

# ACRYLATE WITH PU

### Description

Dr. Fixit Roofseal Classic is a revolutionary single-component roof waterproof topcoat coating. This innovative product combines waterproofing and heat insulation in one application. Formulated with Acrylate PU hybrid emulsion technology and reinforced with nanofibers, it offers superior performance and lasting protection.

Dr. Fixit Roofseal Classic meets ASTM D6083-TType II standard specification

#### Areas of Application

Existing flat or sloped roof surfaces such as:

- Brickbat coba finishes
- Cement mortar screeds
- China mosaic tiles
- Clay Tiles
- Ceramic Tiles.

### Features & Benefits

- Protection: Provides exceptional waterproofing and reduces surface temperature by up to 10°C in peak summer.
- Flexible & Crack Bridging: The highly flexible formula bridges crack up to 2 mm, offering long-lasting protection.
- Durable Coating: Suitable for light foot traffic, making it ideal for various roof applications.
- Easy Application: Single-component, self-priming, ready-to-use waterproof coating.
- Eco-Friendly Choice: Non-toxic and VOC-compliant water-based coating for a sustainable solution.

#### Method of Application

#### SURFACE PREPARATION

- Roof substrate must be pressure-washed with water jet having a minimum pressure of 1,400 psi is to be used to remove all dirt, dust, chalking and waste products.
- When encountering roof substrates that have living organisms such as algae, mold or fungus, should be clean with 3:1 bleach solution or biowash shall be used to kill and remove these organisms during the roof cleaning.
- Freshly laid cement sand concrete screed should be design greater than 80 mm thickness and 50mm at the end slope, using waterproofing additives in concrete screed will reduce the shrinkage potential. The concrete curing takes about 8 weeks to be fully cured before application of Top coat coating.
- Ensure the roof slope is at least 1 in 80 or 1 in 100, as per the specified requirements.
- Thoroughly inspect the terrace roof for cracks, blisters, ponding, exposed foam, and open seams. Evaluate the debonding of screeds or tiles on the terrace roof by tapping with a nylon hammer. Give special attention to areas around roof penetrations, ponding spots, and parapet wall cracks.
- Remove concrete screed, brickbat coba, China mosaic, or ceramic tiles if they are found to be debonded by more than 30% from the roof substrate during a hammer test. Proceed to reach up to the base slab level for fresh waterproofing as necessary..
- Ensure there is a 1 water drain outlet of minimum 100 mm dia for 500 Sq.ft floor area and gaps around pipe inserts should be sealed properly with polymer modified mortar.
- Stagnant water caused by undulations in the roof surface should be identified and repaired using Polymer-Modified Mortar (PMM).
- All joints / corners / rainwater outlets, marble / tile strip joints should be grouted with PMM.
- Ensure that all penetration points, mechanical equipment, HVAC & solar panels are suitably placed on the up stands.



#### SCREED REPAIR:

- Remove loose and damaged / hollow sound concrete roof screed in pockets with mechanical cutter.
- Clean the concrete screed with water to remove dirt and loose particles.
- Brush applies a bond coat of SBR based polymer & cement mixed in the ratio of 1:1 (SBR polymer 1: Cement 1) by volume to make it lump free slurry coat. Repair the damaged concrete screed surface with Polymer Modified Mortar mixed with SBR based polymer 10% by weight of cement in (M20) concrete in ratio of 1:1.5:3 i.e., one bag of 50 kg cements: 1.5 times volume of sand: 3 times volume of aggregates: 25L water.
- Level the repair mortar and finish with trowel by providing proper slope. Moist cures the repaired surface for 7 days. Air cure screed for 4-5 days, before application of roof topcoat coating system.

# TREATMENT OF ROOF WITH STAGNANT WATER:

- Make the surface rough by hacking and chipping out the undulations portion. Extend it on the larger area to create slop towards drain.
- Apply a bond coat of Dr. Fixit Pidicrete URP mix in the ratio of 1:1 (URP 1: Cement 1) by volume to make it lump free slurry when applied on in the pre wet surface.
- Prepare the Polymer modified mortar (PMM) mixing with Dr. Fixit Pidicrete URP 10% by weight of cement in the ratio of 1:3 when the bond coat is tacky, finishing with trowel. Moist wet curing must be done up to 3-4 days.

#### SCREED CRACK REPAIR:

- All visible hairline cracks on concrete roof screed > 0.50 mm and not giving hollow sound, should be cut and widen in V shape with mechanical cutter in the size (10mm W x 6mm D) and filling the same with Feviseal HY 100/300 sealant with suitable gun.
- Allow sealant to cure a minimum 72 hours (about 3 days).
- Apply a bandage of Dr. Fixit Roofseal Classic in 2 coats with 45 GSM glass fiber mesh over and above the crack repair surface.

#### RAINWATER OUTLETS TREATMENT:

- Hacking and chipping the surface around the rainwater drain outlet mouth up to 25mm in depth.
- Apply a bond coat of SBR-based polymer, Dr. Fixit Pidicrete URP, and cement mixed in a ratio of 1:1. (Polymer 1: Cement 1) by volume over the corners and pipe insert outlet gaps. Filling the gaps around the drain mouth with PMM polymer-modified mortar mixed with Dr. Fixit Pidicrete 10% by weight of cement ratio of 1:3. Providing and fixing 100-mm-wide, 45-gsm glass fiber mesh all around the periphery of the drain mouth of a rainwater outlet sandwiched with Dr. Fixit Roofseal Classic waterproof coating Apply the second coat for an interval of 4-6 hours, all over the rainwater outlet.

#### VERTICAL UP STAND DETAILING:

- Providing a 100mm x 100mm square or rectangle upstand of M20 grade concrete or with polymer modifiedmortar around mechanical equipment like HVAC, air conditioning, solar panels, etc.
- Apply a self-priming coat of Dr. Fixit Roofseal Classic, dilute with water in the ratio 2:1, and follow by application of 2 coats of Roofseal Classic waterproof coating sandwiched with 45 gsm glass fiber mesh without dilution in the interval of 4-6 hrs. Ensure that all the reinforcement is properly placed or positioned.

# WATERPROOFING APPLICATION:

- Apply one self-priming coat of Dr. Fixit Roofseal Classic (diluted with water in the ratio 2:1) at the rate of 10.0 to 11.0 sq. m./ltr. Allow it to dry for 2-3 hours.
- Apply the first coat of Dr. Fixit Roofseal Classic at a rate of 2 to 2.2 sq. m./ltr./coat. Allow the coating to air cure for a minimum of 4-6 hours to walk, and apply a second coat at 90° to the first coat. Apply second coat, at the rate of 2 to 2.2 sq. m./ltr./coat. The system will achieve a total dry film thickness of 450-500 microns.
- The coating should be terminated below the drip mold on the vertical surface. All corners, gaps, joints, and roofleak repair area and outlets shall be coated with two extra coats.
- Air cures the coating for 7 days.

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#### POST APPLICATION

 let the waterproof coating cure for at least 7 days before you proceed with your flood / pond testing by ponding water up to 50mm height for 24 hrs.

PARAPET WALL WATERPROOF COATING:

• Apply one undiluted coat of Dr. Fixit Raincoat Waterproof Coating (Basecoat) at 4.2-4.7 sg m/liter/coat for a 100-120-micron film. Follow with one coat of Dr. Fixit Raincoat Classic/Select Topcoat (color optional) after 6-8 hours, undiluted at 6.0-6.5 sg m/liter/coat.

OR

• For vertical Parapet or masonry plaster walls apply two coats of Dr. Fixit Roofseal Classic at 1.65-1.85 sq. m./ liter/ 2 coats without dilution. Follow with one coat of Dr. Fixit Raincoat Classic/Select Topcoat (color optional) after 6-8 hours, undiluted at 6.0-6.5 sg m/liter/coat.

# DRYING/ CURING TIME AT 30 °C / 85% RH

Touch Dry	60 min.
Hard Dry	4 to 6 hours

**Precautions & Limitations** 

- Do not apply if rain is expected within 24 hours after the application.
- Do not apply Dr. Fixit Roofseal Classic over expansion or moving joints directly.
- Do not apply during rain, fog, mist or when ambient temperature falls below 10°C or if the temperature might drop to this level within 4 hrs of application. Similarly, in case of extremely hot conditions where the surface temperature is more than 36°C, do not apply the product. Cool down the surface temperature by watering the area and then apply.
- Pidilite Industries does not give any warranty against dirt pick-up on the Dr. Fixit Roofseal Classic.
- Not recommended for roof areas larger than 500 sg m.
- There is a reduction in gloss, sheen, and age, which is part of the weathering process.
- Dr. Fixit Roofseal Classic is recommended over existing building Flat/ Slope roof surface like Brick-Bat Coba finish. Screed China mosaic Clav tile roof, Apply Dr. Fixit Primer AC for application on non-porous surfaces like Marble, Granite, glazed ceramic tiles. Not recommend for application on Kota, & kadappa stone tiles and mud phuska roof, and over mangalore tile roof surface.

#### **Technical Information**

PROPERTIES	TEST METHOD	SPECIFICATION AS PER ASTM D 6083 M - TYPE II	RESULTS
Solid Content W/S%	ASTM D 1644	> 50	57
Stormer Viscosity @23°C KU	ASTM D 562	80 -145	112
Density (gm./cc)	ASTM D 1475		1.31
Initial Elongation at Break %	ASTM D 2370	Min. 100	300
Tensile Strength N/mm <sup>2</sup>	ASTM D 2370	Min 1.4	2 .1
Permeance	ASTM D 1653	Max 50	17
Peal Adhesion to Concrete N/m	ASTM D 903	Min 350	750
Final Elongation after 1000 Hrs.	ASTM D 2370	Min 100	125

Accelerated weathering %



Accelerated weathering 1000 Hrs.	ASTM D 4798	No Cracking	No Cracking
Tear resistance K/Nm	ASTMD 624	>21	24
Water swelling %	ASTM D 471	Max 20	1.4
Low temperature flexibility after 1000 Hrs. accelerated weathering	ASTM D 522	Min Pass 13 mm mandrel @ 10°C	Pass
Crack bridging ability mm	EN 1062-7:2004		2 mm
Adhesion to Concrete N/mm <sup>2</sup>	ASTM D 4541		2.0
Solar Reflectance Index	ASTM E 1980		105

The values in the above table are obtained in controlled lab conditions when tested properly by competent laboratory. Note: Tolerance up to 5% on the lower side from the above values are allowable.

#### Theoretical Coverage\*

Material : self-primer coat + 2 undiluted coats

Total Coverage : 1.0-1.1 sq. m./liter to achieve DFT 450-500 microns

for vertical masonry walls: 1.65-1.85 sg. m./liter; 2 coats

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

\*\*Comparative thermal performance of Dr. Fixit Roofseal Classic on roofing temperature recorded from 1 pm to 3 pm of roof surface recorded with the aid of a laser-guided infrared non-contact thermometer. The degree of surface Temperature reduction will vary depending on the various factors, including heat gain during extreme heat by external walls and windows and surrounding environmental factors.

#### Packaging

1, 4, 10, 16, 20 litre

#### Shelf Life & Storage

- Shelf life is 36 months from the date of manufacturing in unopened conditions. To be stored in original and unopened packaging in a cool and dry place away from direct sunlight.
- Recommend temperatures of (10°- 30°Celsius) for storage of Dr. Fixit Roofseal Classic and anything below 10 °Celsius and above 30°Celsius is certainly not recommended.

#### Health & Safety Precautions

- 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



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