to isolate the floor from walls and skirting. The following floor constructions are included in the Part E Robust Detail pattern book, and show the appropriate ISOVER products that match the generic descriptions.

PRECAST CONCRETE PLANK - RESILIENT PLATFORM LAYER

Method of compliance:
Robust Detail E-FC-1 using floating floor treatment FFT4 and ceiling treatment CT1

Note: The sound insulation performance will be increased if ISOVER APR 1200 (min 25mm) is placed in the ceiling void.

Walking surface (min 11.5kg/m²)

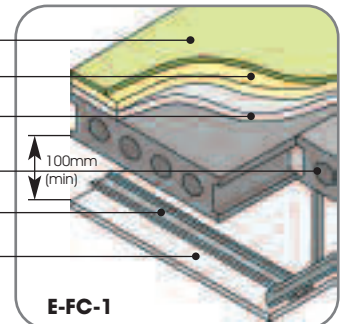
25mm ISOVER RD Acoustic Floor Slab

40mm (min) sand/cement screed - 80kg/m² (min) mass per unit area

150mm (min) precast concrete floor plank
300kg/m² (min) mass per unit area

Casoline MF ceiling

12.5mm Gyproc WallBoard



IN-SITU CONCRETE SLAB

Method of compliance:
Robust Detail E-FC-2 using floating floor treatment FFT4

Note: The sound insulation performance will be increased if ISOVER APR 1200 (min 25mm) is placed in the ceiling void.

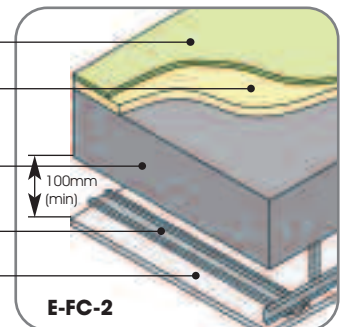
Walking surface (min 11.5kg/m²)

25mm ISOVER RD Acoustic Floor Slab

250mm (min) in-situ concrete floor slab
2400kg/m³ (min) density without screed

Casoline MF ceiling

12.5mm Gyproc WallBoard



PRECAST CONCRETE PLANK - SCREED LAID ON RESILIENT LAYERS

Method of compliance:
Robust Detail E-FC-3

Note: The sound insulation performance will be increased if ISOVER APR 1200 (min 25mm) is placed in the ceiling void.

65mm (min) sand cement screed, or 40mm proprietary screed (nominal 80kg/m² mass per unit area)

5mm polyethylene foam 30-36kg/m³

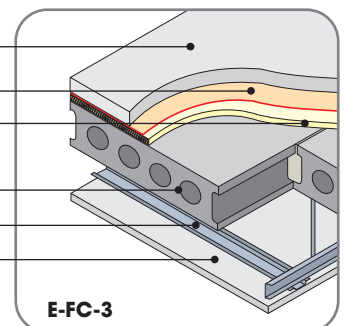
25mm ISOVER RD Acoustic Floor Slab

150mm (min) precast concrete floor plank
300kg/m² (min) mass per unit area

Casoline MF ceiling

12.5mm Gyproc WallBoard

note: Ceiling void 150mm (min) with 150mm (min) concrete planks, and 100mm (min) with 200mm (min) concrete planks

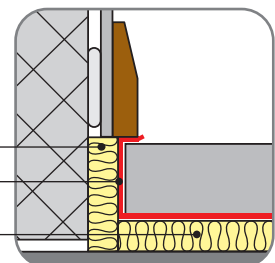


Edge Detail to E-FC-3

ISOVER RD Acoustic Floor Slab used as isolation edge strip

5mm polyethylene foam

25mm ISOVER RD Acoustic Floor Slab



STEEL-CONCRETE COMPOSITE

Method of compliance:
Robust Detail E-FS-1 using floating floor treatment FFT4

Note: The sound insulation performance will be increased if ISOVER APR 1200 (min 25mm) is placed in the ceiling void.

Walking surface (min 11.5kg/m²)

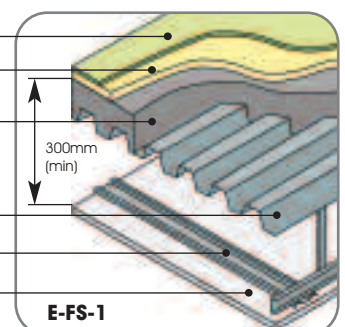
25mm ISOVER RD Acoustic Floor Slab

Concrete thickness
80mm (min) at shallowest point
130mm (min) at deepest point
concrete density 2200 kg/m³ (min)

"Shallow" or "Deep" profiled metal decking

Casoline MF ceiling

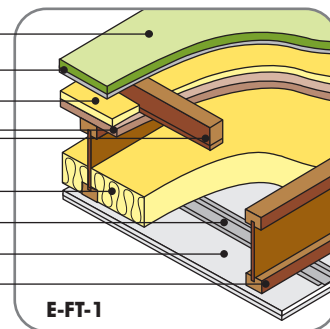
12.5mm Gyproc WallBoard



TIMBER I-JOIST FLOOR E-FT-1 (FOR USE WITH TIMBER FRAME WALLS ONLY)

Using ceiling treatment CT2

- 18mm (min) T&G flooring board
- 19mm Gyproc plank
- 25mm (min) ISOVER APR 1200 between flooring battens**
- FFT-1 resilient composite deep battens (may have resilient layer at the top or the bottom)
- 15mm (min) floor decking
- 100mm (min) ISOVER APR 1200**
- Gypframe RB1 resilient bar at 400mm centres
- 2 layers 15mm Gyproc WallBoard
- 240mm (min) timber I-joists

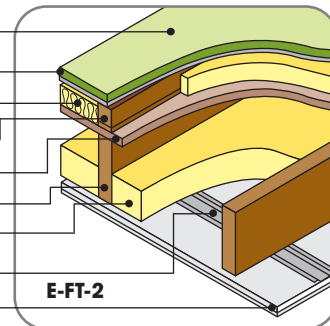


E-FT-1

TIMBER SOLID JOIST FLOOR E-FT-2 (FOR USE WITH TIMBER FRAME WALLS ONLY)

Using ceiling treatment CT2

- 18mm (min) T&G flooring board
- 19mm Gyproc plank
- 65mm (min) ISOVER APR 1200 between flooring battens**
- FFT-1 resilient composite deep battens (may have resilient layer at the top or the bottom)
- 11mm (min) OSB floor decking
- 220mm (min) solid timber joists at max 400mm centres
- 100mm (min) ISOVER APR 1200 between joists**
- Gypframe RB1 resilient bar at 400mm centres
- 2 layers 15mm Gyproc WallBoard



E-FT-2

Party/Separating Floors meeting Building Regulations performance requirements solution likely to require site testing

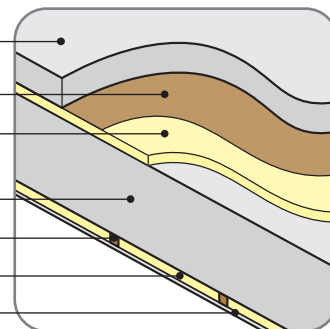
Applies to new build houses, flats, and rooms for residential purposes (hotels, nursing homes, student accommodation). Building Regulations Approved Document E 'Resistance to the Passage of sound', July 2003 (England and Wales), gives examples of floor types which, if built correctly, should achieve the acoustic performance standards. This solution for a concrete base floor is shown below, incorporating the appropriate ISOVER acoustic products.

CONCRETE BASE FLOOR, TYPE 2.1C (B)

Method of compliance: As described in Approved Document E - subject to pre-completion sound testing

Note: Ensure acoustic separation between walking surface and perimeter walls. See Approved Document E for full design details.

- Floating Surface 65mm sand/cement screed
- Waterproof layer laid separately
- 25mm ISOVER Sound Deadening Floor Roll**
- Concrete base floor (min 300kg/m²)
- Timber battens or GypFrame Resilient Channel RB1
- Min 25mm ISOVER APR1200 (optional with timber battens)**
- 1 layer 12.5mm Gyproc WallBoardTEN



Internal timber floors in new dwellings

Internal floors within the same dwelling need to achieve 40dB airborne sound insulation. Solutions can be either supported by laboratory test reports or contained within Approved Document E (to comply with Part E Building Regulations, July 2003 England and Wales). The following floor constructions meet this requirement.

TIMBER JOIST FLOOR INTERNAL FLOOR TYPE C

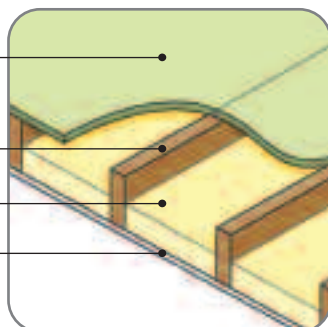
Method of compliance: As described in Approved Document E - site testing not required

T&G Chipboard walking surface (min mass 15 kg/m²)

200mm x 50mm timber joists

Min 100mm ISOVER APR 1200

12.5mm Gyproc WallBoard TEN



TIMBER I-JOIST FLOOR

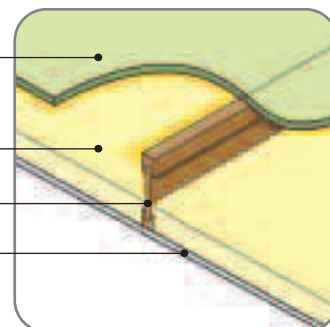
Method of compliance: Laboratory tested -site testing not required

Screw-fixed walking surface of 22mm T&G Chipboard

65mm ISOVER APR 1200

Engineered I-joists nominally 240mm deep and at 600mm centres

15mm Gyproc WallBoard screw-fixed directly to the joists



Packaging and Physical Dimensions



Acoustic floor products are supplied fully palletised, offering the following benefits.

- Weatherproof packaging for outside storage
- Reduced storage space
- Less handling therefore less damage
- Faster loading, unloading and counting
- Reduced haulage costs
- Packs remain clean and in good condition



Sound Deadening Floor Roll

Thickness mm	Width mm	Length m	Pack area m ²	Packs/pallet	m ² /Pallet
25	1200	10.00	12.00	24	288

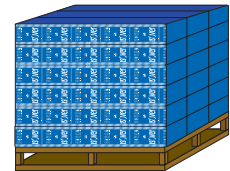
Packed on 1200mm x 1200mm wooden pallets.



RD Acoustic Floor Slab

Thickness mm	Width mm	Length mm	Pack area m ²	Batts per pack	Packs/pallet	m ² /Pallet
25	625	1200	4.50	6	21	94.50

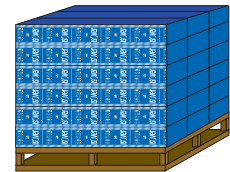
Packed on 2000mm x 1200mm wooden pallets.



Sound Deadening Floor Slab – Rigid Grade

Thickness mm	Width mm	Length mm	Pack area m ²	Batts per pack	Packs/pallet	m ² /Pallet
25	625	1200	6.00	8	18	108.00

Packed on 2000mm x 1200mm wooden pallets.



ISOVER APR 1200

Thickness mm	Width mm	Length mm	Pack area m ²	Packs/pallet	m ² /Pallet
25	2 x 600	20.00	24.00	24	576.00
50	2 x 600	13.00	15.60	24	374.40
65	2 x 600	10.00	12.00	24	288.00
75	2 x 600	12.20	14.64	24	351.36
100	2 x 600	9.17	11.00	24	264.00

Packed on 1200mm x 1200mm wooden pallets.



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