

# Technical Data Sheet

## Rdymix Roofcure Pro

### Description

Rdymix Roofcure Pro is a heavy-duty terrace waterproof coating system, composed of specially developed highly elastic & resilient acrylic polymers, properly selected & graded fillers, lightfast & weather durable pigments, microfibres, additives & best quality fungicidal in water medium. It is used as a liquid applied waterproofing membrane for all types of building terraces. Rdymix Roofcure Pro is a three-layer system with coats in different colours ensuring proper build-up of the thickness, making it a reliable waterproofing system the coating performance can be enhanced for large roofs, by providing a fibre mesh that is embedded or sandwiched between the coats.

### Areas of Application:

Building roofs / terraces – Flat & sloping, over existing cementitious waterproofing treatments like brickbat coba, concrete screeds, acrylic coatings, etc.

### Features & Benefits

- **Film thickness** – Provides higher dry film thickness of 1 to 1.25 mm in three coat application.
- **Crack bridging** – Bridges cracks up to 2 mm width.
- **Application advantage** – No need to remove existing sound brickbat coba, plaster, concrete surface.
- **Suitability** – Can be used for flat as well as sloping roofs.
- **Strength** – Higher tensile strength, tear resistance & bond strength with cementitious substrates.
- **Resilience** – Forms highly elastic & resilient coating so helps to withstand the structural movements.
- **Durability** – Resistant to UV & weather conditions.
- **Abrasion resistant** – no additional protective coating is required for roof subjected to foot traffic.
- **Ease of application** – Can be applied by brush & roller easily.
- **Weight addition** – light in weight does not add extra weight over the roof.
- **Toxicity** – it is non-toxic in nature
- **Breathability** – it is breathable
- Easy to recoat existing surfaces coated earlier with Rdymix Roofcure Pro.

## Method of Application

### SURFACE PREPARATION

- Prepare the surface by thorough cleaning, washing and removing dust, dirt, oil, grease and loose particles.
- In existing old terraces with brickbat coba or screeds, the substrate must be checked for its soundness.
- Damaged or hollow portions, sharp edges, etc., must be cut and removed till the mother slab should be recoated with slurry of Rdy mix Rdybond and cement in a 1:1 proportion.
- After drying, the brick bat coba in that portion should be reinstated by mixing Rdy mix Rdybond in the base slurry as well as while doing the top coba.
- In other areas, where the coba is sound, the surface cracks must be filled with Rdy mix Crackcure No Shrink or polymer-modified mortar in case cracks are wider than 5 mm.
- Cracks less than 2 mm, should be cleaned free of dust with a vacuum cleaner.
- Apply Rdy mix Penitro Primer in the crack and let it dry, then pour Rdy mix Roofcure Pro in these cracks and allow it to dry ensure that the roof slope of a minimum of 1 in 100, is already provided.
- Bitumen waterproofing treatments if existing, must be completely removed by scarification or by other effective mechanical means.

## APPLICATION

- Dilute 2 parts of Rdymix Penitro Primer with 1 one part of water, dilution will cover 7 to 8 sq.mt. Allow to dry for 6 to 8 hrs. Apply the first coat of Rdymix Roofcure Pro without any dilution at the rate of 2 m<sup>2</sup> per litre and allow it to dry before taking up the second and third coats, the rate of application being the same.
- In larger roofs, an open woven glass fibre mesh of 2.5 mm x 2.5 mm must be sandwiched between the first and second coat. While the 1st coat is still wet, place the fibre mesh on it.
- After the coat dries, start applying the 2nd coat of Rdymix Roofcure Pro. This improves the performance of the coating dramatically, to take care of all movements in cracks and cold joints in the substrate caused by variations of high and low temperatures.
- This reinforcement with fibre mesh shall be extended up to the drip mould over the angle fillets. The sequence of colours of Rdymix Roofcure Pro can be decided depending on the desired top coat colour.
- In case only two colours are being used, ensure that the colour of the first and the third coat are the same. This would ensure correct consumption of material that will deliver a total DFT of 1 mm. Drying time between coats will be 6 to 8 hrs. Allow the system to air cure for 7 days minimum.
- A total thickness of 1 to 1.2 mm must be achieved when Rdymix Roofcure Pro is dry. Seven days after application of Rdymix Roofcure Pro, it should be checked for its adhesion to the substrate. For this, mark a square of 5 cm x 5 cm, for every 200 sq. m of the area.
- Cut the square with a knife diagonally across the square. Rip the coating and check the coating's thickness with Vernier callipers, to see if the dry film has an average thickness of 1 mm.
- This should be done in every 200 m<sup>2</sup> over the entire roof. Once these tests are done, reapply Rdymix Roofcure Pro over these portions, in accordance with the regular procedure.

## MAINTENANCE AND REPAIR

- Over a period of time or some years, if Rdymix Roofcure Pro has developed cracks on exposure to weathering or extreme temperature variations, it is extremely easy to recoat over it again, with only one coat of application of Rdymix Roofcure Pro.
- Cracks if any, can be treated by placing a fibre mesh over a recoat, while it is still wet. After this dries, it would need an additional coat over the mesh to strengthen the area.
- In rest of the area where there are no cracks or damage on the surface, you can just go in for only one coat of Rdymix Roofcure Pro, after properly sanding the surface.

## POST APPLICATION CHECKLIST

- Conduct ponding test by filling water up to 50 mm height for 48 hours to ensure leak-free terrace.
- testing of the coating thickness can be carried out in an area of 1 metre X 1 metre area of the roof, to check the thickness.
- In this area mark at least 5 squares of 5 cm X 5 cm. With a knife, each square must be cut diagonally and rip it.
- The dry film thickness of the membrane shall be checked with a Vernier Calliper, which should measure 1 mm.

## PRECAUTIONS & LIMITATIONS

- All corners, gaps, joints, protrusions & 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 or equipment.
- Do not apply Rdymix Roofcure Pro over expansion or moving joint to achieve the full proof waterproofing, parapet walls should be covered with Rdymix Wallblok TC never dilute Rdymix Roofcure Pro with water for ease of application.

## COATINGS & PAINTS TECHNICAL INFORMATION

Sr.no	Parameters	Test method	Typical Values
1	Solid Content	ASTM D 2369	69 %
2	Hardness Shore A	ASTM D 2240: 2002	80
3	Tensile strength	ASTM D 412: 2002	2.6 N/mm <sup>2</sup>
4	Elongation at Break	ASTM D 412: 2002	200 %
5	UV Resistant - accelerated	ASTM G154: 2000	Excellent: no thermal degradation,
6	Weathering (1000 hours)	NA	No cracking, chalking and discoloration
7	Adhesion strength	ASTM D 4541: 2002	0.9 N/mm <sup>2</sup>
8	Water vapour transmission	ASTM E 96: 2000	19 g/m <sup>2</sup> /day
9	Algae & Fungus Resistant	(SS 345: 1998)	No algae & fungus growth
10	Crack Bridging	ASTM C 836: 1995	No cracks up to 2 mm width
11	Rapid chloride permeability	ASTM C 1202 – 97	No cracks up to 1 mm (10 cycles) very low
12	Water permeability (Depth of penetration at 5 bar pressure)	BS EN 12390, Part 8:2000	6

### COVERAGE:

2m<sup>2</sup> per litre/coat

### PACKING:

## SHELF LIFE & STORAGE:

Shelf life is 36 months from the date of manufacturing in unopened condition store in a cool & dry place.

## Disclaimer:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge, understanding and experience of the product. The product can have a variety of different applications as well as differing application and working conditions in user environment that are beyond our control. We are therefore, not liable for the suitability of our product for the production/application processes and conditions in which user/customer uses them, as well as the intended applications and results. We strongly recommend that the user carry out their own prior trials to confirm such suitability of our product and its compliance with all applicable laws, regulations, and safety standards. The Information in the Technical Data Sheet does not constitute a warranty or guarantee, either express or implied, of any specific properties and suitability for any particular purpose.