



HIND HYDRO FLEX WBPU

PRODUCT DATA SHEET

ECO- FRIENDLY HIGH-PERFORMANCE PU ELASTOMERIC WATERPROOFING COATING

DESCRIPTION

Hind Hydroflex WBPU is a single component water based, high solid, UV Resistant hybrid Polyurethane membrane with 350% elongation for long-lasting waterproofing. **Hind Hydroflex WBPU** is ideal for waterproofing of exposed roofs, new or existing. **Hind Hydroflex WBPU** consists of highly elastic polymer and inherent flexibility allows the membrane to accommodate movements in substrate and prevents water leakages.

USES

Hind Hydro Flex WBPU is used for Typical Applications as follows:

- Waterproofing of Reinforced Concrete Roofs, balconies and terraces, decks.
- Highly recommended for large roof areas.
- Over existing cementitious treatment like Brick bat Coba, Concrete Screed, China mosaic tiles , soft drink bottling plants, control rooms, computer room, other utility areas, off-shore platforms and ship decks.

ADVANTAGES

- Waterborne Hybrid PU, high solids, single pack, easy to use
- **Hind Hydro Flex WBPU** system provides dry film thickness of 0.80 to 1.0 mm in 2 to 3coats.
- Can be applied directly over existing Brickbat Coba, IPS, and Concrete Screed without need for removal.
- Seamless, high tensile strength, highly durable flexible membrane - No Joints to cause leakage.
- Excellent UV resistance.
- Ideal for waterproofing of facades, terraces, balconies and walkways.
- Long-term protection against algae, fungi & mildew.
- No-screed protection or layer needed - Excellent for foot traffic.
- Bridges, seals and fill non-moving - static- hairline cracks up to 1- 2 mm.
- VOC compliant - Solvent-free & non-toxic.

APPLICATION

SURFACE PREPARATION

Surface must be clean, dry and in sound condition to ensure adequate adhesion. Remove all oil, grease, dust, loose particles and other foreign material. Surface must then be thoroughly washed off with clean water. If the concrete (new or old) has as trowel or power float finish, it must be mechanically abraded to provide key for good bonding. Ensure that the roof slope and water drainage is already provided. In existing old terraces with Brickbat Coba or screeds, the substrate must be checked for its soundness, remove any weak surface layer etc. up to slab level. Just before laying the Polymer modified mortar mix apply bond coat over the surface by brush of Polymer based cement slurry duly admixed with **Hind Hydro Flex WBPU** in a proportion **1:1**, by volume and allow to tack dry (5 minutes). Lay Polymer modified Cement **1: 3** duly admixed with **Hind Hydro Flex WBPU @** dosage 10% by weight of cement duly mixed with required water content and repair the area. Allow to cure with clean water/moist cure as usual. Bitumen based waterproofing treatments if existing must be completely removed by mechanical scarification or by any other effective mechanical means before doing this application.

APPLICATION PROCEDURE

To ensure proper adhesion surface should be primed with a single coat of **Hind Hydroflex AQP Primer**. Substrate must be in good condition for application of primer. Before the application it is recommended to slightly stir **Hind Hydro Flex WBPU**, until it becomes homogeneous. Apply first coat of **Hind Hydro Flex WBPU** without dilution spreading at the rate of **0.5kg/Sq.m/Coat**. While the underling coat is still wet, lay **Hind Fiber Glass (45 gsm)** as a reinforcing material which is incorporated between the layers while the underlying surface is still wet to enhance tensile strength and durability. Apply the second coat without dilution spreading at the rate of **0.5kg/Sq.mt /Coat** to achieve total **DFT of 0.80 to 1.0mm** with forced coverage

method. Allow complete drying between coats for minimum **4 hours** depending on the weather conditions. Make sure Glass fibre mesh is completely embedded. Surface should be smooth after the application. Check to see no void surface is left untreated / uncoated.

All joints/corners/drainage outlet sand penetration points shall be treated prior to all application of **Hind Hydro Flex WBPU**. All corners, gaps, joints, protrusions and outlets should be coated with an extra coat incorporating fibre mesh. It is recommended to reinforce **Hind Hydro Flex WBPU**, coating with **40-60 gsm** Fiber glass mesh as a reinforcing material for Roof area > 100Sq.mt.

DRYING / CURING TIME (At 30°C / 85% Relative Humidity)

- **Touch Dry – 60 min.**
- **Hard Dry – 3 to 4 hours.**
- **Ponding Test – 72 hours.**
- Drying times may vary depending on the prevailing climatic conditions, low temperature and higher relative humidity may prolong the drying process.

POST APPLICATION

Conduct ponding test by filling water up to **50mm height** for **48 hours** post air curing to ensure leak-free terrace.

Precautions & Limitations

- All corners, gaps, joints, Roof leak repair area & outlets shall be coated with two extra coats.
- Do not apply during rains.
- The product is designed only for foot traffic and not vehicular or movement of machinery or equipment.
- Do not apply **Hind Hydro Flex WBPU** over expansion or moving joints directly.
- To achieve the foolproof waterproofing, parapet walls should be covered with **Hind Hydro Flex WBPU**
- Never dilute **Hind Hydro Flex WBPU** with water for ease of application.
- Do not apply when ambient temperature is **below 10°C or above 35°C**.
- Keep the material in close when not in use.
- There is a reduction of Gloss /Sheen/Ageing which is part of weathering process.

TECHNICAL INFORMATION

PROPERTIES	UNITS	RESULTS
Weight Solids	%	≥63%
Flash Point	°C	Non-Flammable
DFT (recommended)	mm	± 0.1-1.0
PROPERTIES	TEST METHOD	TEST RESULTS
Adhesion	ASTM D 3359	Excellent
Water resistance	ISO2812-2	Excellent (No adhesion loss/Blistering)
Alkali resistance	SS 5 Part G2	Excellent (No yellowing/Blistering)
Efflorescence resistance	SS 500: 2002	Excellent
Water vapour permeability	ASTMD1653	≥25 g/sq.m 24 hrs
Tensile strength (@ 50 mm/ min)	ASTMD412	≥2.75N/mm ²
Elongation at break (@ 50 mm/min)	ASTMD412	≥450%
Shore A hardness	ASTM 2240	>65
Crack bridging ability	AS/NZD4548.5:1999	Excellent-able to bridge cracks upto 2 mm
Durability (weathering)	ASTMG154	Excellent (>7 years)
Dirt pick-up resistance	SS 500: 2002	Very good
Washability	ASTM D 2486	Excellent

Theoretical Coverage - 0.5kg/Sq.mt /Coat

*Coverage may vary depending upon the texture and porosity of the surface.

**Comparative thermal performance of OHMPUCC on roofing. Temperatures recorded from 1pm to 3pm of roof surface recorded with the aid of laser guided infra-red non-contact thermometer.

PACKING

Hind Hydroflex WBPU is available in **5Kg, 10kg & 20 Kg Container.**

CLEANING OF TOOLS

Tools and equipment after use to be cleaned with thinner or suitable solvent. Cleaning should be done before the material starts to gel or harden.

SHELF LIFE & STORAGE

Best Before 12 months in a sealed container. Keep the container in a dry, cool well-ventilated space and away from sources of heat ignition. Container must be tightly closed.

HANDLING PRECAUTION

This product is for professional use only. The applicators and operators shall be trained, experienced and have the capability to handle the equipment and to mix/stir and apply the coating correctly. Applicators and operators shall use appropriate protection when using this product. The guideline is based on the correct knowledge of the product.

HEALTH & SAFETY

While handling, all contact with eyes, skin, and clothes should be avoided. In case of any splashing in the eyes, rinse with cold running water for 10-15 minutes. Any accidental case sought medical attention immediately.

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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