CUSTOM AUDIO DESIGNS

ISO-SCREED RESILIENT LAYER

USES:	BENEFITS:
• **Impact reduction under screed** • **Suitable for Concrete & Timber floors** • **Meet New Building Regs**	• **Provides significant reduction in airborne and impact noise and vibration** • **Easy to cut rolls** • **Very Flexible** • **Simple installation** • **Low cost** • **Does not significantly increase the floor level**

ISO-SCREED
Iso-Screed is a 5mm foamed polyethylene layer of 33Kg/m³. Used in conjunction with the appropriate floor materials it meets Approved Document E requirements for an under screed resilient layer.

Giving added value of water resistance. It can also protect the mineral wool during screed laying. ISO-SCREED significantly reduces impact noise and vibration under floor screed as well as providing a degree of airborne and thermal insulation

Section 3.65 of the Building Regulations (Approved Document E) states that the resilient material should meet the following two requirements:

1. A maximum dynamic stiffness (measured in accordance to BS EN 2905201:1992) of 15MN/m³
AND
2. A minimum thickness of 5mm under the load specified in the measurement procedure of BS EN 29052-1:1992, 1.8kPa to 2.1kPa.

ISO-SCREED meets both these requirements.

In any construction height is a significant factor. This material is designed to ensure maximum performance whilst minimising height rise of the construction.

PLEASE NOTE:

To protect the resilient layer whilst the screed is being laid use a 20-50mm wire mesh.

GENERAL PHYSICAL DATA	
Roll Size-	Large 30m x 1.85m Small 30m x 0.925m
Thickness-	5mm
Weight-	0.17kg/m²
Density-	33kg/m³
Dynamic Stiffness-	14MN/m³

Description

A resilient layer between floor and screed that meets the requirements of Approved Document E when combined with a structural floor of sufficient mass incorporating a screed between 65mm and 75mm.

Product Design

IsoScreed is a closed cell foam that not only provides superb acoustic performance but also has important qualities in resisting water absorption, preventing fungal growth, mildew and bacteria growth and is completely inert. Traditional open cell foams act just like a sponge and absorb up to 33% of their own weight in water, trapping air within the structure and creating a breeding ground for fungi, bacteria and mildew. Once wet the foam will never completely dry out.

Product Features

The closed cell structure and the homogenous, compact skins of the IsoBase foam combined with the water repellent properties of polyolefins results in a water absorption of less than 1%, when tested in accordance with ISO 2896, and a water vapour transmission co-efficient mue-value of greater than 3500 when tested in accordance with ISO 1663.

Product Benefits

Tests performed in the laboratory showed that the IsoBase foam does not contribute to fungal growth. This is explained by the fact that it contains no organic nutrients and therefore does not provide a culture medium for fungi, even under high humidity. The foam is inert and does not rot or decay, even when exposed to high humidity and elevated temperatures. Further more, it is produced without the use of plasticisers and other fast migrating additives, which would cause breakdown in adverse conditions. IsoBase foam acts as an all in one resilient acoustic layer and a damp proof membrane. This saves the cost of supplying and installing a separate DPM.

Technical Details

Inert, physically cross-linked closed cell polyolefin foam sheet. There is a fine cell structure with two process skins, supplied in 30m x 0.925m rolls.

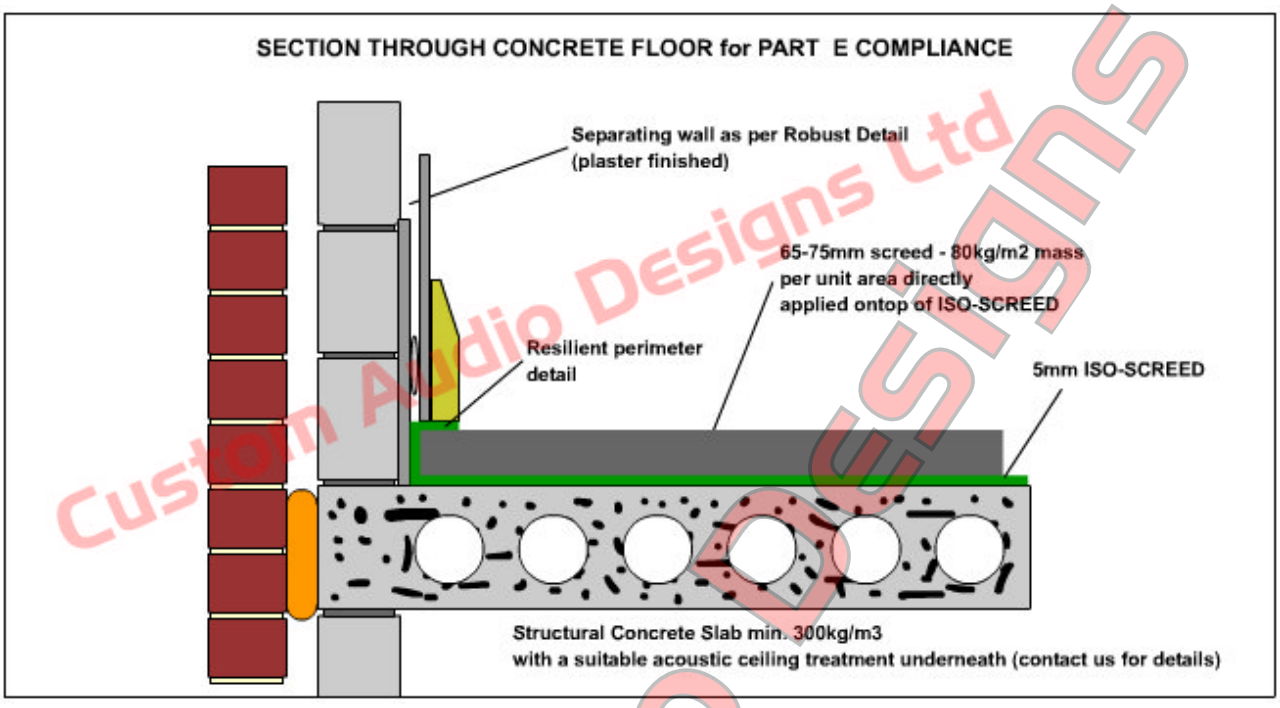
IsoBase has a maximum load rating of ca. 5K/Pa. As a typical guide a concrete screed thickness 70mm corresponds to ca. 1K/Pa load.

Thickness	ISO 1923	5mm
Impact Sound Improvement Index	ISO140/4 and 717/2	65mm Screed 17dB 70mm Screed 18dB
µ value (23ºC, 0-85%rh)	ISO 1663	7000
Water absorption (28 days)	ISO 2896	<1.0%

Installation Guide

1. Clean floor slab thoroughly removing any excess concrete from the surface.
2. Check floor for moisture and either dry off excess or treat with a proprietary damp proof treatment.
3. Roll out the IsoBase lapping it up the perimeter walls and doorways by at least 100mm. At corners cut a 45 degree piece out to form a tight fit and tape using a suitable tape.
4. Roll out the next roll overlapping the previous one by at least 150mm and tape the join ensuring there are no gaps.
5. Any services penetrating the floor should also be wrapped in IsoBase and the joints taped ensuring there are no gaps.
6. When laying the screed ensure that the screed does not penetrate between or under the joints. The screed must not touch either the structural floor or any of the perimeter walls.
7. Prior to fitting plasterboard and skirting boards fold over the protruding IsoBase and rest the boards on top so that all hard surfaces are isolated from each other and from the screed.
8. Trim of the remaining the IsoBase with a sharp knife and apply an acoustic sealant finish.

Separating Floors / Concrete Floor / Resilient Layer under Screed for Part E Compliance (with Floor Type 2) /
65mm Screed Rd Delta Lw 17dB
70mm Screed Rd Delta Lw 18dB

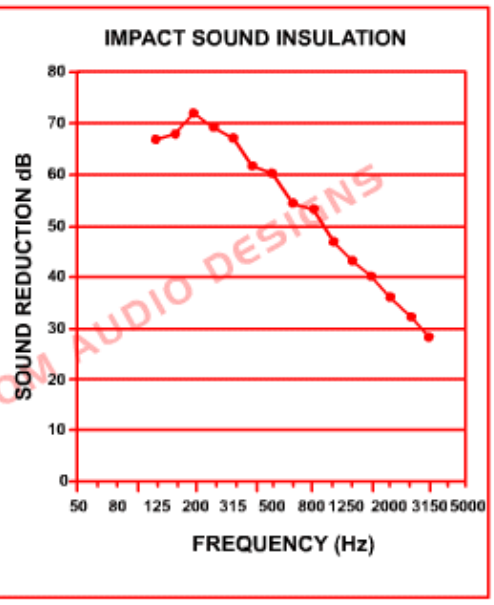


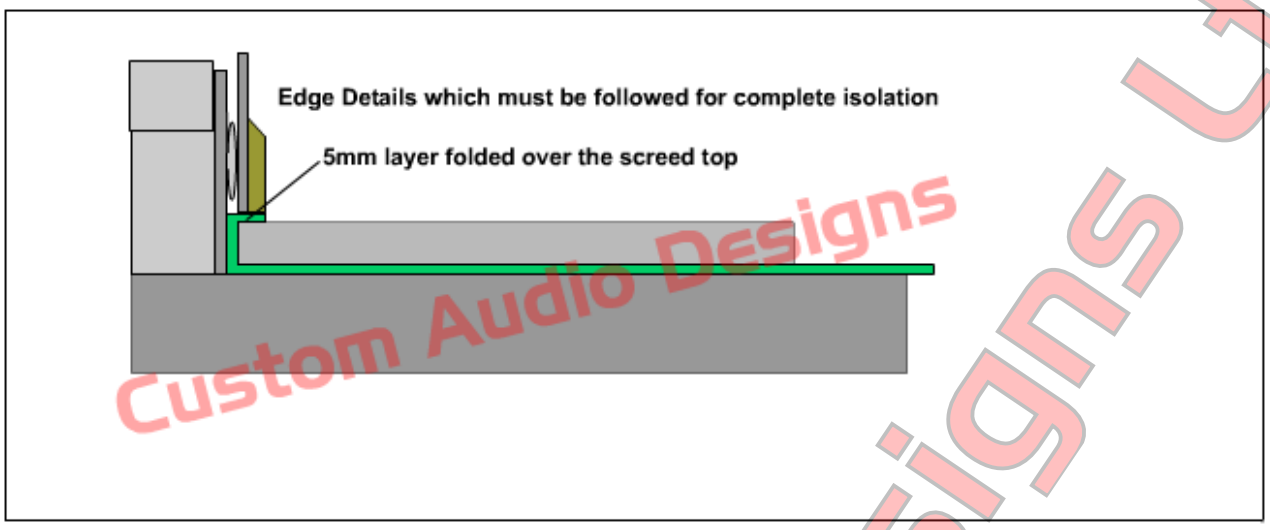
Separating Floors / Concrete Floor / Resilient Layer under Screed for Part E Compliance (with floor type 2)

65mm Screed Rd △Lw17dB **70mm Screed Rd △Lw 18dB**

Application: Resilient Layer Under Screed
Mass per unit area: 33 kg/m3
Overall Depth: 5mm + screed
Fire Protection: 60 minutes
Dynamic Stiffness: 14MN/m3

FREQ. Hz	R (dB)
50	XX
63	XX
80	XX
100	68
125	69
160	71
200	70
250	68
315	61
400	60
500	55
630	54
800	49
1000	47
1250	42.5
1600	40
2000	36
2500	32
3150	29
4000	XX
5000	XX





PLEASE NOTE: Failure to follow the exact edge details will cause an acoustic failure.