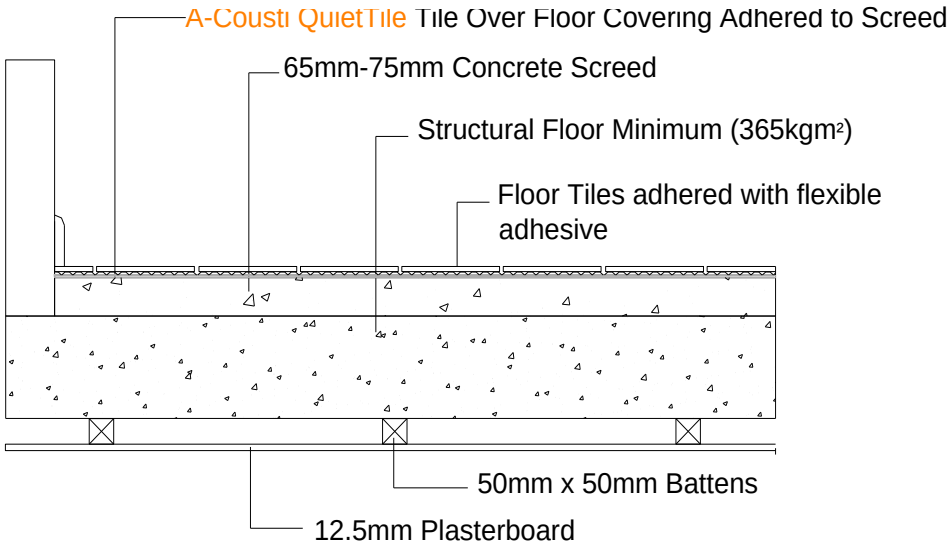
Technical Installation Guide Number 17

A-cousti QuietTile Resilient Layer

Description

A-Cousti QuietTile under tile resilient layer has an overall uncompressed thickness of 3 mm and produces not less than 17dB reduction in impact sound pressure level when measured in accordance with BS EN ISO 140-8:1998 and calculated in accordance with BS EN ISO 717-2:1997. A-Cousti QuietTile is approved under ADE for floor types 1.1C and 1.2B with a minimum mass of 365kg/m2. For beam and block construction seek advice on mass values from the manufacturer of the system.



Product Design

A-Cousti QuietTile resilient layer has been developed to enhance the range of A-Cousti acoustic products and solutions. It 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 process skins of the A-Cousti QuietTile foam combined with the water repellent properties of polyolefins result 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 A-Cousti QuietTile foams do **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.
Furthermore, it is produced without the use of plasticizers and other fast migrating additives, which would cause breakdown in adverse conditions. A-Cousti QuietTile foam acts as an all in one resilient acoustic layer and a damp proof membrane. This saves the cost of a supplying and installing a separate DPM.

Technical Details

A-Cousti QuietTile is an inert resilient physically cross-linked closed cell polyolefin foam sheet. There is a fine cell structure with two process skins, supplied in roll form 1.85M wide by 30M long.

A-Cousti QuietTile has a maximum load rating of ca. 5K/Pa., equivalent to 500 kg/m2.

○ Thickness	ISO 1923		3 mm
○ Impact Sound Improvement index	ISO 140/4 and 717/2 (ΔLw)		
		65mm Screed	17dB
		70mm Screed	18dB
○ μ value (23°C, 0-85%rh)	ISO1663		7000
○ Water absorption (28 days)	ISO2896		<1.0%

Technical Installation Guide

Resilient Underlay

Ensure that the concrete is properly cured and free from residual moisture. Whilst A-Cousti QuietTile is moisture resistant it is not advisable to allow moisture to condense under the underlay.

Sweep the surface thoroughly and remove all extraneous material. If the surface is rough concrete apply a thin levelling screed. Use a recommended adhesive (list available from Xetal Consultants Limited) and follow the manufacturer's instructions, to bond the A-Cousti QuietTile to the substrate. Ensure that the entire surface is fully adhered and there are no bubbles or creases.

Bond the ceramic tile floor finish to the A-Cousti QuietTile using a proprietary flexible tile adhesive. Leave the tiles 5mm off the walls and fill the gap with A-Cousti Fix and Seal so that there is no contact between the hard surface of the tile and the wall.

Fix skirting or other upstand 5mm off the tile surface and fill the gap with A-Cousti Fix and Seal to prevent any contact between the hard surfaces of the tile and the upstand.

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For further information contact us direct or visit www.xetal.co.uk.