

Block X550 TPO

Thermoplastic polyolefin (TPO) Waterproofing Membrane

SMART ADVANTAGES

- Excellent weather resistance, aging resistance, tensile strength and elongation.
- Installation can be done on wet substrate.
- Directly expose to the weather conditions without any protective layer.
- Simple construction. No contamination
- White color TPO to increase reflection of sun rays
- Repeat welding is possible
- Ability of resist the growth of mold and algae
- Strong aging resistance and stability
- Excellent environmental friendly performance. No pollution
- Smooth surface with high light reflection rate which result in energy saving and pollution resistant
- High Security without open flame installation

DESCRIPTION

Block X550 TPO is a thermoplastic polyolefin (TPO) waterproof membrane is made of TPO resin (Hifax) by chemical copolymerization with the stabilizers. It is internally reinforced with fabric mesh for mechanically fixed roofing systems. The Block X550 TPO is a white membrane and helps to reflect heats instead of absorbing it. It is one of the best materials using for roof waterproofing. Divide in to 2 types Reinforced (R) and Fleece Backing (FB)

COVERAGE

- Width 2 metre, Length 20 metres ($40\text{m}^2/\text{ roll}$) the thickness is 1.5mm and 2 mm.

In order to calculate total consumption of synthetic waterproofing membranes, it must be added quantity of 10% overlapping and 2-3% of loss depending upon the project conditions on the total application area.

TECHNICAL CHARACTERISTICS		
Characteristic	Reinforce (R)	Fleece Backing (FB)
Tensile Strength (ASTM D412)	> 25.0 MPa	> 20.0 MPa
Elongation (ASTM D412)	> 700 %	> 700 %
Maximum Tension	> 200 N/cm	> 250 N/cm
Heating treatment size change rate % ≤	< 1	< 0.5
Low temperature bending	-40 °C No.Crack	
Water impermeability	0.3Mpa, 2h Impermeable	
Impact resistance	0.5kg, m ,impermeable	
Seam peel strength N/mm	> 3.0 N/mm	> 3.0 N/mm
Trapezoid tear strength N	> 250	> 450
Water absorbing capability (70 °C, 168h)%	< 3%	
Heat aging (115 °C) 672 hr	No bubble ,crack ,delamination , bonding and holes	
Tearing Strength (ASTM D751)	> 450 N	> 450 N
Artificial Climate accelerating aging	No bubble ,crack ,delamination , bonding and holes	
Light Reflective Rate	More than 80%	



APPLICATION

INSTALLATION MECHANICAL FIXATION AND BALLASTED **METHOD**

- There are two methods of installation for Block X550 TPO (R), which are ballasted method and Mechanical Fixation method.
- The Ballasted method involve a system build-up from the substrate, separation layer, Block X550 TPO (R) membrane, protection layer and counter weight.
- In the Mechanical Fixation method, the fixation can be with the concrete mechanical Insulated, concrete mechanical non-insulated and metal mechanical fixed. The parameters to be considered for mechanical fixing is the effect of wind and type of anchors suitable to the substrate.
- Synthetic waterproofing membranes applications should be done by approved applicators. For the further information please apply application manual

INSTALLATION FULL ADHERED METHOD

- Apply adhesive by scraper or roller at coverage rate to suit substrate, typically approximately 0.2kg/ m2 . Leave for 5 to 10 minutes
- Gently dampen the fleece side of the Block X550 TPO (FB) membrane to improve initial bond strength. Next, carefully roll the membrane into the adhesive before it begins to form a skin, making sure it adheres properly, and press down firmly. The membrane is designed with a selvedge along both edges, so overlap the layers at the selvedge to secure a minimum weld of 50mm.

PREPARATION

1. Clean the Surface:

Remove all dirt, debris, oils, and contaminants from the substrate. Use a broom, vacuum, or pressure washer as needed. If necessary, use a suitable cleaner to eliminate any residues that may affect adhesion.

2. Dry the Area:

Ensure the surface is completely dry before application, as moisture can hinder adhesion. This is especially important after cleaning the surface.

3. Check for Sharp Objects:

Inspect the substrate for any sharp objects, protrusions, or rough spots. These should be smoothed or repaired to prevent puncturing or damaging the membrane.

4. Repair Surface Imperfections:

Fill in any cracks, holes, or uneven areas in the substrate with a suitable patching material to create a smooth and level surface.

5. Verify Compatibility:

Ensure that the substrate is compatible with the Block X550 TPO membrane. Refer to the manufacturer's guidelines for specific substrate requirements.

Following these preparation steps will help ensure optimal adhesion and a successful installation of the Block X550 TPO membrane.

CLEANING

Prior to curing, all tools can be cleaned with cleaning solvents. Hardened material must be mechanically removed.

STORAGE & SHELF LIFE

The shelf life of this product is 12 months from the date of

Moving, transporting, storing and using materials should avoid objects and environments that easily cause perforation or physical damage.

Different types of products should be classified and stored in parallel, with a height of no more than 5 layers.

The finished products should be sealed and packed using clean waterproof cloth to protect and put it in a high place, such as pallet or wood.

FIRE

Bostik Block X550 TPO is non-flammable

PACKAGING

40m2 /roll

HEALTH AND SAFETY

Suitable protection clothing, dust masks, gloves and eye protection should be worn during membrane installation.

For more detailed information refer to Safety Data Sheet.

The application recommendations are defined by standards of use. They are imperative to respect them, but they don't need a previous try, especially for the first use or particular inconvenient of support, site or environment.

Consult our safety data sheet for precautions to use.

BOSTIK (THAILAND) CO.,LTD.

Tel No: +66 2361 6460

