XETAL
DESIGN INNOVATION

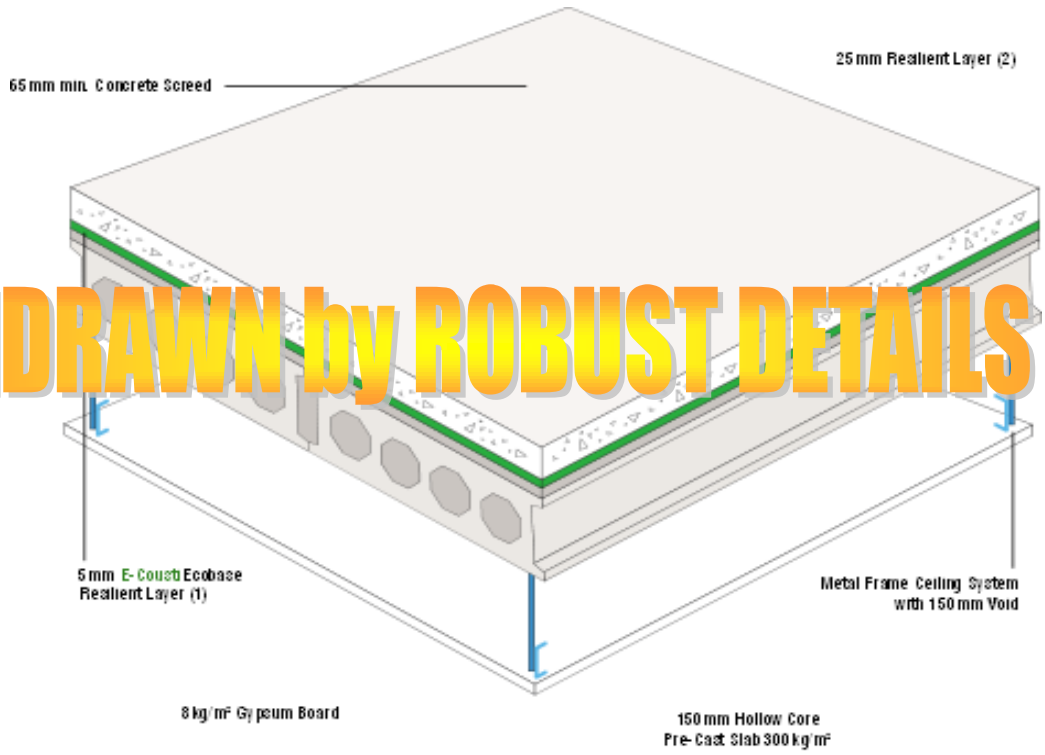
Technical Installation Guide Number 4

A-Cousti Ecobase for RD E-FC-3

Description

A-Cousti Ecobase is a 5mm foamed polyolefin layer of density 33Kg/M^3 that when used with 25mm of 140Kg/M^3 mineral wool batt meets the requirements of Robust Detail E-FC-3. It is permissible to substitute 25mm expanded (SD grade) or extruded polystyrene insulation board in Resilient Layer 2.

The Robust Detail specification does allow the A-Cousti Ecobase to be laid under the other resilient layer provided that the product is lapped up the wall to prevent any contact between the floor and wall at the junction. The material is supplied in 30m rolls X 1.85m wide



Product Design

A-Cousti Ecobase resilient foam has been developed to enhance the range of A-Cousti acoustic products and solutions. It is 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 Ecobase foam combined with the water repellent properties of polyolefin's 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 Ecobase 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.

Ecobase 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.

Product Performance

The combination of 5mm polyolefin cross linked foam and 140kg/m3 mineral wool batt provides >ca 5K/Pa load capacity (load of a typical 70mm screed is approximately 1K/Pa).

Screed thicknesses of 65mm and 75mm provide ΔLnw improvement figures of 17dB and 18dB respectively, meeting the Robust Detail requirement of a minimum improvement of 17dB.

A-Cousti Ecobase can also be used as an economical acoustic underlay where the structural floor is of sufficient mass. Please consult our technical department for specific applications.

Product Application

E-FC-3

Ensure that the concrete is properly cured and free from extraneous materials. Where planks are not sufficiently butted tightly together use A-Cousti Fix and Seal to fill joints. All joints should be grouted and any voids between wall and floors also filled with A-Cousti Fix and Seal.

Sweep the surface thoroughly. Lay the mineral batt across the floor area ensuring that batts are butted tightly. Measure and cut the A-Cousti Ecobase allowing the thickness of the screed plus 10mm extra around the perimeter edges to lap up the wall and create an isolated floor surface.

Lay at right angles to the mineral wool batt, or if this is not feasible ensure that the joints between the 2 resilient layers are staggered. It is recommended that joints are sealed using a good quality carpet tape. On no account should the wall or the concrete come into direct contact with the screed.

If required it is permissible to install A-Cousti Ecobase below the mineral wool batt provided that it is still used to isolate the screed edge from the walls and skirting.

Finish by turning down under skirting and trim off.

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