# Proteus Pro-Therm Cellular Glass

Proteus WATERPROOFING

**Product Datasheet** | **v2 | March 2025**

NBS

## Product Details

| | |
|---|---|
| Product name | **Proteus Pro-Therm Cellular Glass** |
| Product type | Insulation |

## Product Description

**Proteus Pro-Therm Cellular Glass** is an A1 non-combustible insulation, manufactured from specially graded recycled glass and natural raw materials (sand, dolomite, lime etc).

It is inorganic, contains no ozone depleting repellents, flame resistant additives or binders, without VOC or other volatile substances.

## Application

**Proteus Pro-Therm Cellular Glass** is suitable for use on the following roof substrates:

- Metal
- Concrete
- Timber

**Proteus Pro-Therm Cellular Glass** is suitable for use with the following waterproofing membranes:

- Cold Melt®
- Proteus Pro-Cold®
- Pro-BW® Plus
- Pro-BW® LO

**Proteus Pro-Therm Cellular Glass** is suitable for us in warm roof applications where non-combustible materials are required with a high load rating.

## Installation

- Can be cut to shape using a fine-toothed saw or panel saw
- Insulation panels should be laid in a staggered pattern where practical, with joints lightly butted. There should be no gaps at abutments
- Can be mechanically fixed or adhered using **Pro-Bond Foaming**
- In a warm roof build up, **Pro-Prime® SA** and **Pro-Vapour Control/Carrier Membrane SA** should be installed above the insulation prior to applying the waterproofing membrane

## Technical Information

| Characteristic | Value | Unit | Standard |
|---|---|---|---|
| **Density** ±15% | 95 | kg/m³ | EN 1602 |
| **Reaction to fire** | A1 | - | EN 13501-1 |
| **Point load** | ≤ 1.5 | mm | EN 12430 |
| **Compressive strength** | ≥ 500 | kPa | EN 826 |
| **Compressive creep** | 225 | kPa | EN 1606 |

**Proteus Waterproofing Limited**
21a Sirdar Road
Brook Road Industrial Estate Rayleigh
Essex SS6 7XF

**Telephone** 01268 777 871
**E-mail** office@proteuswaterproofing.co.uk
**Website** www.proteuswaterproofing.co.uk

# Proteus Pro-Therm
# Cellular Glass

Proteus WATERPROOFING

**Product Datasheet** **v2 | March 2025**

| Characteristic | Value | Unit | Standard |
|---|---|---|---|
| Bending strength | ≥ 400 | kPa | EN 12089 |
| Tensile strength | ≥ 150 | kPa | EN 1607 |
| Water vapour resistance | ∞ | μ | EN 10456 |
| Hygroscopicity | zero | - | EN 12571 |
| Capillarity | zero | - | EN 1015-18 |
| Thermal expansion coefficient | $9 \cdot 10^{-6}$ | $K^{-1}$ | EN 13471 |
| Specific heat | 1000 | J/(kg·K) | EN 10456 |

## Size, Finish and Colour

| Length mm | Width mm | Thickness mm | Thermal conductivity W/m·K | Thermal Resistance $m^2 \cdot K/W$ | Colour |
|---|---|---|---|---|---|
| 600 | 450 | 50 | 0.036 | 1.35 | Dark Grey |
| 600 | 450 | 60 | 0.036 | 2.65 | Dark Grey |
| 600 | 450 | 70 | 0.036 | 1.90 | Dark Grey |
| 600 | 450 | 80 | 0.036 | 2.20 | Dark Grey |
| 600 | 450 | 90 | 0.036 | 2.50 | Dark Grey |
| 600 | 450 | 100 | 0.036 | 2.75 | Dark Grey |
| 600 | 450 | 110 | 0.036 | 3.05 | Dark Grey |
| 600 | 450 | 120 | 0.036 | 3.30 | Dark Grey |
| 600 | 450 | 130 | 0.036 | 3.60 | Dark Grey |
| 600 | 450 | 140 | 0.036 | 3.85 | Dark Grey |
| 600 | 450 | 150 | 0.036 | 4.15 | Dark Grey |
| 600 | 450 | 160 | 0.036 | 4.40 | Dark Grey |
| 600 | 450 | 170 | 0.036 | 4.70 | Dark Grey |
| 600 | 450 | 180 | 0.036 | 5.00 | Dark Grey |
| 600 | 450 | 190 | 0.036 | 5.25 | Dark Grey |
| 600 | 450 | 200 | 0.036 | 5.55 | Dark Grey |
| 1200 | 600 | 80 | 0.036 | 2.20 | Dark Grey |
| 1200 | 600 | 100 | 0.036 | 2.75 | Dark Grey |
| 1200 | 600 | 120 | 0.036 | 3.30 | Dark Grey |
| 1200 | 600 | 140 | 0.036 | 3.85 | Dark Grey |
| 1200 | 600 | 150 | 0.036 | 4.15 | Dark Grey |
| 1200 | 600 | 160 | 0.036 | 4.40 | Dark Grey |
| 1200 | 600 | 180 | 0.036 | 5.00 | Dark Grey |

Each project is designed individually to suit specific needs by our in-house design team
Tapered schemes are also available

**Proteus Waterproofing Limited**
21a Sirdar Road
Brook Road Industrial Estate Rayleigh
Essex SS6 7XF

**Telephone** 01268 777 871
**E-mail** office@proteuswaterproofing.co.uk
**Website** www.proteuswaterproofing.co.uk

## SHELF LIFE AND HANDLING

Pallets should be stored undercover in a dry area.
Always use relevant safe manual handling techniques relevant to a products size and weight.

## MATERIAL

Recycled glass and natural raw materials (sand, dolomite, lime, etc.).

## PACKAGING

Boards are supplied on pallets wrapped in polythene.

## LIMITATIONS OF USE

For professional use only.

## GUARANTEES

Defects arising from lack of maintenance or abnormal use may fall outside of the cover of the Proteus Waterproofing guarantee.

## GUIDELINES AND STANDARDS

It is the responsibility of the Contractor to thoroughly familiarise themselves with all relevant Codes of Practice and Building Regulations to the works or referred in the specification.

Proteus Waterproofing take no responsibility for misinterpretation or lack of knowledge for third parties.

The works shall be carried out in accordance with the requirements of:

- **BS 6229** Flat roofs with continuously supported flexible waterproof coverings - Code of practice
- **BS 8217** Reinforced bitumen membranes for roofing - Code of practice
- **BS 8000-0** Workmanship on construction sites - Introduction and general principles
- **BS 8000-4** Workmanship on building sites - Code of practice for waterproofing
- **LRWA** Design Guide for Specifiers
- **S2T** Safe to Torch
- **GRO** Code of Best Practice

**Proteus Waterproofing Limited**
21a Sirdar Road
Brook Road Industrial Estate Rayleigh
Essex SS6 7XF

**Telephone** 01268 777 871
**E-mail** office@proteuswaterproofing.co.uk
**Website** www.proteuswaterproofing.co.uk