



Polynum™ BIG

Insulation For Roof & Wall



Polynum Big insulation sheet is an advanced and highly effective thermal insulation solution designed to offer optimal thermal comfort to any structure

This versatile product serves a dual purpose as both a reflective bubble insulation and a vapor control layer, making it ideal for application in roofs, walls for commercial buildings and residence houses.

Its multi-layered design includes reflective radiation barriers made of pure aluminum, boasting an impressive 97% infrared reflectivity. Additionally, the inclusion of a layer of large air bubbles ensures superior insulation performance, helping to regulate temperatures and enhance energy efficiency.

Optional Products:

- Fire Retardant formulated
- Reinforcing Net



Durability for Years



Reflect 97% IR



Thermal Insulation



Easy to Install



No eye & face protection required



Saving Energy



Green Building



Light weight & Thin



Against condensation
Resistant to moisture



| Property | Units | Dir | Value |
|---|--------------------------|------|-----------------------|
| Nominal thickness (EN 823) | mm | | 8.0 +/-5mm |
| Standard Roll Size | m X m | | 1.2m X30m |
| Standard Roll Weight (Gross) | kg | | 8.5 kg +/- |
| Emissivity (ASTM C 1371) | | | 0.05 |
| Reflectivity (ASTM C 1371) | | | 0.95 |
| Heat resistance (R)* – under roof (ASTM C 363) | m ² ·°C/W | Down | 3.06 |
| Heat resistance (R) – Concrete wall/ Plaster board | m ² ·°C/W | | 2.1 |
| Resistance to Corrosion | AS/NZS4859.1 (App.1) | | Pass |
| Noise Reduction Coefficient (ASTM E-384) | % | | 54% |
| Tensile properties (ASTM C 1136-92) | g/cm-width | MD | >10kg/cm ² |
| Puncture properties | g/cm-width | | 72 kg/cm |
| Fire Safety - EN 13501-1-2000 | | | Pass |
| Water Vapor Transmission (ASTM E-96) | g / ft ² · hr | | 0.018 (method A) |
| Fungal Resistance Test (ASTM C 1338) | | | No fungal growth |
| Dry Delamination | AS/NSZ 4201.1 | | Pass (<0.5%) |
| Thermal Stability Test for cracks @ 110°C ASTM 1136-92 & ASTM 1204-94 | | | Pass |

Quality system approved to ISO 9001: 2015 standard