



# SMARZKOT PLATINUM

Acrylate PU

#### **Discription:**

SMARZKOT PLATINUM is a single-component roof waterproofing topcoat. It combines waterproofing and heat insulation in one easy application. Made with Acrylate PU hybrid emulsion technology and strengthened with nanofibers, it provides excellent performance and long-lasting protection.

#### Uses:

Water proofing on existing flat or sloped roof surfaces such as:

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

#### Advantages/Characteristics:

- Non-toxic and VOC-compliant, making it a sustainable choice.
- A single-component, self-priming, ready-to-use waterproof coating.
- Perfect for roofs with light foot traffic.
- The formula is highly flexible and can cover cracks up to 2 mm, providing long-lasting protection.
- Offers excellent waterproofing and can lower surface temperature by up to 10°C during peak summer.

# Company Standard Compiance:



#### **Technical Information:**

Properties	Specification
Appearance	White Liquid
Density	1.33 g/cc
Volatile Organic Compound (VOC)	2.16 %
Surface Drying Time	60 min.
Initial Elongation at Break	400 %
Tear Resistance	18 N/mm <sup>2</sup>
Permeance	29 perms
Low Temp. flexibility after 1000 Hrs. accelerated weathering	PASS
Pull of Adhesion to concrete	19 N/mm <sup>2</sup>
Peel adhesion to concrete	54.52 N/mm <sup>2</sup>
Abrasion resistance (CS 17 Wheel - 1000 Cycle, 1.0 Kg)	22 mg
Dry Film Thickness	500 micron
Depth of Water Permeability 7 Bar	NIL
Peel adhesion to Mosaic Tile	49.65 N/mm <sup>2</sup>

Pull of f Adhesion to Mosaic Tile	1.82 N/mm <sup>2</sup>
Shore A Hardness	74
Water Absorption-24 Hrs.	PASS
Crack Bridging Ability	2 mm
Final Elongation at Break afer 1000 accelerated weathering 1000 Hrs	PASS
Initial Tensile Strength	25 - 3.0 N/mm <sup>2</sup>
Recoating Time	4-6 Hrs.
Solid Content	57-59
рН	8.56

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.

# Method of Application: Surface Preparation

- **Clean the Roof**: Pressure wash the roof with a minimum 1,400 psi water jet to remove dirt, dust, and debris.
- Treat Mold and Algae: Use a 3:1 bleach or biowash solution to kill and clean any algae, mold, or fungus on the roof.
- **Concrete Screed**: The new cement sand screed should be at least 80 mm thick, with a 50mm slope. Use waterproofing additives to reduce shrinkage. Let the concrete cure for 8 weeks before applying the topcoat.
- Check Roof Slope: Ensure the roof slope is at least 1:80 or 1:100, as required.
- **Inspect the Roof**: Look for cracks, blisters, ponding, exposed foam, and open seams. Check for loose screeds or tiles by tapping with a nylon hammer. Pay attention to roof penetrations, ponding areas, and parapet cracks.
- **Remove Loose Material**: If more than 30% of the screed, tiles, or other materials are loose, remove them and redo the waterproofing at the base slab.
- Install Drain Outlet: Make sure there's a 100 mm drain outlet for every 500 sq. ft. of roof area, and seal gaps around pipe inserts with polymer-modified mortar.
- Fix Stagnant Water: Identify and repair areas with stagnant water caused by surface unevenness using Polymer-Modified Mortar (PMM).
- **Seal Joints**: Use PMM to grout all joints, corners, rainwater outlets, and tile/marble strip joints.
- Place Equipment Correctly: Ensure that all roof penetrations and mechanical equipment

(HVAC, solar panels) are properly placed on upstands. over the corners and gaps around the pipe insert.

# **Rainwater outlet treatment**

- Hack and chip the surface around the rainwater drain outlet to a depth of 25mm.
- Apply a bond coat of BUTABOND SBR mixed with SBR-based polymer and cement in a 1:1 ratio
- Fill the gaps around the drain mouth with PMM polymer-modified mortar MICROCONE RGL at 10% of the cement weight (1:3 ratio).
- Install a 100mm wide, 45 gsm glass fiber mesh around the periphery of the drain outlet, then coat it with SMARZKOT PLATINUM waterproof coating.
- After 4-6 hours, apply a second coat of the waterproofing over the entire rainwater outlet.

## Screed crack Repair:

- Use a mechanical cutter to widen the cracks in a Vshape (10mm wide and 6mm deep). Fill the cracks with SEALCRACK POWDER using a suitable gun.
- Let the sealant cure for at least 72 hours (3 days).
- Apply two coats of SMARZKOT PLATINUM with 45 GSM glass fiber mesh over the crack repair area.

## Treatment of roof with stagnant water

- Roughen the surface by hacking and chipping out the raised areas, then extend the work over a larger area to create a slope towards the drain.
- Apply a bond coat of BUTABOND SBR mixed in a 1:1 ratio (URP to cement) to form a smooth slurry, and apply it to the pre-wet surface.
- Prepare polymer-modified mortar (PMM) by mixing BUTABOND SBR(10% of cement weight) in a 1:3 ratio. Apply it when the bond coat is still tacky, then finish with a trowel. Moist cure the surface for 3-4 days.

# Screed Repair:

- Use a mechanical cutter to remove any loose, damaged, or hollow concrete roof screed in patches.
- Clean the surface with water to remove dirt and loose particles.
- Apply a bond coat of SBR-based polymer mixed with cement in a 1:1 ratio to create a smooth, lump-free slurry.
- Repair the damaged screed with Polymer Modified Mortar (PMM), mixed with 10% SBR-based polymer by weight of cement, and in the ratio of 1:1.5:3 (cement:sand:aggregates). For example, mix 1 bag (50kg) of cement with 1.5 times the volume of sand, 3 times the volume of aggregates, and 25L of water.
- Level and finish the repair mortar with a trowel, ensuring a proper slope. Moist cure the surface for 7 days.
- Allow the screed to air cure for 4-5 days before applying the roof topcoat.

#### Water proofing Application:

- First, apply a self-priming coat of SMARZKOT PLATINUM mixed with water in a 2:1 ratio, at 10 to 11 sq. m./ltr. Let it dry for 2-3 hours.
- Then, apply the first coat at 2 to 2.2 sq. m./ltr./coat. Allow 4-6 hours for it to air cure, then apply a second coat at 90° to the first, using the same coverage rate. The total dry thickness should be 450-500 microns.
- The coating should stop below the drip mold on the vertical surface. Apply two extra coats on corners, gaps, joints, roof repairs, and outlets.
- Let the coating cure for 7 days.

# Vertical Upstand Detailing:

- Create a 100mm x 100mm square or rectangular upstand using M20 grade concrete or polymermodified mortar around mechanical equipment like HVAC units, air conditioning, solar panels, etc.
- Apply a self-priming coat of SMARZKOT PLATINUM, diluted with water in a 2:1 ratio. Then, apply two coats of SMARZKOT PLATINUM waterproof coating, sandwiching 45 gsm glass fiber mesh between the layers, with a 4-6 hour interval between coats. Make sure the reinforcement is properly placed.

## **Working Precautions:**

- Do not apply if rain is expected within 24 hours.
- Do not apply SMARZKOAT PLATINUM directly over expansion or moving joints.
- Don't apply during rain, fog, or mist. Avoid applying if the temperature is below 10°C or if it's expected to drop below this within 4 hours. In hot conditions (above 36°C), cool the surface with water before applying.

#### Limitations:

- Redwop does not guarantee resistance to dirt on SMARZKOAT PLATINUM .
- Not recommended for roof areas larger than 500 sq. m.

- Expect a reduction in gloss and sheen over time as part of normal weathering.
- SMARZKOAT PLATINUM is suitable for flat or sloped roofs with surfaces like Brick-Bat Coba, screed, China mosaic, or clay tiles. For non-porous surfaces.

#### 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 sq. m./liter; 2 coats

Note: Coverage may vary depending on the texture and porosity of the surface. Comparative thermal performance of SMARZKOT PLATINUM 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.

#### Storage & Shelf-life:

- 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 SMARZKOT PLATINUM and anything below 10 °Celsius and above 30°Celsius is certainly not recommended.

## Health & Safety

- Skin Contact: Wash with soap and water. Remove contaminated clothing.
- Eye Contact: Rinse eyes with plenty of water immediately. See a doctor if irritation continues.
- Ingestion: Though it's water-based, seek medical advice if swallowed.



ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance



EMS, and continually improve their environmental performance ISO/IEC 17025 enables laboratories to demonstrate that they operate competently

and generate valid results, thereby

promoting confidence in their work both

nationally and around the world.



ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.



ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.

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