

TILE BACKER BOARD DATA & TEST SHEET

01/06/10

PRODUCT DESCRIPTION

The main component of ProWarm Tile backer boards is a high density, expanded polystyrene hard foam with flame retardant additive. ProWarm hard foam is manufactured in an environmentally friendly process without CFC's or HCFC's. ProWarm Standard Board is coated on both sides with a glass-fibre mesh reinforced polymer-cement coating.

PHYSICAL PROPERTIES

The physical properties of ProWarm Tile Backer Boards are noted below;

| Property | Rating | Assessed in Accordance With |
|---|---------------------|--------------------------------|
| Density (kg/m3) | 34.4 (Avg) | DIN 53420 |
| Compressive Strength | 30 t/m ² | DIN 52612 |
| Bending Strength (k/pa) | 350 | |
| Thermal Conductivity (w/mk) | .027 | DIN 52612 |
| Dimensional Stability @23 °C/50% RH | DS (N) 2 | |
| Dimensional Stability @23 °C/90% RH | DS (23,90) 1 | |
| Water Absorption Capillary | 0 | DIN 53428 |
| Water Absorption by Immersion | 0.1% (Vol) | ISO 2896 |
| Combustibility (Board) | B1 | DN 4102 |
| Tile Loading Weight (Board) | 50kg/m² | |
| Water Permeability – Tested at 10 bar (Xmm of Cement) | 1000 | DIN 1048 |
| Capillary Absorption Kg x m ² x h0.5 | 0.073 | BS EN 1062-3 |

ENVIRONMENTAL SAFETY & BIOLOGICAL FACTORS

ProWarm hard foam is not affected by bacteria, moulds or fungi and will not provide nutrient value for insects or vermin. It is non-toxic, non-irritant and odourless and has a Global Warming Potential (GWP) of zero and an Ozone Depletion Potential (ODP) of zero.

THERMAL INSULATION

ProWarm Hard Foam is a closed cell material with excellent stable thermal properties based on entrapped air. It has a thermal conductivity of 0.031 w/mk.

MOISTURE RESISTANCE

ProWarm Hard Foam is non-hygroscopic and is therefore moisture resistant whilst retaining its thermal properties.

DURABILITY

ProWarm Hard Foam is rot proof and durable and will remain effective as an insolent for the life of the construction (when installed as recommended).

COMBUSTIBILITY

ProWarm Hard Foam is manufactured with a flame retardant additive and when combined with the glassfibre mesh reinforced polymer-cement coating will achieve a Euroclass B rating.