



TechFin® 2K Plus

High Performance Polymer modified Flexible Cementitious
Protective & Waterproof Coating/Membrane.

Description:

TechFin® 2K Plus is an elastomeric, two-component polymer-rich cementitious modified waterproofing system coating, composed of high-quality cement, properly selected & graded fillers, additives and liquid polymer. **TechFin® 2K Plus** maintains its flexibility under permanent immersion and when exposed externally. It is ideally suited for achieving waterproofing for the water retaining structures such as swimming pools, water tanks, reservoirs and protecting concrete and masonry structures that exhibit cracking and where further movement is expected.

When the two components of **TechFin® 2K Plus** are mixed together exhibits a good degree of thixotropy to enable ease of application by brush or spray techniques to give an even finish with no sagging, even in vertical situations. It hydrates to form a durable, highly alkaline, permanently elastomeric coating which not only protects the concrete or other substrates from water penetration and carbon dioxide diffusion but also accommodates movement in cracks. It is non-hazardous and ideally suited for application in confined spaces.

Application Includes:

- Water-retaining structure
- Any concrete, cement or masonry surface that is subjected to damage from moisture.
- Swimming pools, water tanks and reservoirs.
- Concrete roofs, basements, and basement walls and lift pits.
- Concrete foundations.
- Parking decks.
- Bathrooms, toilets, sunken portions, balconies, planters, etc.
- Podiums.

Features & Benefits:

- **Permeability-** Impermeable to water providing excellent waterproofing property.
- **Elasticity-** Highly elastic film formation which accommodates thermal movements.
- **Water pressure-** High film built-up to withstand 10m hydrostatic pressure without any leakages.
- **Seamless coating-** Forms seamless coating without any joints, prevents water leakage.
- **Bonding-** Excellent adhesion to concrete and masonry substrates hence longer life.
- **Toxicity-** It is Non-toxic and free of VOC.
- **Ease of application-** Easily applied by brush, roller or spray.
- **Application advantage-** Can be applied on damp surfaces leading to wide range application and instant remedy from moisture.

Application Instructions:

Surface Preparation

All surfaces must be smooth, sound and free from debris, loose or flaking material and areas of standing water. Surfaces must be free from contamination such as oil, grease, dust, loose particles and organic growth. Concrete surfaces must be fully cured, laitance free and free from any traces of shuttering, release oils and curing compounds.

All surfaces should then be grit blasted to remove all foreign matter and open up blow-holes, and provide a suitable key for **TechFin® 2K Plus**. All blow holes and imperfections should be filled with **TechFin®**, **TechnoCem™** range of repair mortar. Masonry surfaces should be fully cured (minimum 28 days) prior to application. Surface must be in SSD condition prior to application.

Mixing:

Shake the liquid well and pour around 75% into a clean mixing container. Slowly add the **TechFin® 2K Plus** Powder while mixing. Mix until a homogenous slurry, free from all lumps, is formed. Scrape any unmixed material from the side of the mixing container with a trowel and mix in. Finally, add the appropriate amount of the remaining liquid to achieve the required consistency for application.

Do not use part mixes. Do not add water, cement, sand or other materials.

- It is recommended that mechanical mixing (400 to 500rpm) should be used for 2 to 3 mins to ensure proper dispersion of the components.
- Pre-wet the surface with clean water.
- Do not allow pooling or ponding.

Application:

Apply the first coat of **TechFin® 2K Plus** mixed materials onto the prepared surface using a brush, trowel, squeegee or roller in a stifling action. Apply the second coat finish depending on site conditions and film thickness required. Before applying the second coat in alternate direction, leave the first coat to dry for approximately 2 to 4 hours depending on the thickness. If over coating is done more than 24 hours after applying the previous coat, or the previous coat has already dried out, the surface must be pre-wetted again.

Typical Properties at 25°C

Mix ratio (liquid: Powder), parts by wt.	1:1.4
Touch dry time, minutes ASTM D 1640	45
Inter coat application time, Hrs	6-8
Cure time after 2nd coat, Hrs	24
Crack bridging ASTM C 836	No cracking up to 2 mm
Adhesion strength, N/mm ² ASTM D 4541	2
Tensile strength (1.7-1.75 mm), N/mm ² ASTM D 412	5
Reduction of rapid chloride permeability, % (Compared to control) ASTM C 1202-97	92

Packaging:

TechFin® 2K Plus is supplied in 12, 24, and 48 Kg premeasure composite Pack.

Cleaning:

TechFin® 1C-FDW should be removed from tools, equipment and mixers with clean water immediately after use. Cured material can only be removed by mechanical means.

Storage & Shelf Life:

The shelf life is 12 months from the date of production if kept in dry store between 5°C and 30°C in the original, unopened containers. Storing in dry conditions at temperatures between 5°C and 30°C in the original unopened containers is recommended. If stored at high temperatures the shelf life may be reduced.

Coverage:

TechFin® 2K Plus covers approx. 1.7kg /m² for 2 coats @ 0.6mm Thickness per coat.

The coverage figure is theoretical due to wastage factors and the variety and nature of substrates, practical coverage figures may be substantially reduced.

Disclaimer: The product information & application details given by the company & its agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and the on-site workmanship are factors beyond our control, there are no expressed or implied guarantee / warranty as to the results obtained. The company does not assume any liability or consequential damage for unsatisfactory results, arising from the use of our products.

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Additional Information: Techno Builders Solutions® By Sterling Technotrade India Pvt.Ltd -The Specialist Construction Chemicals Company® range of associated products includes high performance concrete Admixtures, Adhesives, Protective Coatings, Concrete Repairs, Industrial Flooring, Grouts & Anchors, Joint Sealants, Surface Treatments, curing compounds, repair mortars, release agents, Grinding Aids & Waterproofing.

*Separate datasheet are available on these products

Water penetration (5 bar pressure) BS EN 12390	Nil
Recommended No of coats	2 (minimum)
Elongation at break, % ASTM D 412	>200
Hardness, Shore A ASTM D 2240	85
Pot life (approximate)	60 min. at 23° C and 60% RH 20 min. at 35° C and 65% RH
Application Temperature	+5° C to +35° C

Note: All technical data stated herein is based on tests carried out under laboratory conditions.

Precautions/Limitations:

- Do not add water to **TechFin® 2K Plus** during application.
- **TechFin® 2K Plus** needs 7 days for complete air curing.
- Do not cure with water or conduct any ponding test before it gets completely cured.
- Concrete & masonry surfaces must be cured for 28 days before application.

Health & Safety Instructions:

Protect your health while working with this material, always use safety goggles, gloves and safety clothing. When handling hazardous materials or pressurized materials, or during any application that may result in spills, splashes or airborne particles, a full face shield is strongly recommended. Protect yourself and others on the jobsite. Consider property in proximity of the application area to prevent loss or damage.

Protect your jobsite from unauthorized persons. Store all materials and equipment safely and out of reach of children and animals. Observe container labels, SDS, applicable laws and regulations and all instructions before using the product and equipment. In case one of the components comes in contact with the skin, wash thoroughly with soap and water. Provide adequate ventilation in volume and pattern in working area.

*Further protection: emergency showers and eyewash stations. Get immediate medical attention as needed.

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