

TarFelt® APP

APP Modified Non-Woven Polyester Based Membrane with Release Film



STP Limited

Description

TarFelt® APP is uniquely formulated, cold-applied, waterproofing membrane manufactured by saturating and coating non woven polyester carrier with a waterproofing compound made of special grade of modified bitumen and APP polymers. It is a virtual self adhesive membrane supported by ShaliBond APP, which nullifies the torching equipment and labour cost.

Approval / Standards

ASTM D 5147

Product Information

Form, appearance, Colour	Black membrane with release film. Non-woven polyester reinforcement.
Handling & Storage	The membranes must be vertically stacked and stored in a shaded area covered by a thick fabric and tied securely in a manner that will minimize exposure to sunlight and UV. The membranes should be protected from all sources of heat and extreme temperatures. Always keep the rolls in vertical position.
Packaging	For 1.5 / 2 mm - 1 m x 20 m (Tolerance: $\pm 1\%$)
Shelf Life	12 months when stored as per recommendations.
Handling Precautions	The membrane is non-hazardous, non-flammable and therefore can be disposed of in any regular disposal areas. All membranes however should be disposed off only after wrapping with paper, plastic or cloth. In case of contact with human skin wash with any soft solvents. Seek medical assistance immediately in case of any allergy.

Technical Characteristics at 25°C, 50% RH

Property	Standard	Result
Softening Point, °C	ASTM D 36 / IS 1205	145 - 150
Penetration, dmm	ASTM D 5 / IS 1203	15 \pm 5
Heat Resistance, 120°C, for 2 hrs.	IS 13826 - Part 5	No flow
Cold flexibility, °C	ASTM D - 5147	Does not crack at +2°C
Elongation @ break, % <ul style="list-style-type: none">• Longitudinal• Transverse	ASTM D - 5147	30 - 40 30 - 40
Tensile Strength, N / 5 cm <ul style="list-style-type: none">• Longitudinal• Transverse	ASTM D - 5147	250 - 275 120 - 135
Tearing Strength, N / 7.5 cm <ul style="list-style-type: none">• Longitudinal• Transverse	ASTM D - 5147	250 - 260 90 - 108

Field of Application

Waterproofing and damp-proofing membrane of

- Corrugated asbestos / metal sheets
- Concrete roof (sloped / flat roofs)
- Basement and swimming pools (externally)
- Concrete retaining structures
- As bearing for precast elements
- Tunnels and subways
- Car park and irrigation canals lining
- As base layer in multi-layer waterproofing system

Advantages

- Total impermeability.
- Excellent resistance to ageing and weathering.
- Stability at high temperatures.
- No torching required. Easy and safe installation.
- Good cold flexibility.

Application Information

- ✓ **Substrate Temperature** - +5°C Min / +45°C Max
- ✓ **Ambient Temperature** - +5°C Min / +45°C Max

Application Methodology

➤ Substrate Preparation

- New concrete should be cured for at least 28 days.
- Cementitious or Mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface.
- Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed.
- Build-up proper gradient of the surface with PCC admixed with **ShaliPlast IW**.
- Ensure that level of all drain mouth is lower than deck slab level by at least 15 mm.
- Correct all construction joints by grouting with **ShaliGrout IP** at 1 m apart and opening of joints in "V" cut groove and fill with **ShaliFix FRM**, using **ShaliSBR Latex** as the bond. Provide 75 mm x 75 mm coving made out polymer modified mortar prepared with **ShaliCrete**-Cement-Sand (1 : 2 : 5) after applying a bond coat with **ShaliSBR Latex**.
- The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any adhesive application.

➤ Waterproofing Application

- Apply **ShaliBond APP** uniformly both on the substrate and **TarFelt® APP** membrane (after removing the release film) approximately @ 250 - 300 g / m² each (theoretical, depend upon surface condition) by trowel / brush and allow the adhesive to touch dry but highly tacky. Approximately this takes 5 - 15 minutes at 30 - 35 °C.
- Unroll **TarFelt® APP** over the tacky surface and bond it to the surface by applying uniform pressure on all sides to remove any air bubbles. This makes **TarFelt® APP** a virtual self-adhesive membrane.
- Alternatively, apply with hot bitumen **85/25 (or 30/40)** grade @ 800 gm / m² with Pour & Roll Method in horizontal surface and bitumen **85/25 (or 30/40)** grade @ 600 gm / m² in vertical surface.
- Cut 1" deep groove 300 - 450 mm above the roof surface on the parapet wall and seal the edge of **TarFelt® APP** inside the groove with polymer modified mortar. In case of low height parapets, terminate **TarFelt® APP** over the parapet.
- For overlapping of joints, rub the polyethylene side of the membrane by wire brush, apply **ShaliBond APP** over the rubbed area, allow it to be tacky and then fix the bituminous side of the **TarFelt® APP** after removal of the release film.
- For longitudinal and transverse joints overlap of 75 mm and 100 mm respectively is desired.
- Seal all the corners of membrane with the **ShaliBond APP** / STP make **85/25 (or 30/40)** grade bitumen for getting better result.
- Allow 3 - 4 days for full dry.

➤ Protection of Waterproofing

- For UV protection, **TarFelt® APP** waterproofing membrane shall be finally coated with **SuperSilverShield** for non-trafficable roof. For foot trafficable area, overlay with PCC dosed with **ShaliPlast IW** of 50 mm thick / tiles loosely laid or fixed.

Precautions

- Do not apply during rain or extreme temperature.
- For **TarFelt® APP** without release film, do not use **ShaliBond APP**. Only use **85/25 (or 30/40)** grade bitumen for best results.

- Do not keep the lid of containing drums of **ShaliBond APP** open for long time as this will result in excessive solvent loss and reduction in adhesion property.
- Apply parapet to parapet to envelope the entire building for long term performance.
- Clean all the tools and equipments immediately after use with STP thinner only. Do not allow material to harden.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health and Safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- Store in a cool, dry place. Keep out of reach of children and away from eatables.
- May be harmful if swallowed
- In case of ingestion seek immediate medical attention.
- Eye protection during application is recommended.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In case of skin contact, wash with soap and plenty of water. Get medical attention if irritation develops or persists.
- It is recommended to wear suitable nose pad during torching application and surface preparation. Dispose as per recommendation mentioned above.



STP Limited
Enhancing Structures' Life

Product Range

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- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
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