



EVATHERM F

INSULATION FOR WARM FLAT ROOFS (FIXED APPLICATIONS)

PROFILE

EvaTherm F insulation is a high performance rigid polyisocyanurate (PIR) foam board for use in warm flat roofs under mechanically fixed single-ply membrane waterproofing systems.

Description: EvaTherm F insulation is a closed cell, CFC and HCFC-free (zero ozone depletion), rigid polyisocyanurate foam core faced, both sides, with a multi-layer coated aluminium foil. It has an exceptionally low thermal conductivity of 0.022 W/mK.

BENEFITS OF EVATHERM D

- Wider choice: EvaTherm F insulation, is available in a wide range of thicknesses which can help reduce the amount of insulation required whilst still ensuring compliance with the latest BREEAM /Code for Sustainable Homes standards and the latest 2010 Part L building regulations.
- Quality: Outstanding product quality manufactured to ISO 9001 Quality Systems. Ozone friendly.
- Zero ozone depletion potential: Low thermal conductivity. The declared thermal conductivity value of 0.022 W/mK is some 30% more efficient than most other insulation materials.
- Compatibility: Fully compatible with most synthetic (PVC, EPDM etc) and bitumen based single-ply membrane waterproofing systems.
- Warm roof construction: No requirement for roof ventilation and inherently safe from harmful interstitial condensation.
- 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 F boards are lightweight yet tough and resilient. The boards are easily cut using a knife or finetoothed saw.
- Durability: EvaTherm F boards are rot-proof, durable and maintenance free. 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:
0.022 W/mK

Compressive Strength:
150 kPa

Facing(s) – Top & Bottom:
Multi-Layer Coated Aluminium Foil

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



DESIGN - SINGLE PLY MEMBRANE WATERPROOFING SYSTEMS

EvaTherm F boards are compatible with most mechanically fixed and loose-laid and ballasted synthetic (PVC, EPDM etc) and bitumen based single-ply membrane waterproofing systems.

- Condensation: To reduce the risk of interstitial condensation, an air and vapour control layer (AVCL) should be installed on the warm side of the insulation. The AVCL can also control air and heat leakage from within the building. Reference should be made to BS 5250:2021 and BS 6229:2018 for the condensation assessment and adequate bonding to the deck.
- Roof Loading: EvaTherm F 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 as BS6229:2018. This means designing with a fall of 1:40. This will take into account for building tolerances, permitted deviations, deflections under load and possible deflections/settlement.
- 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 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. Calculations relating to the bonding and any supplementary fixings should be made with reference to BS 6399- 2:1997.

EVATHERM F BOARD IS AVAILABLE IN THE FOLLOWING DIMENSIONS:

Length (mm)	600,1200,2400
Width (mm)	1200
Thickness (mm)	25*,30,40,50,60,70,80,90,100,120,130,140,150

Other sizes available on request. EvaTherm F insulation is also available as a tapered board.*This thickness comes in bigger boards 2400x1200mm