PRODUCT INFORMATION

****

**PBUT Butyl Rubber Strip**

**Product Description:**

PBUT is an Elastomeric Rubber Roofing and Waterproofing Membrane (Manufactured from an EPDM Butyl Rubber Polymer Blend). It is a copolymer of isobutylene with small amounts of isoprene, two gases derived from petroleum distillation. The butyl rubber molecule has a highly saturated structure, and therefore is resistant to heat ageing processes, sunlight and ozone and has exceptionally high resistance to diffusion by gases and liquids (other than mineral oils and solvents). Butyl was commercialised in 1937, it is also used in tyre inner tubes because of its resistance to gas diffusion.

EPDM is an inert polymer made by co-polymerising Ethylene and Propylene with small amounts of another polymer. Its excellent weathering properties provide PBUT with increased durability compared to pure Butyl membranes.

**Product Data:**

|  |
| --- |
|  Colour: Standard colour is black Dimensions: 50mm x 12m 80mm x 12m Service Temperature Range: -50°C to 110°C Life Expectancy: Tropical Areas - In excess of 20 Years Temperature Zones – Earliest application still good after  40 years |

**Applications:**

* Industrial, commercial and residential flat roofs and gutters.
* Irregular angles, curves and contours of any scale architecture.

|  |  |  |  |
| --- | --- | --- | --- |
| **Physical Property** | **Test Method** | **Spec.** | **Typical** |
| Hardness, Shore A | ASTM D 2240 | 68 +/ -5 | Pass |
| Tensile Strength, MPa | ASTM D 412 | 8.3 Min | 9.2 |
| Elongation, Ultimate % | ASTM D 412 | 300 Min | 441 |
| Resistance to Heat AgeingProperties after 166 Hours @ 116°C (240°)Tensile Strength, psi (MPa)Elongation, Ultimate % | ASTM D 573ASTM D 412ASTM D 412 | 6.2 Min210 Min | 8.6311 |
| Ozone ResistanceCondition after exposure to 50 pphmOzone in air for 7 days @ 40°CSpecimen is at 25% strain | ASTM D 1149 | No Cracks | No Cracks |
| Water Vapour PermeanceAt 23°C ± 2°C, 45% Rh, perms | ASTM E 96 | 0.06 Max | 0.02 |
| Resistance to Water AbsorptionAfter 166 hours in immersion @ 70°CChange in mass % | ASTM D 471 | 4 Max | 3.2 |
| Specific Gravity, typical |  |  | 1.2 Black1.3 Colour |
| Thermal Conductivity, typicalKcal, hr/m/°C |  |  | 0.27 |
| Temperature Range Remains Flexible from |  |  | -50°C to +110°C |

**Chemical Properties:**

* Chemical Resistance
* Unaffected by water (distilled, potable, sea)
* Unaffected by soil chemicals (soil acids, lime, iron derivatives, silicate derivatives)
* Unaffected by building materials (quick lime, slaked lime, cement)
* Unaffected by decomposition materials (albuminous products, sulphide etc.)
* Unaffected by fertiliser solutions (25% nitrates, phosphates, sulphates)
* Unaffected by bitumen (avoid substrates with bitumen content, because the bitumen absorbs adhesive solvents and these can cause subsequent bubbling)
* Petroleum products (petrol, diesel, white spirits, fuel oil, lubricating oil, grease) will permanently weaken Butyl.

Butynol foam strip 50mm x 12mm

75mm nominal

Double studs well spiked

Butynol foam strip 50mm wide

2mm gap between RAB Board sheets

RAB Board

Double cavity battens

 Butynol foam strip 50mm wide

Titan Panel 65mm x 10g wood thread screw

in pre drilled c/sk hole

18 18

10

No

Fixings

80mm wide butynol/ foam strip for internal and external

corners