

EvaTherm A – Insulation for warm flat roofs (adhered applications)

EvaTherm A is a high performance rigid polyisocyanurate (PIR) foam board for use in warm flat roofs under built-up felt, mastic asphalt and approved single-ply membrane waterproofing systems.

EvaTherm A is a closed cell, CFC and HCFC-free (zero ozone depletion), rigid polyisocyanurate foam core faced, both sides, with a perforated mineral coated glass fibre tissue. It has an exceptionally low thermal conductivity of 0.025 W/mK.



Benefits of EvaTherm A

- **Wider choice:** EvaTherm A in a wide range of thicknesses, will assist in meeting the appropriate Building Regulation standard with any form of warm flat roof construction.
- **Quality:** Outstanding product quality manufactured to ISO 9001 Quality Systems. Ozone friendly Zero ozone depletion potential (Zero ODP). EvaTherm A has a global warming potential (GWP) of less than 5.
- **Low thermal conductivity:** The declared thermal conductivity value of 0.025 W/mK is up to 30% more efficient than other types of insulation materials.
- **Insulation savings:** It is possible to meet the Building Regulation requirement with only 120mm of EvaTherm A.
- **Compatibility:** Fully compatible with built-up felt, mastic asphalt and approved single-ply membrane waterproofing systems.
- **Warm roof construction:** No requirement for roof ventilation and inherently safe from harmful interstitial condensation.
- **Tapered systems:** EvaTherm A boards are available in a tapered format to assist roof drainage.
- **Reduced risk of condensation:** Condensation within the roof structure is avoided as it is maintained at the same temperature as the inside of the building.
- **Handling:** EvaTherm A is lightweight yet tough and resilient. It is easily cut using a knife or fine-toothed saw.
- **Durability:** EvaTherm A is rot-proof, durable and maintenance free.
- **CE Mark:** All of our products carry the CE Mark to show compliance with the harmonised European Standard BS EN 13165.

Product Features

Use(s):
Flat Roofs

Thermal Conductivity:
0.025 W/mk*

Compressive Strength:
150 kPa

Facing(s) – Top & Bottom:
Glass Tissue Fleece

Material Core:
**CFC & HCFC Free
(Zero ODP & GWP <5)
Rigid PIR Foam**

Standard Board Size:
1200mm x 600mm

ISO 9001 and ISO 14001

*0.024 W/mK (thicknesses 120mm and above) 0.025 W/mK (thicknesses between 80mm and 119mm) 0.026 W/mK (thicknesses below 80mm)

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Design – Single-Ply Membrane Waterproofing Systems

EvaTherm A boards are compatible with most mechanically fixed, fully bonded and loose-laid and ballasted single-ply membrane waterproofing systems.

- **Condensation:** The requirement for a vapour control layer must be assessed with reference to BS 5250 and BS 6229. If required, a polythene sheet (minimum 1000g) or bitumen based vapour control layer should be used.
- **Roof Loading:** EvaTherm A boards are suitable for loads associated with the pedestrian maintenance traffic on the roof; for areas of heavier pedestrian traffic extra precautions should be taken such as the use of specially designed walkways (consult the membrane manufacturer for specific details). Care must be taken to avoid damage to boards by impact or by concentrated loads during installation. When using ballasted systems the roof structure must be designed to accept the additional dead load, minimum 80 kg/m².
- **Roof Drainage:** To ensure adequate drainage the roof should have a minimum finished fall of 1:80. This may mean designing for twice the minimum finished fall to account for building inaccuracies, roof deflection and building settlement.
- **Tapered Systems:** Tapered EvaTherm A boards are available where it is not desirable or technically possible to create the falls in the roof structure. In refurbishment projects they offer a simple solution to ponding problems whilst at the same time upgrading the thermal insulation of the roof.
- **Thermal Bridging:** With increasing levels of insulation it is vitally important to ensure continuity of the insulation at the junction of elements. At the junction of the roof and the wall packing the eaves with compressible mineral fibre insulation will both prevent thermal bridging and close the cavity. At upstands and parapets the cavity wall insulation should be continued above the level of the roof to ensure continuity of the wall and roof insulation.
- **Wind Uplift:** The wind uplift force exerted on the roof will vary according to geographical location, site location and building height. Reference should be made to BS 6229 for adequate bonding of the vapour control layer to the deck to help resist wind uplift. Calculations relating to the bonding and any supplementary fixings should be made with reference to BS 6399.
- **Fire Performance:** The fire performance of EvaTherm A depends upon the choice of waterproofing system. Generally an external fire rating of FAB will be achieved with mechanically fixed and adhered systems, whilst loose laid and ballasted systems are deemed to achieve a fire rating of FAA. Fire stopping in the form of mineral fibre insulation should be used at party walls.



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EvaTherm A board is available in the following dimensions:

Length (mm) 1200

Width (mm) 600

Thickness (mm) 25, 30*, 40, 50, 60, 70, 80, 90,
100, 120, 130, 140, 150

Other sizes available on request EvaTherm A insulation is also available as a tapered board.*this thickness comes in bigger boards 1200 x 1200m