

# 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 <sup>2</sup>	DIN 52612
Bending Strength (k/pa)	350	
Thermal Conductivity (w/mk)	0.033	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 <sup>2</sup> 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 0.033 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.