Dr. Fixit HydroShield PUD Plus



NEXT GENERATION POLYURETHANE DISPERSANT BASED WATERPROOFING COATING

Description

Dr. Fixit HydroShield PUD Plus is a hybrid PU elastomeric waterproofing roof coating, new technology based on water borne Polyurethane dispersions, offering excellent protection from moisture and standing water. Exhibits high resistance to all weather conditions and excellent resistance to UV radiation. **Dr. Fixit HydroShield PUD Plus** is easy to apply by brush, roller, causes less destruction, is fast to carry out work and environment friendly. A coating has green building certification from Singapore Council and GRIHA (India)

Typical Applications

- Highly recommended for large roof areas.
- Over existing cementitious treatment like brick bat coba, Concrete Screed, China mosaic tiles.

Features

- High build system provides dry film thickness of 850 to 1000 microns in 3 coats.
- With over 300% elasticity it forms seamless membrane with 2mm crack bridging ability.
- Excellent weathering resistance (upto 10 years) when reinforced with the fiber mesh /polyester fleece.
- Solar Reflectance Index (SRI) value 105 & superior whiteness reduces heat transfer to the building.
- Demonstrate outstanding performance than traditional acrylic emulsions.
- Excellent protection from moisture and standing water.
- Long-term protection against algae, fungi & mould.
- No-screed protection or layer needed Excellent for foot traffic.
- Reduces surface temperature up to 10°C**
- Low VOC compliant Odourless application.
- Reedy to use, single pack.
- Easy to apply

Packaging

20 Liters (Colour: White , Light blue)

Drying Time

Per coat 5-6 hours at 30°C

Methods of Application

1 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.
- Ensure that the roof slope of a minimum of 1 in 100 is already provided.
- Bitumen based waterproofing treatments if existing, must be completely removed by mechanical scarification or by any other effective mechanical means.

2 RENDER/SCREEDS

• New rendered or screeds surfaces must have a wood float finish and be allowed to cure for at least 15 days.





3 CRACKS / JOINTS TREATMENT

- The careful sealing of existing cracks & joints before the application is extremely important for log lasting waterproofing results. Clean hairline cracks, of dust, residue or other condemnation.
- All hairline should be opened to atleast 1 5 mm with "V" groove for ease of application, then filled with acrylic crack filler Dr. Fixit Cracks-X paste.
- For porous surfaces apply primer coat prepared with Dr. Fixit Crack X Paste and water 1:1 proportion over the crack. Fill Dr. Fixit Crack x Paste when the surface is tacky not dried. Allow it to set for 24 hours.
- Cracks more than 5 mm shoud be repaired with Polymer modified cement sand mortar in the Ratio of 1:3 duly admix with Dr. Fixit Pidicrete URP @ 10% by weight of cement Or with Dr. Fixit Polymer Mortar HB a ready to use single component polymer modified repair mortar. Allow to cure for 5-7 days /moist cure as usual. Ensuring it adheres to the surface.

3 PRIMING

• To ensure proper adhesion surface should prime with a single coat of Dr. Fixit Primeseal dilute with water in the ratio 2:1 spreading at the rate of 8-10 /Sq.mt /Litre Substrate MUST be in SSD condition for application of primer. Allow the primer to cure according its technical instructions.

4 APPLICATION

- Stir well before using. Apply 1st coat of Dr. Fixit Hydroshield PUD Plus without dilution Spreading at the rate of 0.45 /litre/ Sq.mt/Coat until all surface is covered. While the underling coat is still wet, lay a 45 GSM Fiberglass Mesh as a reinforcing material which is incorporated between the first coat and second coat.
- Apply second coat at 90° to the first coat. Ensure there are no pinholes or air bubbles on the membrane surface without dilution spreading at the rate of 0.45 /litre/Sq.mt/Coat. Apply a third coat with the same coverage and consumption to achieve @1.30- 1.40 /Litre/Sq.mt for 0.850 to 1000 microns DFT with forced coverage method. Allow complete drying between coats with a minimum 5-6 hours depending on the weather condition. 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.
- It is recommended to reinforce Dr. Fixit Hydroshield PUD Plus coating with 45 GSM Fiberglass mesh as a reinforcing material for Roof area > 200 Sq.mt.

5 DRAIN APPLICATION

• All joints/corners/drainage flange, outlets and penetration points shall be treated prior to all application of Dr. Fixit HydroShield PUD Plus. All corners, gaps, joints, protrusions and outlets should be coated with an extra coat incorporating fibre mesh ensuring no pinholes or air bubbles are present on the membrane surface.

6 DRYING / CURING TIME AT 300C / 85% RH

- Touch Dry 60 min.
- Hard Dry 5 to 6 hours.
- Drying times may vary depending on the prevailing climatic conditions; low temperature and higher relative humidity may prolong the drying process.

7 PONDING

- If pond testing is required, ensure the membrane is allowed to cure for a minimum of 7-8 days
- before pond testing.

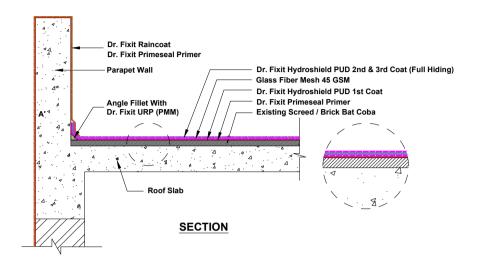
8 TOOLS CLEAN-UP

• Brush & Roller can be cleaned up with water while it is still wet.

9 SAFETY

- MSDS is available from Dr. Fixit on request
- It is recommended that applicators wear PVC or similar gloves and safety goggles while handling this product.
- Keep out of reach of children. If eye contact occurs, rinse with cool water.
- If ingested, seek immediate medical assistance.





Precautions & Limitations

- All corners, gaps, joints, Roof leak repair area & outlets shall be coated with two extra coats.
- Do not apply during rains; substrate MUST be in SSD condition for application of primer.
- The product is designed only for foot traffic and not vehicular or movement of machinery.
- Do not apply Dr. Fixit HydroShield PUD plus over expansion or moving joints directly.
- To achieve the full proof waterproofing, parapet walls should be covered with Dr. Fixit HydroShield PUD Plus/ Dr. Fixit Raincoat system.
- Never dilute Dr. Fixit HydroShield PUD Plus with water for ease of application.
- Do not apply when ambient temperature is below 10°C or above 36°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	%	≥68%
Flash point	°C	Non - Flammable
DFT (recommended)	mm	0.8 - 1.0

PROPERTIES	TEST METHODS	RESULTS
Adhesion	ASTM D 3359	Excellent : ≥ 3.5 N/mm ²
Water resistance	ISO 2812 - 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	ASTM D 1653	≥ 25 g/sq.m 24 hrs
Tensile strength (@ 50 mm/ min)	ASTM D 412	≥ 1.50 N/mm²



Elongation at break (@ 50 mm/min)	ASTM D 412	≥300%
Shore A hardness	ASTM 2240	70 to 75
Crack bridging ability	AS/NZD 4548.5 : 1999	Excellent-able to bridge cracks upto 2 mm
Durability (weathering)	ASTM G 154	Excellent (>10 years)
Dirt pick-up resistance	SS 500: 2002	Very good
Washability	ASTM D 2486	Excellent

Theoretical Coverage*

Rooftops / exposed external areas (3 coats required) the minimum dry film thickness required is 850 to 1000 microns for roof. This should be achieved by applying 3 coats with minimum total consumption >1.30 - 1.40/Litre/ Sq.mt. A 20L pail will cover approximately 15 m².

*This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption.

**Comparative thermal performance of Newcoat Coool on roofing. Temperatures recorded from 1 pm to 3 pm of roof surface recorded with the aid of laser guided infrared non contact thermometer.

Storage

Dr. Fixit HydroShield PUD Plus pails should be stored in dry and cool place on an upside down position. Protect the product against direct sunlight. Storage temperature should be between $+5^{\circ}$ C - 30° C.

Shelf Life

- Dr. Fixit HydroShield PUD Plus pails should be stored in dry and cool place on an upside down position. Protect the product against direct sunlight.
- Storage temperature should be between +5°C 30°C.
- 24 months from the date of manufacture in unopened & proper storage conditions.

Health & Safety

- Skin Contact: Wash skin with soap & water. Remove contaminated clothes.
- On eye contact: Immediately splash eyes with plenty of water. Consult Physician if irritation persists.
- Ingestion: It is based on Water Based Coating system, however, seek medical help.

Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals





Pidilite Industries Limited Construction Chemicals Division Ramkrishna Mandir Road, Post Box No. 17411 Andheri (E) Mumbai 400059 INDIA Tel +91-22-2835 7000 · Fax +91-22-2835 7008 www.drfixit.co.in · info.drfixit@pidilite.com

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