

Kesari Flexi Top HI

Kesari Flexi Top HI (Heat Insulation variant) is a premium, high-performance elastomeric liquid waterproofing and solar reflective coating engineered for extreme climatic conditions. Formulated with advanced thermal-insulating hollow microspheres, specialized acrylic polymers, and weather-durable pigments, it provides exceptional waterproofing while actively lowering internal building temperatures through high solar reflectance and thermal emittance.

1. Product Technical Overview & Specifications

Technical Parameter	Description / Specification
Product Name	Kesari Flexi Top HI
Nature / Form	Single-component, liquid thermal insulating & waterproofing acrylic emulsion
Color & Finish	Bright Solar Reflective White
Packaging Sizes	Available in 20 kg, 30 kg, and 50 kg containers
Shelf Life	12 months in unopened, original containers in cool, dry conditions
Solar Reflectance (SRI)	High SRI value (> 100) for maximum solar heat rejection
Elongation at Break	Over 300% for superior crack-bridging capability

Core Functions	Solar heat-reflective roof insulation, terrace waterproofing, and weather-protective membrane.
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2. Recommended Areas of Application

- Exposed concrete roofs, flat residential/commercial terraces, and metal corrugated roofs
- Exterior heat-exposed walls, sunshades, and parapets
- Podium decks, balconies, and structures requiring energy-efficient cool-roof solutions

3. Core Application Systems & Execution Protocol

Step 1: Surface Preparation

- Ensure substrate is structurally sound, clean, and free from dust, grease, loose particles, oil, efflorescence, and laitance.
- Perform mechanical cleaning using a wire brush or high-pressure water jet. Allow complete drying.
- Repair structural cracks, honeycombs, or surface imperfections using Kesari Crackfiller or polymer-modified repair mortar.

Step 2: Priming Coat

- Apply a penetrating priming coat consisting of Kesari Flexi Top HI diluted with clean water (approx. 1 part water to 2 parts product) to seal pores and enhance adhesion.
- Allow the primer coat to dry completely for approximately 2 to 3 hours.

Step 3: Multi-Layer Thermal & Waterproofing Application

- **First Coat (Base Layer):** Apply Kesari Flexi Top HI undiluted uniformly across the primed surface. Embed non-woven fiberglass mesh in high-stress zones if required.
- **Second Coat:** Allow first coat to dry for 4 to 6 hours, then apply second coat perpendicularly (90-degree angle) for a complete monolithic barrier.
- **Coverage & Curing:** Yields ~1.2 to 1.5 sq.m per kg per 2 coats. Allow 7 days to cure fully before heavy foot traffic or water ponding tests.

4. Important Precautions & Limitations

- **Weather Conditions:** Do not apply if rain is forecasted within 4-6 hours or when ambient temperatures drop below 10°C. Protect fresh applications.
- **Roof Drainage:** Ensure proper structural slopes toward drain outlets to prevent stagnant water ponding for extended periods.
- **Safety:** Wear appropriate personal protective equipment (PPE) including gloves and safety glasses during application.