

 **KARMA**

Acoustic Solutions



Regulations governing the transmission of sound between dwellings is a relatively modern creation. Many older buildings were created without any consideration being given to the issue of noisy neighbours. What's more, the levels of external noise around these buildings has increased significantly in recent decades, with buses and lorries, for example, often passing close to many properties.

When a property is refurbished or converted, it will generally become necessary for it to meet the necessary regulations. These regulations don't exist simply as a demand of Building Control but reflect the people's expectations regarding acoustics and soundproofing in the 21st Century.

The Karma range of soundproofing products was created to ensure both regulations and expectations are met.

Key to symbols

- PART E** Has demonstrated compliance with Approved Document E (England and Wales) - conversions*
- SECTION 5 (NT)** Has demonstrated compliance with Section 5 (Scotland) - non traditional buildings*
- SECTION 5 (T)** Has demonstrated compliance with Section 5 (Scotland) - traditional buildings*
- FIRE** Product/System has been tested to a particular fire rating
- GWP** Global Warming Potential of resilient layer
- Recycle** Product made from recycled or recyclable materials

* When used in a suitable overall floor and ceiling design.

† On site it is wise to carry out pre-conversion sound tests to establish whether any existing floors and walls meet the performance requirements of Part E regulations for floors and walls. If they do conform and remain unaltered these tests may provide evidence of compliance.

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Performance requirements of the Building Regulations

Separating walls and floors should be built to meet the following requirements:

ENGLAND and WALES	Airborne Sound Walls and Floors DnT,w + Ctr (Minimum Values)	Impact Sound Floors L'nT,w (Maximum Values)
Flats formed by material change of use	43	64

SCOTLAND	Airborne Sound Walls And Floors DnT,W (Minimum Values)	Impact Sound Floors L'nT,w (Maximum Values)
Conversions other than traditional buildings*	56	56
Conversion of traditional buildings	53	58

* The definition of a traditional building is a building or part of a building of a type constructed before or around 1919:
a) using construction techniques that were commonly in use before 1919; and
b) with permeable components, in such a way that promotes the dissipation of moisture from the building fabric.

Completed constructions are required to be tested by an accredited acoustician to demonstrate compliance with the Regulations.

Flanking Transmission

Flanking transmission is where sound is transmitted indirectly between one room and another through adjoining parts of the structure rather than directly through the separating wall or floor.

It is important to identify potential flanking paths in advance as they can reduce the performance of the acoustic floor, wall or ceiling treatment.

The Karma range offers solutions such as Flanking Strips which can isolate acoustic floors from the rest of the structure.

KARMA Masspanel System with TNF 70 Fire Retardant Slab



Panel Size: 1200 x 600 x 30mm
Weight: 20kg
Slab Size: 1200 x 600 x 70mm

PART E

FIRE

Karma Masspanel comprises 18mm cement particleboard T&G4 bonded to a 12mm thick woodfibre layer. It is laid as a floating floor above a timber deck.

TNF 70 slab is a high density rock fibre slab with a smoke and fire resistant coating. It is friction fitted between joists and sealed with an intumescent and acoustic mastic and provides 90 minutes fire resistance. Masspanel and TNF70 comply to Part E when there is a lath and plaster ceiling in situ and joist depth is at least 200mm.

Benefits

- Excellent acoustic performance to height ratio
- Tested to BS EN 13652
- Installed from above - existing ceiling can be retained
- Dry system which is quick to install
- Can be laid with a variety of floor finishes
- Compliant with Part E when there is a lath and plaster ceiling insitu

KARMA Visco 400/600 400mm centres only



Karma Visco 400



Karma Visco 600

Panel Size: 2400 x 600 x 35/39mm
Weight: 20.5kg/m² - 23.6kg/m²
Laid Area per Board: 1.44m²

PART E

SECTION 5 (1)



Karma Visco 400/600 is a structural acoustic floor designed to attenuate impact and airborne sound passing through existing timber floors and can be laid direct to joists. It comprises two layers of moisture resistant chipboard, separated by visco - elastic sound damping strips with an acoustic chip foam resilient layer on the underside.

Benefits

- 36mm product for 450mm joist centres, 40mm for 600mm centres maximum
- Boards can be installed directly to joists
- Acoustic felt contours over minor irregularities
- Will not add to existing fire hazard when properly installed

KARMA JoistDeck 37 Maximum joist centres 450mm



Panel Size: 2400 x 600 x 37mm
Weight: 15.6kg/m²
Edge Detail: T&G4

PART E

GWP = 0

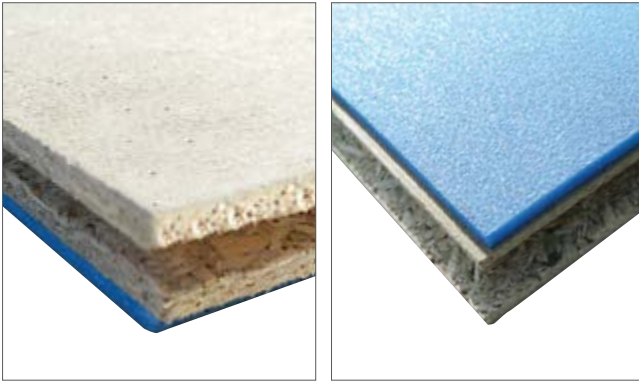


Karma Joistdeck 37 is a high performance overlay board designed to be installed directly on to joists with a resilient acoustic ceiling system below. It comprises 22mm T&G4 chipboard laminated to a 15mm low resonance resilient layer.

Benefits

- For 450mm joist centres maximum
- Can be applied direct to joists
- Shallow build up
- Excellent acoustic performance

KARMA Acoustic Overlay 23



Panel size: 2400 x 600 x 23mm
Weight: 13.1kg/m²
Edge Detail: T&G4

PART E

GWP = <5

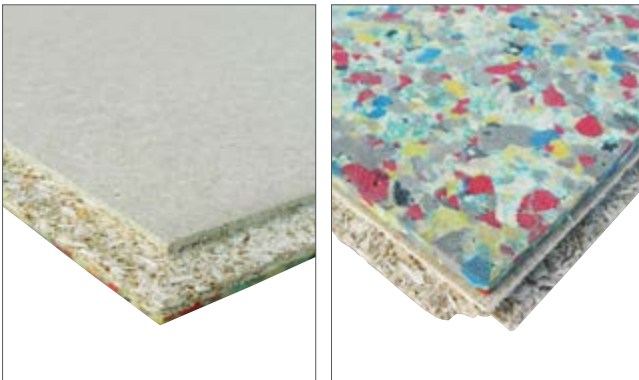


Karma Acoustic Overlay 23 is an overlay board designed to be laid above a timber deck to reduce impact and airborne sound transmission. It consists of 18mm T&G4, P5 chipboard laminated to a 5mm cross linked polyethylene resilient layer.

Benefits

- Minimal height increase makes it ideal for refurbishments
- Quick and easy to install, offering savings in time and labour
- Non load bearing partitions can be built off the floating floor
- Suitable for use in loft conversions in accordance with Floor 4.d Type 2 (Scottish Section 5 – Generic Internal Constructions)

KARMA Acoustic Overlay 26



Panel size: 2400 x 600 x 26mm
Weight: 13.5kg/m²
Edge Detail: T&G4

PART E

GWP = 0

SECTION 5 (T)

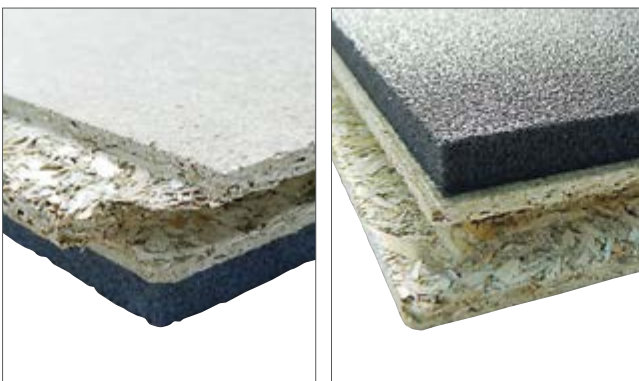


Karma Acoustic Overlay 26 is an overlay board intended to be laid above a timber deck to reduce impact and airborne sound. It consists of 18mm T&G4, P5 chipboard laminated to a 8mm recycled foam resilient layer and provides superior impact performance than Karma Acoustic Overlay 23.

Benefits

- Enhanced impact sound performance
- Minimal height increase makes it ideal for refurbishments
- Quick and easy to install, offering savings in time and labour
- Non load bearing partitions can be built off the floating floor

KARMA Acoustic Overlay 28



Panel size: 2400 x 600 x 28mm
Weight: 13.5kg/m²
Edge Detail: T&G4

PART E

GWP = <5



Karma Acoustic Overlay 28 is an overlay board intended to be laid above a timber deck to reduce impact and airborne sound. It consists of 18mm T&G4, P5 chipboard laminated to a 10mm closed cell Polyethylene foam resilient layer, an added benefit over Karma Acoustic Overlay 23 is that the 10mm foam will help with slight undulations.

Benefits

- Enhanced impact sound performance
- Quick and easy to install, offering savings in time and labour
- Non load bearing partitions can be built off the floating floor
- Can be used on both timber and concrete floors

KARMA EasyPanel (Overlaid with 18mm chipboard)



Panel size: 1200 x 800 x 15mm
Weight: 19kg/m²
Edge Detail: Square edge

PART E

SECTION 5 (NT)

SECTION 5 (T)

Karma Easypanel is a high performance floor panel filled with dry silica sand which produces exceptional acoustic performance. It is generally overlaid with 18mm T&G chipboard. EasyPanel adds mass to lightweight constructions. EasyPanel can also be used in wall and ceiling applications.

Benefits

- A high performing refurbishment solution
- Quick and easy to install
- Product is natural, breathable, pollutant free and odourless
- Panels are butt jointed with T&G4 chipboard floated on top if required
- Solution is only 33mm high max including chipboard
- Airborne performance of 60 (-6) R_w (-C_v) on timber floor with chipboard on top (Note: this floor includes res bars)
- Impact performance of 53 L_{n,w} on timber floor with chipboard on top (Note: this floor includes res bars)

KARMA Visco 17/21



Panel Size: 1200mm x 600mm
Weight: 9.1kg/m² - 18.0kg/m²
Laid Area per Board: 0.72m²

PART E

SECTION 5 (T)

SECTION 5 (NT)



Karma Visco 17/21 are shallow acoustic overlay boards designed to dampen vibration and attenuate impact and airborne sound passing through floors with minimum loss of room height. They comprise substrate layers of moisture resistant MDF combined with either fibreboard (17) or cement particleboard (21) separated by sound damping strips. A resilient layer of acoustic chip foam is adhered to the underside.

Benefits

- Shallow construction - only 17 or 21mm
- Acoustic felt contours over minor irregularities
- Can meet Part E with resilient bar ceiling
- Can also be used on concrete floors

KARMA Visco 33/33HD



Panel Size: 1175 x 575 x 33mm
Weight: 18.4kg/m² - 27.9kg/m²
Laid Area per Board: 0.72m²

PART E

SECTION 5 (T)



Karma Visco 33/33HD are acoustic overlay boards designed to attenuate impact and airborne sound passing through existing timber floors. The top layer of moisture resistant MDF is separated from the bottom layer of chipboard (33) or cement particleboard (33HD) by visco elastic sound damping strips. A resilient layer of acoustic chip foam is adhered to the underside.

Benefits

- Laid on top of existing timber floorboards
- Excellent impact and airborne performance
- Adds mass to lightweight constructions
- Acoustic felt contours over minor irregularities
- Visco 33HD can also be used with lath and plaster ceilings

Regupol® 3912



Roll Width: 1000mm
Roll Length: 15m
Roll Thickness: 6mm

PART E



Regupol® 3912 is a tough, resilient acoustic underlay manufactured from PUR Foam and is ideally suited to refurbishment and timber based constructions to comply with Part E of the England and Wales Building regulations and Section 5 of the Scottish Building regulations.

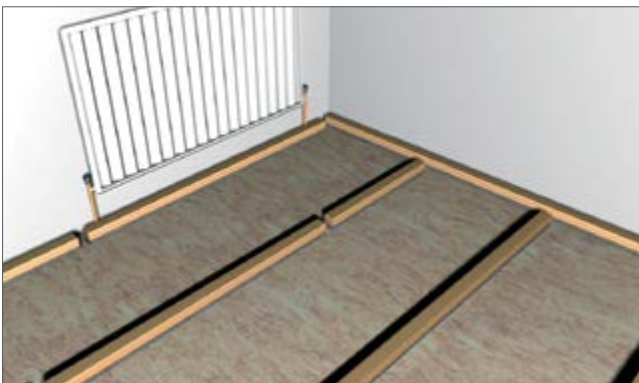
It can also be used for new build but consultation with our technical team is recommended prior to specification.

Benefits

- Standard thickness 6mm thick*
- Offers long term performance without collapse or "bottoming" out under highpoint loads
- Resistant to ageing and deformation
- Quick and easy to install (simply bond to the subfloor beneath the final floor finish)
- Reduces construction heights
- Primarily used for refurbishments, although can also be used for new build projects
- Suitable for use with underfloor heating

* Other thicknesses are available upon request

Reflex Bearer



Batten Width: 45mm
Batten Length: 2.4m

Resilient fibre strip 17mm thick adhered to the underside.

PART E

SECTION 5 (NT)

SECTION 5 (T)

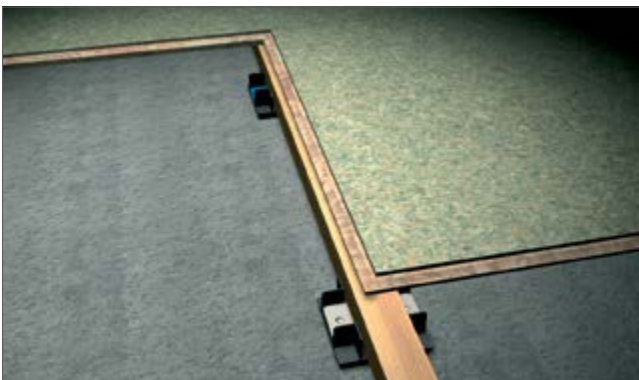
Reflex Bearer comprises softwood timber with a unique double density resilient fibre layer which provides a high degree of impact sound reduction.

The bearer contributes significantly to the reduction of impact and airborne sound on level timber or lightweight steel constructions and on concrete subfloors in new build and refurbishment applications. The softwood timber has either PEFC accreditation as standard or FSC on request.

Benefits

- Approved FFT1 and FFT3 bearer in many Robust Detail Constructions
- Approved for new Scottish Example Constructions
- Exceptional impact sound reduction in party floors
- Can eliminate wet trades
- Provides void for services and underfloor heating
- Proven durability of resilient polymer based fibre layer

Saddle System



PART E

SECTION 5 (NT)

SECTION 5 (T)

Saddle System can be used in domestic and commercial applications and can also contribute significantly to the acoustic performance of floors. The unique, innovative packing system provides an easy and accurate method of levelling a timber floating floor over an uneven subfloor.

The Saddle System contributes significantly to the reduction of impact and airborne sound through party floors. It complies as an FFT2 floor in many Robust Detail floors and Scottish Section 5 Example Constructions.

Benefits

- FFT2 compliant for many Robust Detail floors
- Quick and easy levelling of uneven floors
- GWP of resilient layer is 0
- Effective reduction of impact and airborne sound
- Eliminates wet trades
- Weight saving compared to screeds; can reduce foundation costs
- PEFC or FSC Chain of Custody
- Provides void for services insulation or underfloor heating

Regupol® 4515 Multi



Roll Size: 1000mm
Roll Length: 20m (3mm)
 18m (4.5mm)
Roll Thickness: 3mm & 4.5mm as standard

PART E

GWP = 0



Regupol® 4515 Multi is a tough, resilient acoustic underlay manufactured from PUR foam and cork granules and is ideally suited to all new build type constructions to comply with Part E and can be bonded to all types of floors.

The acoustic underlay is compatible with all types of floor finishes including ceramic tiles, sheet vinyl, vinyl tiles, wood laminates, carpet and marmoleum/linoleum.

Benefits

- Highly sustainable and completely recyclable
- Offers long term performance without collapse or “bottoming” out under high point loads
- Resistant to ageing and deformation
- Quick and easy to install (simply bond to the subfloor beneath the final floor finish)
- Reduces construction heights
- Suitable for both new build and refurbishments
- Suitable for use with underfloor heating
- Suitable for all floor finishes including ceramic/stone tiles

Regupol® 7210C



Sheet Length: 2250mm
Sheet Width: 1150mm
Material Thickness: 5mm

PART E

GWP = 0



Regupol® 7210C is an acoustic resilient layer used under all types of floor screeds in new build and refurbishment projects and is aimed at constructions where Pre-Completion Testing (PCT) is preferred to that of a Robust Detail (RD).

It has been independently tested on-site to show compliance with building regulations in accordance with Approved Document E. The underscreed is designed to isolate screeds from the main structure of the building reducing impact energy generated by general footfall.

Benefits

- Approved by NHBC for Approved Document E compliance
- Excellent impact and airborne performance
- Offers long-term performance without collapse or “bottoming” out under high point loads
- Minimal creep even under high loads
- Resistant to ageing and deformation
- Quick and easy to install (no need for separate perimeter strips)
- Minimises construction heights
- Suitable for use with underfloor heating
- Protects expansion joints
- Sustainable and also completely recyclable
- Moisture proof
- Zero global warming potential (GWP) and zero ozone depletion potential (ODP)

Park Bearers



Length: 2400mm
Width: 45mm
 Resilient foam strip 9mm thick adhered to the underside

PART E

SECTION 5 (NT)

SECTION 5 (T)

Park Bearers are an economical acoustic batten featuring a special closed cell polyethylene foam layer on the underside. They provide effective impact and airborne sound insulation on concrete separating floors. The softwood timber has either PEFC accreditation as standard or FSC on request.

Benefits

- Approved FFT1 and FFT3 bearer in many concrete Robust Details
- Effective reduction of impact and airborne sound
- Accommodates service runs
- Eliminates the delays caused by screeds
- Proven track record
- PEFC or FSC chain of custody
- GWP of resilient layer is 0

Soundblocker



Soundblockers are an acoustic treatment for suspended ceilings where there is poor sound insulation. Simply installed onto the back of suspended ceiling tiles Soundblockers provide a rapid and effective means of improving sound insulation, reducing “crosstalk” from adjacent spaces.

Benefits

- Reduces crosstalk from adjacent rooms
- Reduces noise from services in the ceiling void
- Extremely easy to install
- Accessories to treat light fittings and air grilles are available

Panel size: 600 x 600mm or 1200 x 600mm

Thickness: 16mm, 19mm, 25mm & 75mm

Weight: From 8.5kg/m² (16mm thick)

Isomax Clips and Channels (ceiling)



Isomax Clips and Furring Channels provide a high performance solution to isolating ceilings. Attaching the Isomax Clip to ceiling joists simply secures the drywall furring channel and decouples the gypsum board from the rest of the structure.

Benefits

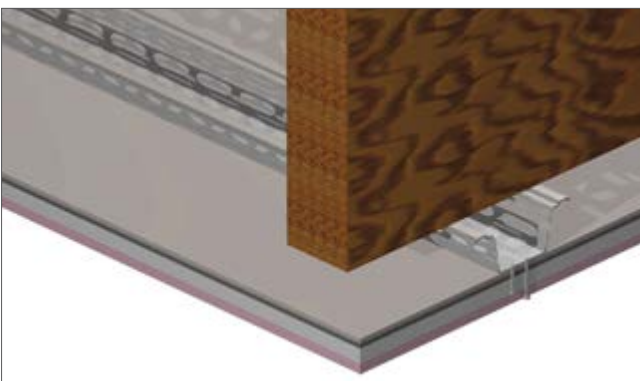
- Space saving solution with excellent acoustic performance
- Robust solution with good load bearing properties
- Simple to install
- Ceiling void depth of only 38mm
- Effective isolation at low cost

Isomax Clips: 98mm long x 25mm deep

Isomax Channel: 1800mm long

PART E

Maxiboard



Maxiboard is a high density, composite building board which can be installed onto a ceiling in order to meet Part E and can provide 1 hour fire protection when fitted with appropriate mineral wool slabs and accessories. It can meet Part E of the Building Regulations without the need to upgrade the floor above.

Benefits

- Improves impact and airborne sound insulation
- Meets Part E of the Building Regulations
- Takes screws and nails direct
- Minimal thickness

Panel Size: 1200 x 600 x 17mm

Weight: 24kg/m²

PART E

KARMA Acoustiwall



Panel Size: 1200 x 1200 x 30mm
Weight: 20kg/m²

GWP = 0



Karma Acoustiwall is an acoustic wall treatment which is ideal for reducing sound transmission through block, brick or stud walls. It comprises 15mm fire resistant plasterboard bonded to a laminated acoustic layer. It is fixed to existing walls or studs using mechanical fixings and is immediately ready for decoration.

Benefits

- Reduces airborne sound through new and existing walls
- Only 30mm thick
- Very easy to install

Isomax Clips and Channels (wall)



Isomax Clips: 98mm long x 25mm deep
Isomax Channel: 1800mm long

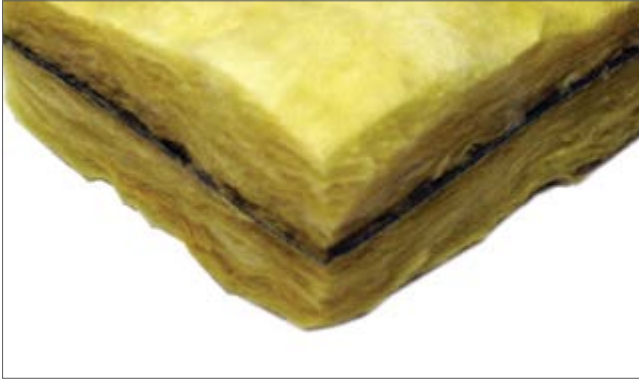
PART E

Isomax Clips and Furring Channels provide a high performance solution to isolating walls. Attaching the Isomax Clip to timber or metal studs or to masonry simply secures the drywall furring channel and decouples the gypsum boards from the rest of the structure.

Benefits

- Space saving solution with excellent acoustic performance
- Robust solution with good load bearing properties
- Simple to install
- Effective isolation at low cost

KARMA Acoustic Blanket



Karma Acoustic Blanket is an innovative acoustic quilt which can be used in a wide range of applications. The product consists of an acoustic barrier membrane sandwiched between two layers of 25mm mineral wool for maximum effectiveness. It is extremely versatile and can be placed between floor joists to reduce sound transmission.

Benefits

- High performance acoustic quilt
- Superior acoustic performance for minimal thickness
- Can be used where access is only available from one side
- Membrane helps to resist slumping of quilt
- Ideal for weaving between joists of independent ceiling system

Roll Length: 5m
Roll Width: 1.2m
Material Thickness: 52mm

Putty Pads



Putty Pads are intumescent, mouldable putty pads designed to easily fit socket boxes to reduce sound travel through dry walls. The pads also provide fire resistance while maintaining the acoustic integrity of the wall. The strong malleable putty avoids accidental tearing or puncturing while offering flexibility during fitting.

Benefits

- Maintains acoustic integrity of the wall in PVC or metal boxes
- Provides up to 2 hours fire resistance
- Easy to use
- Fast to fit
- Acoustic and fire testing available on request

Size: 3.6m x 178mm
Coverage: 27 single or 20 double sockets per reel

FIRE

KARMA Acoustic Pipewrap



Dimensions: 2500mm long to suit 110mm diameter pipe
Packing: 10 per pack
Coverage: 25lm/pk

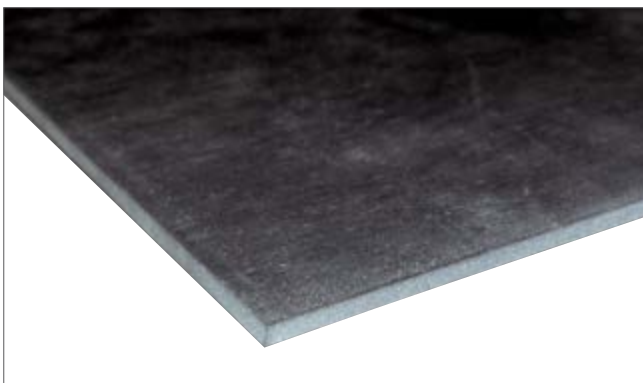
PART E

Karma Acoustic Pipewrap consists of an encapsulated mineral wool wrap with two self-adhesive fixing strips, designed to assist in reducing unwanted noise in waste pipe enclosures. It is used where service pipes pass through separating floors to reduce sound transmission between adjacent floors and dwellings.

Benefits

- Complies with Approved Document E, Section 5 and Robust Detail
- Easy to fit
- Encapsulation of fibre reduces potential irritation

WB Acoustic Barrier



Sheet Size: 2m x 1.2m
Weights Available: 3kgm², 5kgm², 7.5kgm², 10kgm²
Coverage: 2.4m² per sheet

WB Acoustic Barrier is specifically designed to isolate the passage of airborne sound through existing separating walls.

Benefits

- Easy to cut and shape
- High acoustic attenuation
- Lightweight acoustic solution

Tecsound® SY



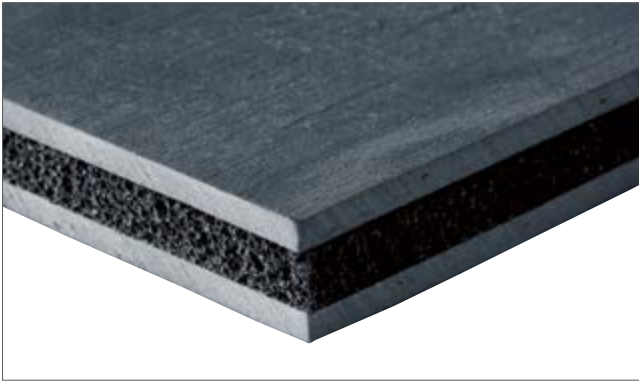
	SY50	SY100
Dimensions:	6.05m x 1.22m	4m x 1.2m
Packing:	5kg/m ² roll	10kg/m ² roll
Coverage:	7.38m ²	4.8m ²

Tecsound® SY is a high density polymer-based, asphalt-free, synthetic soundproofing membrane, that offers good acoustic insulation in different building elements. Equipped with a self-adhesive layer, to allow its direct application on the majority of building surfaces.

Benefits

- High acoustic insulation, combined with soft, flexible elements
- Flexible with great elongation capacity
- Easy handling and adaptable to uneven surfaces
- Good bonding to most of the types of surfaces
- Acts as a vapour control layer
- Cold- and heat-resistance
- Excellent ageing resistance
- Rotproof

Soundlay Plus 12



Sheet Size: 12 x 1000 x 1200mm
Weight: 19kg per sheet



Soundlay Plus 12 is an overlay treatment comprising two layers of dense acoustic barrier laminated to either side of a 6mm layer of Class 'O' foam. It is used to reduce impact and airborne sound. It can be used in place of carpet underlay and with simple preparation also under laminates and vinyl.

Benefits

- Easy improvement to impact sound transmission
- Can meet Part E when used with a resilient bar ceiling
- Can be used with timber or concrete floors
- Can be used with most floor finishes - this may include using a timber stiffening layer
- Supplied in easy to handle sheets

Soundlay 9



Sheet Size: 9 x 1000 x 1200mm
Weight: 10kg per sheet



Soundlay 9 consists of a layer of acoustic barrier laminated to a 6mm layer of Class 'O' foam. It is primarily used on concrete floor applications.

Benefits

- Slim solution for sound reduction
- Can be used as a high performance carpet underlay
- Supplied in easy to handle sheets
- Can meet Part E when used with a resilient bar ceiling
- Can be used with most floor finishes - this may include using a timber stiffening layer

Acoustilay



Sheet Size: 1200 x 1200mm
Sheet thickness: 10mm, 12mm, 15mm
Sheet Weight: 3kgm², 8kgm², 15kgm²



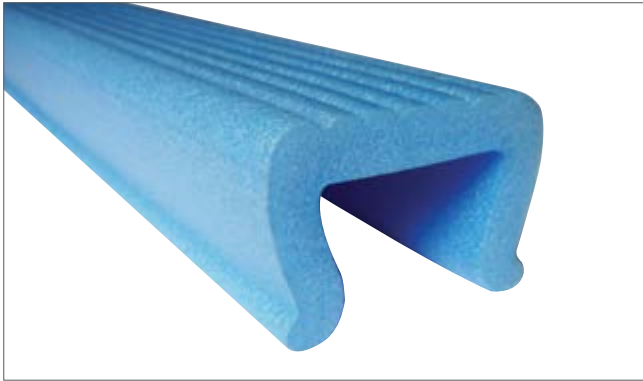
Acoustilay is perfect for sound insulating floors in domestic situations and can be used above most lath and plaster and resiliently fixed, double plasterboarded ceilings to bring the overall floor/ceiling construction up to the standards of Part E.

Benefits

- Improves airborne sound insulation
- Reduces impact noise
- Simply laid under most floor finishes - this may include using a timber stiffening layer
- Easily cut and shaped
- Can be used to meet Part E of the Building Regulations



KARMA Acoustic JoistHood



Size: 12 x 50 x 2000mm
Density: 30kg/m³

Karma Acoustic Joisthood has been specifically engineered to be a low cost, simple to install acoustic joist treatment. The product is simply placed over the existing joists, prior to adding the mass of the floor on top.

Benefits

- Does not require specialist knowledge
- Very lightweight and easy to handle
- Can be used in loft conversions
- Simple installation process
- Zero ODP
- Moisture resistant and rot proof
- 100% Recyclable

Ecopearls



Weight per Bag: 18.5kg
Coverage: 3.7kg provides 10mm per m²

Ecopearls are an ecological levelling grain comprising natural woodchips and mineral aggregates.

They provide a fast track dry levelling solution taking out subfloor deviations from as little as 2mm. They provide an ideal base for overlay boards where the base floor is uneven and are very easy to use.

Benefits

- Fast track, cost effective levelling of base floors
- Surface usable straight after application
- Ecological dry build material
- Unaffected by mould or fungus

Jumpax



Board Panel Size: 600 x 1200 x 10mm
Pack Contents: 4 base and 4 top boards
 (2.88m²)



Jumpax is an acoustic, fast track floor preparation system for the glue-down of all resilient floor coverings such as sheet vinyl, LVTs, linoleum, cork, rubber, carpet and carpet tiles. It can be used over almost any type of floor construction as well as on underfloor heating. Only 10mm thick, it produces a highly professional smooth finish.

Benefits

- Instant floor levelling of most substrates
- Excellent sound reduction of 23dB Delta Lw
- No need to remove old floor coverings or loosening screeds
- A cost effective solution to problem floors

Karma Accessories

Acoustic Gripper Strips

1200 x 30mm x 9mm

Acoustic D5 PU Adhesive

310ml cartridge

Acoustilay MDF 6mm

Acoustilay Perimeter Strip

Karmawall Acoustic Ductwrap

52mm x 0.6m x 5m

52mm x 1.2m x 5m

Karma Acoustic Perimeter Strip

(Can be used with all board products)

100mm x 5mm x 75m roll

Acoustic PU Adhesive (D4)

310ml cartridge

PVA Adhesive (D3)

1 litre bottles

Easypanel Tape

50mm x 50m roll

Intumescent Mastic

310ml tube

Isolation Strip (Visco products)

Soundlay Perimeter Strip

1m x 30mm x 9mm

1m x 30mm x 6mm

Maxiboard Adhesive

Maxiboard Resilient Bar

Maxiboard Screws

Soundblocker Diffuser Hood

Soundblocker Downlighter Hood

Soundblocker Modular End Caps

Soundblocker Modular Side Strip

Soundblocker Perimeter Strip

Building Regulations Information

Explanation of Terminology

When the recent amendments to the Building Regulations were introduced, a whole new list of terms and abbreviations came into being that are different from the terminology that we have been used to.

In an attempt to decipher some of the terms and abbreviations that we will come across on a day-to-day basis in literature relating to acoustics and in particular Part E the following jargon buster may be useful.

Average sound pressure levels in common environments

(SPL) dB	TYPICAL ENVIRONMENT	AVERAGE SUBJECTIVE DESCRIPTION
140	30m from military aircraft at take off	Intolerable
150	Pneumatic chipping and riveting, operators position	Intolerable
120	Boiler shop (max levels), ships engine room	Intolerable
110	Auto punch press operators position, sheet metal shop, textile weaving room	Very Noisy
100	Automatic lathe/milling shop, platform of underground station (max level)	Very Noisy
90	Heavy lorries at 6m, construction site with pneumatic drills	Very Noisy
80	Kerb side of a busy street, office with tabulating machines	Noisy
70	Loud radio in domestic room	Noisy
60	Restaurant, department store	Noisy
50	Conversational speech at 1m	Noisy
40	Average suburban area whispered conversation at 2m	Quiet
30	Residential area at night	Quiet
20	Background in TV and recording studios	Very Quiet
0-10	Normal threshold of hearing	Very Quiet

Simple terminology

Absorptive Material	Material that absorbs sound
Airborne Sound	Sound propagating through the air. Often linked to speech, media equipment, etc.
Building Element	Walls, floors and roofs etc.
Ctr	The spectrum adaption term to take account of specific sound spectra, which are predominantly low frequency. Only used as a correction to airborne measurements.
Decibel (dB)	The most commonly used unit to measure sound.
dB(A)	Unit of sound weighted to the human ear.
DnTw	The measurement used to measure the airborne sound insulation between two rooms (on site).
Dntw + Ctr	See above, but with the low frequency correction factor included.
Final Floor Finish	Carpet, vinyl, laminate or other top floor finish.
Flanking Transmission	Airborne sound or impact sound transmitted between two rooms using an indirect path i.e. the top or bottom of a separating wall.
Floating Floor Treatment	Often referred to as "FFT". An FFT may use battens, cradles or platform base all of which use a resilient layer to provide isolation from the base floor.
Floating Layer	A surface layer that rests on a resilient layer.
Frequency	The number of pressure variations per second that gives a sound its distinctive tone.
Hertz (Hz)	The unit of the frequency of the sound – also known as "Cycles Per Second".
Impact Sound	Sound resulting from direct impact on a building element.
Internal Floor	Any floor that is not a separating floor between dwellings.
Internal Wall	Any wall that does not have a separation function between dwellings.
LnTw	The measurement used to measure the impact sound insulation of floors (on site). =Lnw laboratory testing.
Noise	Unwanted sound.
Pre-Completion Testing (PCT)	A new requirement to Part E where structures not conforming to the RSD will be tested prior to completion to check they reach the required standards.
Resilient Layer	A layer of resilient material that isolates an element (e.g. screed, floating floor) from another element (base floor).
Robust Standard Detail (RSD)	A collection of pre-approved constructions that, if used, negate the need for PCT.
Rw	The measurement used to rate the airborne sound insulation of a material or building element in a laboratory.
Separating Floor	A floor that separates adjoining dwellings.
Separating Wall	A wall that separates adjoining dwellings.
Structure Borne Sound	Sound, which is carried by the structure of the building.
Underscreed Material	A layer of resilient material (E48, 6010BA, & SH) fitted beneath a floating screed. The resilient material sits on either a hollow core or block and beam base to provide impact sound attenuation.



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IMPORTANT: Directions for use are given for guidance only and are not intended to form part of any contract. They should be varied or adapted to suit your particular materials or conditions of use. It is strongly recommended that prospective users test a sample of the product under their own conditions to satisfy themselves of its suitability for the intended purpose. For the Pre Completion Testing route to compliance with the Building Regulations Karma Acoustic Solutions may provide site test evidence (where available) concerning the use of their product in a similar overall construction. Test evidence of a product passing minimum standards in one construction is not a warranty or specification that the same product will meet the desired acoustic performance level in any other building. Such evidence can only be considered indicative and should not be relied upon.