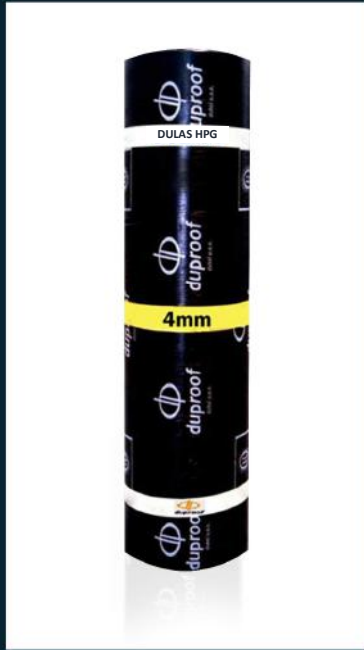




DULAS HPG

(SBS-MODIFIED MEMBRANE)



DESCRIPTION

DULAS HPG is a high performance superior waterproofing membrane with double reinforcement, a tough non-woven Spun bond polyester and Glass fiber. It is specially designed to have superior properties and functionalities of both Polyester and Glass fiber reinforcement for wide range of construction applications. The elastomeric nature of the synthetically modified coating is designed as a homogeneous mixture of a special bitumen and high quality type SBS elastomer, which ensures high product quality and outstanding performance with excellent flexibility in cold climatic conditions. The top surface of the membrane is laminated with special polymeric foil or Sand or Slate, which protects the membrane from the weathering, and the bottom surface covered by a polyethylene foil.

FEATURES AND BENEFITS

- Excellent flexibility at low temperatures
- Excellent tensile and tear strength
- Higher dimensional stability
- Superior puncture resistance
- Self-sealing to minor cracks
- Highly resistant to dilute chemicals
- Absolute impermeability to water

SPECIFICATION AND COMPLIANCE

DULAS HPG membranes are tested in accordance with UEAtc (European Union for technical agreement for construction industry) and can be tested as per ASTM D5147 (Standard Test Method), ASTM D6162 (Standard Specification) and other relevant international standards

MAIN USES

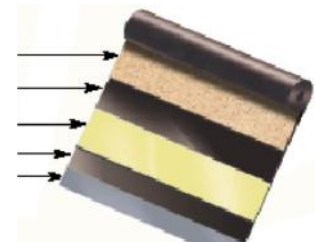
- In the construction of single layer waterproofing system of flat roofs and pitched roofs and in infrastructure applications
- As a loose laid membrane over slip-sheet with side and end laps torched
- In regions where deformation stresses from roof structures are expected and is used in underground reservoirs, tunnels and engineering constructions
- Ideal for new and re-roofing projects, waterproofing on steel decks and wood support decks

QUALITY ASSURANCE AND WARRANTY

Duproof is an ISO 9001 Quality Assured company, and DULAS HPG membranes carry a material warranty against any manufacturing defects



Polymeric Foil or Sand or Slate
SBS-Modified Bitumen
Polyester + Glass fiber
SBS-Modified Bitumen
Polyethylene Foil



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METHOD OF APPLICATION

Surfaces onto which the membrane is to be applied must be sound, clean and dry. Dust, loose material and protrusions must be removed and cracks, holes etc made good.

Priming: Apply one coat of bituminous primer to all surfaces at 5-6 m²/lit and allow to dry. Primed surfaces must be covered within the same day. If left exposed for longer periods, clean and re-prime before applying the membrane.

Membrane Application: Position the roll carefully with the correct orientation before the torching operation begins. Heat the lower surface of the rolls with a propane gas torch and unroll as the bitumen begins to melt. Maintain minimum 100 mm side laps and 150 mm end laps between rolls, staggering the joints where possible. All seams must be heat sealed from the top to ensure watertight laps.

Protection: Once laid, it is recommended to protect the membrane from long-term exposure, construction abuse and backfill, preferably within 24 hours. On vertical areas **DUBOARD** are recommended; on horizontal surfaces a minimum 25 mm thick sand-cement screed may be used. **DULAS HPG** membranes are also suitable for partially bonded or loose laid installation.

PACKING AND STORAGE

DULAS HPG membranes are supplied in rolls of 1m X 10m & shrink wrapped on pallets. Rolls must be kept upright on pallets under shade. Pallets should not be stacked one over the other.

HEALTH AND SAFETY

There are no direct health hazards associated with **DULAS HPG** membranes. Normal precautions for hot and volatile substances should be observed during application. Refer to our MSDS sheets for advice.

TYPE AND FINISH

| | | | |
|--------------------------------|------------------------|--|-----|
| Thickness | [mm] | 4.0 | 5.0 |
| Nominal weight | [kg / m ²] | 4.5 | 5.5 |
| Dimensions (length x width) | [m] | 10 x 1 | |
| Coating | | SBS – modified bitumen | |
| Type of carrier | | Composite of 180/200/250 g/m ² spun bond polyester mat (P) and 60 g/m ² | |
| Top Surface | | Polymeric foil (F) or Sand (Q) or Slate (S) or (QQ) for both side sand | |
| Bottom Surface (Torching side) | | Printed Polyethylene foil | |

To order specify finish, reinforcement and thickness e.g. DULAS FHPG-260 4mm for foil finish, 200g/m² polyester and 60g/m² glass reinforcement and 4 mm thick sheet membrane.

TECHNICAL DATA

| PROPERTY | UNIT METHOD | TEST | VALUE |
|--------------------------------|-------------------|-------------|--|
| COMPOUND PROPERTIES | | | |
| Softening point | [° C] | ASTM D 36 | 120 |
| Penetration, @ 25°C | dmm | ASTM D 5 | 25-35 |
| Heat resistance, 2 hrs. @100°C | - | UEAtc | No flow |
| Flexibility at low temperature | [° C] | DIN 52123 | -15 to -20 |
| Water absorption | % | ASTM 570 | <0.4 |
| MECHANICAL PROPERTIES | | | |
| Type of carrier | g/m ² | | Spun bond Polyester mat +Glass |
| | | | 250/60 |
| Tensile strength (L/T) | [N / 5 cm] | UEAtc | 1200/1000 |
| Elongation (L/T) | [%] | UEAtc | 50/55 |
| Tear resistance (L/T) | N | ASTM D 5147 | 400/400 |
| Puncture resistance | Static Dynamic | UEAtc | L ₄ Static @ 25 Kg I ₄ Dynamic @ 9 Joules |

In accordance with the standard up to 20% variation is expected.

Tolerances on nominal values shown are as per UEAtc directives for polymer modified bitumen membranes. These data are correct at the time of printing but may be changed without any prior notice subject to clients requirements availability of raw materials or other conditions. This data sheet supersedes all previous publications pertaining to this product. All reasonable care has been taken in preparing this document, which to the best of our knowledge is accurate and true. Recommendations and suggestions are made in good faith and should only be considered for general guidance. No liability is assumed or taken by us in relation to the application, as usage conditions and any labour involved are beyond our control.