



HIND HYDRO FLEX PU (SB)

PRODUCT DATA SHEET

SINGLE COMPONENT MOISTURE CURED POLYURETHANE WATERPROOFING COATING

DESCRIPTION

Hind Hydro Flex PU (SB) is single component moisture cured modified Polyurethane Elastomeric liquid waterproofing membrane. It forms a seamless monolithic membrane that adheres to almost all construction substrates viz. Concrete, Cement Blocks existing roof felts etc. It is resistant to Chlorides and Sulphates that are present in the soil and to most mild acids and alkalis. It conforms to **ASTM C 836** and **ASTM C 898**.

USES

Hind Hydro Flex PU (SB) is formulated for application as an exclusive concealed waterproofing system. It is used for waterproofing of Podium, Terrace, toilet, balconies, planter boxes, reinforced concrete roof, external tanking of basements, swimming pool, retaining walls, Sea walls, dams, reservoirs, repairing and re-furbishing of old water proofing system (Tar-felt & APP Membrane applied areas) sub-grade floors and wall & culverts.

ADVANTAGES

- Single Component, cold applied .
- Easy and ready application from containers with brush, rollers or spray.
- Seamless, Self- Leveling and Roller applicable.
- Root resistant, highly elastomeric to accommodate expansion & contraction.
- Excellent UV resistance and long term ageing stability.
- Flexible and withstand Structural movement and Crack-bridging.
- Environment friendly and the membrane can sustain properties at high temperature.
- Resistance to oxidation.
- Chemical resistant and does not allow bacterial growth.
- Does not contain TAR.
- Can be applied under wide service temperature climates.

APPLICATION

SURFACE PREPARATION

The concrete surface over which the coating is to be applied should be structurally sound and cleaned with air jetting or grinding to make the surface clean, dry, free from loose particles, oil, laitance and other containments. Cracks on the surface to be repaired by cutting 'V' groove and using single component fiber reinforced repair mortar based on '**Hind Patch R**'.

Coving : Provide 75mm X 75mm concave using suitable polymer modified mortar.

Priming

Over the prepared Concrete surface, one coat of **Hind Hydro Flex PU (SB)** to be applied as primer on dry concrete surface(Moisture level must not exceed 5%) by help of brush or airless spray. The recommended dosage is 125ml to 200 ml per Sq. Mtr (depending on the porosity of the asurface) - Single coat application with approx. 50 microns DFT and Relative Humidity 50% . The coated surface gets touch dry after 30 minutes at 27⁰ C.

Application

We recommend application of 2 coats of **Hind Hydro Flex PU (SB)** to be done using a roller/brush/airless spray over dry primed surface. This first coat must be allowed to dry completely for approximately 10-12 hours. For large areas airless spray is recommended. The second coat to be applied by same method in perpendicular direction to the first coat applied surface. After the second coat application gets completed, it should be allowed to get completely dry for 36 hours before proceeding to the next stage. Water Ponding test to be carried after **7 days** of full curing. Vertical application to be terminated up to 300 mm height. Quartz sand @ 200 gm/Sq. Mtr to be sprinkled on the second coat applied surface when it is still tacky for providing a mechanical grip to facilitate application of plaster. To achieve a higher mechanical properties for waterproofing, Non-woven 50 GSM geo-textile with 50mm overlaps in each direction after application of 1st coat of **Hind Hydro Flex PU (SB)** while it is still tacky.

Recommended Dosage of Application 1.2 10 1.35 Kg/Sq. Mtr in 2 Coats

PHYSICAL PROPERTIES

Product Composition	Modified Polyurethane
Colour	Black & White
Density at 27 ⁰ C	1.25 ± 0.05
Solid Content (ASTM C 836)	92 ± 2 %
Tack Free time at 25 ⁰ C	10-12 hours
Full Cure at 25 ⁰ C	42 hours at 1mm thickness
Tensile Strength (ASTM D 638)	> 2.0 N/mm ²
Typical cured membrane properties at 28 days	
Elongation (ASTM D 412)	> 650%
Tensile Strength N/mm ² (ASTM D 412)	2.0 ± 0.20
Recovery from 200% Elongation (ASTM D 412)	98%
100% Modulus Elongation (ASTM D 412)	4.9 N
Shore Hardness 00 (ASTM C 836)	>50
Crack Bridging (ASTM C 836)	Upto 2 mm
Extensibility after heat Ageing (ASTM C 836)	>6mm
Weight Loss (Max 20%) (ASTM C 836)	8 ± 2 %
Moisture Vapour Permeability (ASTM E 96)	0.177/Sq.Mtr/hr/mm
Tear Resistance (ASTM D 4073)	28 /7.5 cm
Service Temperature	-45 ⁰ C to 75 ⁰ C
Peel Adhesion to primed concrete, Pull Strength MPa (ASTM D 4541)	≥2.0
Recommended Application Temperature	10 ⁰ c to 40 ⁰ C
Water Absorption %	≤ 0.5
Si Value (ASTM E 1980)	>90 (Only for White)

PACKING

Hind Hydro Flex PU (SB) is available in 24 Kg. Container.

COVERAGE

1.2 to 1.35 Kg per Sq. Mtr for 1mm thickness DFT depending on the surface condition.

STORAGE

12 months in original unopened container. Do not expose or open container to high humidity conditions. Store in a cool & dry place.

HANDLING PRECAUTION

Hind Hydro Flex PU (SB) is non-toxic but ingestion is to be avoided. Any splashes to the skin must be washed with water. If contact with eyes occurs, wash well immediately with water and seek medical advice.

Note:

- **Hindcon Chemicals** maintains a team of technically trained professionals to provide full support to your problems in construction, and recommend the correct product to suite your specific requirements. Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The result shown here are generated from our laboratory or from our site experiences.
- Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since **HINDCON CHEMICALS LIMITED** has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
- The right to change the properties of the products is reserved with us. The proprietary rights of third parties must be observed. All orders are accepted subject to the terms of sale and delivery. Users must always refer to the most recent issue of the latest Data Sheet for the product concerned, copies of which will be supplied on request.

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