

Dr. Fixit Roofseal Classic



ACRYLATE WITH PU

Description

Dr. Fixit Roofseal Classic is single component, insulating elastomeric waterproof coating for roofs that offer a seal against water and heat. Dr. Fixit Roofseal Classic is based on Acrylate PU hybrid emulsion technology reinforced with nano fibres. It combines the benefits of waterproofing as well as heat reduction in a single product.

Standard Compliance / Specification

Meet the ASTM D6083 - Type II standard specification

Areas of Application

Over existing building Flat/ Slope roof surface like;

- Brick-Bat Coba finish surface
- Cement mortar screed
- China mosaic tile roofs.

Features & Benefits

- Waterproofing - Completely protect surfaces from water penetration
- Crack Bridging - Outstanding flexibility with crack bridging up to 2mm
- Tough coating - Suitable for light foot traffic
- Reflective roof coating - Reduces surface temperature up to 10°C** in the peak summer
- User friendly - Single component, Ready to use easy to apply
- Eco friendly - Non - toxic and VOC complaint water based coating

Method of Application

1 SURFACE PREPARATION

- Roof substrate must be pressure-washed with water with, a minimum working pressure of 1,400 psi is to be used to and/or 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.
- All new cement-sand, freshly laid screed / IPS surfaces should be allowed to age at least 12 weeks before application of topcoat surface coating.
- Ensure that the roof slope have a minimum of 1 in 80 or 100 is already provided.
- Check the soundness of the top screed, half round angel fillet / unsound plaster on vertical surface / joints surrounding pipe ducts of rainwater outlet, look for de-bonding signs by tapping with nylon hammer.
- 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 due to undulation in the roof surface should be marked and repaired with PMM.
- All joints / corners / penetration points, 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 and rounded with angle fillet

CRACKS TREATMENT

CRACKS ON IPS / SCREED - CRACK'S

- All hairline cracks more than 0.50mm and not giving hollow sound, on the IPS/screed or at the junctions of flat roof & vertical parapet wall, pipe joints, should be checked with nylon/ rubber hemmer. Cut and widen cracks with mechanical cutter up to 10mm in width.
- Clean cracks, of dust, residue or other contamination. Prime locally with the Dr. Fixit Pidiprime A with brush and allow to cure tack free. Fill all prepared cracks with Dr. Fixit PU Sealant. Allow the sealant to air cure for 72Hrs.



- Apply a coat of Dr. Fixit Roofseal Classic reinforce with, 45gsm glass fiber mesh cut to fit size in minimum 100mm wide centered over all cracks and while wet, cover, press the mesh it to soak. Then apply another coat of Dr. Fixit Roofseal Classic, until it is fully covered. Allow both the coats to cure for 5-6 hours to cure.

SCREED REPAIR:

- Check the existing roof surface with nylon hammer and remove the existing unsound, de-bonded screed, surface defects, etc. Remove the hollow screed and plaster surface with mechanical cutter.
- Clean the surface and brush 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.
- Mix Dr. Fixit Pidicrete URP 10% by weight of cement in (M20) concrete in ratio of 1:1.5:3 i.e. one bag of 50kg cements: 1.5 times volume of sand: 3 times volume of aggregates: 25L water. Level the repair mortar and finish with trowel.
- Moist wet curing must be done up to 3-4 days. Prolonged wet curing will minimizes the chances of cracking and improve the physical properties.

TREATMENT OF ROOF WITH STAGNANT WATER

- Make the surface rough by hacking and chipping out the undulations portion. Extend it on the larger area for creating 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.

2 WATERPROOFING APPLICATION

- Stir well prior to application.
- All joints / corners / penetration points, rainwater outlets, marble / tile strip joints and parapet wall and floor junction joint (corner rounding) over the length shall be treated prior to all application of Dr. Fixit Roofseal Classic by reinforcing minimum layer of 50 - 100 mm width, with 45gsm glass fibre mesh cut to size, embedded in between the two coats of Dr. Fixit Roofseal Classic to provide additional strength to the treatment. Allow the coating to dry for 4- 6 hrs. before application of second.
- Apply a coat of Dr. Fixit Roofseal Classic (diluted with water in the ratio 2:1) as Self-Priming 9 - 10 Sq.mtr / litre.
- Allow coating to dry for 4 hours prior to applying first coat & second coat.
- Apply two coats of Dr. Fixit Roofseal Classic @ 2.0 - 2.2 Sq.mtr / litre / coat, with the same application coverage. Application direction of second coat should be perpendicular to that of the first coat without water dilution to deliver a DFT of 450- 500 micron.
- Allow the system to air cure for 7 days minimum.
- For vertical surfaces: Apply two coats of Dr. Fixit Roofseal Classic with forced coverage of 3.3 -3.7 Sq.mt/ litre/ Coat.

3 MAINTENANCE & RECOATING OF DR. FIXIT ROOFSEAL CLASSIC

- Over a period of time or some years, if Dr. Fixit Roofseal Classic has developed cracks on exposure to weathering or extreme temperature variations, it is extremely easy to recoat over it again. Cracks if any can be cut in v groove and filled with PU sealant. Placing a 45gsm glass fibre mesh over a recoat, after properly cleaning and sanding the surface. Apply coats and check to see no void surface is left uncoated with second coat. Allow second coat to dry for 6-8 hours.

4 POST APPLICATION

- Conduct pond test after 7 days, Stagnated water up to 50mm height for 24 hrs.



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

- Touch Dry - 60 min.
- Hard Dry - 4 to 6 hours.
- Drying times may vary depending on the prevailing climatic conditions; low temperature and higher relative humidity may prolong the drying process.

6 TOOLS CLEAN-UP

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

Precautions & Limitations

- Do not apply if rain is expected within 48 hours after application.
- Do not apply Dr. Fixit Roofseal Classic over expansion or moving joints directly.
- Do not apply if the surface temperature is greater than 35°C or below 10°C, or likely to fall below 10°C during the application or drying period.
- Pidilite Industries does not give any warranty against dirt pick up onDr. Fixit Roofseal Classic.
- Not recommend for roof area more than 300 Sq.mtr.
- There is a reduction of Gloss /Sheen/Aging which is part of weathering process.
- Apply Dr. Fixit Primeseal Plus on smooth - Nonporous surfaces like Marble, Granite, glazed ceramic tiles & clay tiles, not recommend for application on Kota, & Kadappa stone, Mud phuska roof with brick tiles, Bituminous treatment.

Technical Information

PROPERTIES	TEST METHOD	RESULTS
Solid Content W/S%	ASTM D1644	57
Density (gm/cc)	ASTM D 1475	1.31
% Elongation at Break	ASTM D 412	300
Tensile Strength N/mm ²	ASTM D 412	2.1
Tear strength N/mm ²	ASTM D 624	24
Water absorption- 24 hr. dip (Max. 20%)	ASTM D 471	Passess
Pull off Adhesion N/mm ²	ASTM D 4541	2.0
Crack Bridging Test (mm)	ASNZ4548- 5	2 mm

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 ²	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. Accelerated weathering %	ASTM D 2370	Min 100	125
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 ²	ASTM D 4541		2.0
Solar Reflectance Index	ASTM E 1980		106

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.mtr / litre to achieve DFT 450 - 500 microns
for vertical masonry walls: 1.65 - 1.85 Sq.mt / litre/ 2 Coats

*Coverage may vary depending upon 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 laser guided infrared non-contact thermometer. The degree of surface temperature reduction will vary depending on the condition of the existing surface, site location, roof pitch and weather factor.

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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