

SMARTCARE FLEXIDEX

WATERPROOFING SOLUTION

Elastomeric Acrylic Waterproofing Membrane.

PRODUCT DESCRIPTION

Asian Paints Berger SmartCare Flexidex is a single-component liquid-applied UV Stable and Flexible elastomeric acrylic water proofing membrane and protective coating. Upon curing, it forms a thick, seamless, durable membrane, thus offering ultimate waterproofing.

PRODUCT BENEFITS



Concrete Surface Protection



UV Resistance Properties



High Elongation Properties



Crack Bridging Ability

KEY FEATURES

- **Protects exposed concrete structures against efflorescence and salt migration** The coating forms a protective barrier that prevents the formation of white powdery deposits and the movement of salts through concrete.
- **Excellent UV resistance** The product is engineered to withstand prolonged exposure to sunlight without degrading, ensuring long-term performance on exterior surfaces.
- **Excellent elongation properties** The membrane possesses high flexibility, allowing it to stretch significantly without breaking or losing its protective qualities.
- **Elastomeric and crack bridging ability** Its elastic nature enables the coating to expand and contract with the structure, effectively covering and sealing hairline cracks.
- **Good resistance to chloride and sulphate ions** The formulation provides a strong defense against harmful chemicals like chlorides and sulphates that can cause concrete deterioration.
- **Resistant to water diffusion** It acts as a highly effective seal that restricts the passage of water through the treated surface, ensuring superior waterproofing.

PACKAGING

3.5 Ltr & 18 Ltr.

TECHNICAL PROPERTIES

| Properties | Value |
|---|--|
| Colour (dry film) | White / Grey |
| Finish (dry film) | Smooth |
| Theoretical Coverage (Actual coverage may vary depending on the nature and profile of the substrate porosity, texture, coat thickness, application method, wastage factor etc.) | 1-1.5 sqm./ liter/ coat to achieve 300-400 microns DFT. It is recommended to apply DFT of 600-800 mic. |
| Solid content (by weight) | 60 ± 5% |
| Density @ 25°C | 1.25 ± 0.05 kg/L |
| Elongation at break (ASTM D 412) | 424% |
| Tensile strength (ASTM D 412) | 1.5N/mm ² |
| Application temp, (°C) | 5 to 45 |

| Properties | Value |
|---|--|
| UV resistance @ 100 (hrs.) (ASTM G 154) | Passes |
| SRI (ASTM E 1980) | > 105 (white color) |
| Crack bridging ability (ASTM C836 /C836M-18) (2022) (ASTM C1305 /C1305M-16) | 3.2 mm No crack, loss of adhesion or any other type of failure |
| VOC (g/L) ASTM D 3960/ D 2369 | < 1 |
| Toxicity | Non-toxic |
| Flash point | Water Base |
| Weathering @100 hours (ASTM D G154-16) | No cracking, chalking, flaking, wrinkling or color change observed |
| Water penetration @ 5 bar (BS EN 12390-8) | Nil |
| Drying time @ 30°C | |
| Touch dry | 4 - 6 hours |
| Dry to recoat | 12 - 16 hours |
| Hard dry | 24 hours |
| Typical cured membrane properties | 28 days |

All values given are subject to 5-10% tolerance.

APPLICATION AREAS

- Recommended for the protection of all types of roofs - Concrete, Tiles, Plasters, Timbers.
- Metal profile roofs, Asbestos, etc.
- Protective Coating for PU Foam Insulations.
- Waterproofing Coating for Combo Roofing Systems.
- Protective Coating for Concrete Bridge Decks and Underpasses.
- Interior and Exterior.

APPLICATION METHOD

Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the coating are as follows:

1. Surface Preparation:

Concrete surface

- Clean the surfaces which shall receive the coating of all dirt, dust, loose material, oil, grease, loose particles, paint coating, etc., to allow for maximum adhesion.
- Cement laitance, all other deleterious materials which will affect the adhesion of the coating with the substrate should be removed by wire brushing, scrubbing or any other mechanical means.
- Cracks and potholes shall be repaired with concrete repair mortar from the SmartCare Repair* range.

Metal profile surface

- Metal Profile Roofs must be free of rust. This can be achieved by wire brushing or grit blasting.
- All gaps between overlapping metal panels must be sealed with a suitable material, and all fixings must be securely tightened

2. Priming:

- Porous substrates should be primed using one coat of SmartCare Flexidex mixed at a ratio of 3:1 with water (3-part SmartCare Flexidex and 1-part Water). The primer should be allowed to dry for a minimum of 2-3 hours before overcoating.
- The primer also functions as an adhesion promoter for the top coats. This primer coat can be applied by a brush, roller or airless spray.
- For Metal Profile Roofs, apply one coat of Epilux 70 Epoxy primer grey or Luxaprime- 1400 Alkyd Zinc Phosphate Primer.

3. Application:

- Mix the contents of the drum prior to the application to remove any sediment. SmartCare Flexidex can be applied by a stiff-bristle brush, roller, or airless spray. When applying by airless spray, dilute the coating with approximately 5% water to reduce the viscosity of the coating.

- Apply the first coat of undiluted material at a coverage rate of 1-1.5 sq. ft. mtr / liter/coat to achieve 300-400 mic DFT. It is recommended to apply a DFT of 600-800 mic.
- It is important to ensure that each coat is cured totally before applying the next coat. Allow a minimum of 8 hours drying time between coats.
- The second coat should be applied at right angle to the first at the same coverage rate, to ensure a full, unbroken coating to the substrate.
- For improved strength and flexibility, embed a 65 g/m² non-woven geo-textile membrane whilst the first coat is still wet on all corner joints, fillets, and pipe penetration joints. Allow the coating to cure fully for 72 hours to achieve its full properties.

PRODUCT LIMITATIONS

- Do not dilute except when used as a primer.
- Do not apply during rain or extreme temperatures.
- Protect from rain for a minimum of 48 hours after application.
- Avoid abuses which may lead to puncturing of the membrane.
- Ensure that the product is applied at least 6 inches inside the drain pipe.

STORAGE CONDITIONS

SmartCare Flexidex must be kept in a stored covered area in the original, unopened packs at 35°C, as excessive exposures to sunlight and UV will result in the deterioration of the quality of the product and reduce its shelf life.

SHELF LIFE

The product has a shelf life of 24 months if stored according to the recommended guidelines.

SAFETY PRECAUTIONS

- Always wear protective gloves, goggles, and clothing during mixing and application to prevent skin or eye irritation.
- Avoid direct contact with skin or eyes; in case of contact, wash the affected area with plenty of clean water.
- If inhaled, move the affected person to fresh air immediately and seek medical advice if discomfort persists.
- Ensure proper ventilation at the site of application to avoid inhalation of fumes.
- Keep away from heat, sparks, and open flames. Do not smoke during handling.

CERTIFICATIONS

Smartcare Flexidex complies with BS 1881, BS 6319 part 3, BS 6319 part 7, ASTM C 579, ASTM C 836, ASTM D 412, ASTM G 154, ASTM E 1980, ASTM C 1305/C1305M 16, C836M-18, ASTM D 3960/ D 2369, ASTM D G154-16 and BS EN 12390-8.

DISCLAIMER

The information provided in this Technical Data Sheet is based on laboratory tests, industry practices, and practical application experience. However, actual site conditions may vary and are beyond the manufacturer's control. Asian Paints makes no warranties, expressed or implied, and shall not be liable for any loss or damage resulting from improper usage, handling, or non-compliance with the recommended guidelines. Users are advised to test the product for suitability before full-scale application.