

# HYDROSTOP PLUS 4PYSP



## Self-Protected Waterproofing & Protection Membrane

### DESCRIPTION

**HYDROSTOP PLUS 4PYSP** is torch-applied polymer modified bituminous self-protected waterproofing and protection membrane laminated onto a tough geo-textile.

A selvedge is provided on one side of the membrane to give a bitumen to bitumen contact on the overlaps, thus restricting any water penetration through the laps.

The presence of non-woven polyester reinforcement at core enhances puncture and tear resistance of membrane.

The geo-textile finish on top imparts protection to membrane from puncture damage.

### USES

**HYDROSTOP PLUS 4PYSP** is designed to waterproof and protect various substrates encountered in horizontal and vertical applications like concrete, masonry, G.I, fibre reinforced cement sheets, asphalt, stone etc,

Due to enhanced puncture resistant property imparted by tough and durable top geo-textile finish, use of **HYDROSTOP PLUS 4PYSP** in waterproofing of below ground concrete structures eliminates the need for additional protection board used with conventional membranes.

It is used to provide protection to existing bitumen based membranes and coatings from puncture and ultra violet ray damage.

### ADVANTAGES

- Superior Performance with Uniform Thickness & Quality
- High Puncture and Tear Resistance
- High Stress Absorbing Characteristic
- Excellent Isotropic Properties and Performance
- Impermeable to Water
- Easy an Instant Waterproofing
- High Tensile Strength and Crack Bridging Capacity
- High Resistance to Flow at High temperature
- High Resistance to Aging and Weathering
- Pre-Fabricated – Impossible to Manipulate Product Quality at Site
- No Curing Period required – Works can be continued without waiting/shutdown period
- Good Resistance to Mild Acids, Mild Alkalis and Salts
- **VERSATILE PRODUCT** - Suitable on almost all types of Surfaces encountered in Building Structure-Concrete, Metal, Wood, Stone, Asphalt, Fibre Reinforced Cement Sheet, G.I.Sheets etc.

### AREAS OF APPLICATION

- Basement Floors and Retaining Walls
- Protection Membrane for Bitumen based Membranes and Coatings
- Roofs and Terraces
- Podiums and Parking Decks
- Bridges, Viaducts, Tunnels and Subways

### PROPERTIES

Properties	Values	Test Standard
<b>Top Surfacing</b>	Polyester Geo-Textile	-----
<b>Penetration* @ 25° C</b>	< 20dmm	ASTM D 5
<b>Softening Point*</b>	>150°C	ASTM D 36
<b>Tensile Strength (N/5cm)<sup>^</sup></b> <b>Longitudinal</b> <b>Transversal</b>	900 650	ASTM D 5147
<b>Elongation at Break</b> <b>Longitudinal</b> <b>Transversal</b>	>40% >50%	ASTM D 5147
<b>Water Absorption</b>	< 0.35%	ASTM D 5147
<b>Flexibility at Low Temperature (No Cracks)</b>	Up to 0°C	ASTM D 5147
<b>Dimensional Stability (L/T)</b>	≤0.5%	ASTM D 5147
<b>High Temperature Flow Resistance (No Flow)</b>	>120°C	ASTM D 5147
<b>Puncture Resistance</b>	>620 N	ASTM E154

<sup>^</sup> Subject to ±20% variation

\*Compound properties tested during manufacturing process

### APPLICATION INSTRUCTIONS

Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the self-protected waterproofing membrane **HYDROSTOP PLUS 4PYSP** is as follows:

#### Waterproofing System:

#### SURFACE PREPARATION

The surface should be dry and should not stagnate water and should have positive slope towards drain outlet.

The surface should be made smooth free from cracks, imperfections, protrusions using suitable material & method.

The surface shall be thoroughly cleaned to remove loose dust, foreign particles, oil, traces of curing compound and other contaminants.

## APPLICATION

### Priming the Surface

Prepared surfaces shall be primed using bituminous primer **TIKI PRIMER**. Allow the primer to dry.

Application rate of primer shall be 3 to 5 m<sup>2</sup>/kg. Actual coverage of material depends on substrate porosity.

### Alignment of Membrane Rolls

After the applied film of **TIKI PRIMER** is dry, membrane rolls are marked with required overlapping line and spread over entire area for alignment with proper overlaps.

### Overlaps

Maintain side overlaps of min.5cm to max.10cm.  
Maintain end overlaps of min.10cm to max.15 cm.

### Re-Aligning Membranes

When the surface area is long, then unroll the membrane in alignment before torching and prevent membrane from shifting or displacement from its aligned position.

### Torching and Laying of Membrane on Horizontal and Vertical Surface

Membrane shall be installed from the lowest point of the slope and progress to the highest point.

Maintaining membrane previous alignment, torch the substrate and underside of the membrane.

When the underside heating of membrane exposes shiny bitumen surface, roll forward the membrane and press firmly from above against the substrate to obtain superior and permanent bonding.

Once torching of membrane is commenced, care should be taken to avoid shifting / lifting of membrane and take care to prevent the damage to membrane.

On vertical surface, the end edge of membrane should be tuck in to the groove made on vertical surface and groove filled with cement sand mortar (or) should be fixed mechanically with metal flashing, edges flush finished with **TIKI PLAST HD SEALANT** caulking sealant.

### Watertight Sealing of Seams

Maintaining the side and end overlaps, a thin bead of bitumen produced during torching at the seams should be smoothed out with a round tip hot trowel ensuring tight and impermeable seal.

As per service condition requirement, after installation, **HYDROSTOP PLUS 4PYSP** can be overlaid with pcc tiles / ceramic tiles / china mosaic chips bedded in cement sand mortar, XPS insulation boards, round gravels, backfilled soil, screed concrete, asphalt etc.

Protection System:

## SURFACE PREPARATION

In applications involving **HYDROSTOP PLUS 4PYSP** being used as a protection layer on bitumen based membranes and coatings, the base surface shall be cleaned thoroughly of all settled dust and other contaminants.

## APPLICATION

Unroll only the required length and cut the piece to the desired shape. Place the membrane piece on the area to be covered. Install the membrane using torch-on application method as per the procedure mentioned in previous section.

## SUPPLY

**HYDROSTOP PLUS 4PYSP** is supplied in standard roll sizes of 1m x 10m of 4mm thickness.

## STORAGE

**HYDROSTOP PLUS 4PYSP** membranes must be stored above 5°C. Store under the shed & protect from extremes of temperature. Rolls must be stored in upright vertical position. Avoid stacking of rolls horizontally on their sides or in double stack position.

## SAFETY PRECAUTIONS

As with all synthetic products, care should be taken during use and storage of **HYDROSTOP PLUS 4PYSP**. As it contains a tacky bitumen compound, which while applied can stick to human skin. Such stains of bitumen can be removed by using a cloth dipped in a suitable solvent.

**Disclaimer:** TIKI TAR DANOSA warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. While TIKI TAR DANOSA endeavors to ensure that information given herein is correct to the best of our knowledge, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

We recommend that adequate tests be performed by you to determine if this product meet all of your requirements.

**Note:** Properties subject to change as per specific requirement.

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ISO 9001 : 2008