

PRODUCT DESCRIPTION

STARCEM 2K is a two-component cementitious & acrylic polymer based flexible waterproofing & protective coating Made up from best quality Portland cement, properly selected & graded aggregates, additives & acrylic emulsion polymer as a binder. It is applied to waterproof and protect concrete and similar structures. Specially designed for swimming pools, submerged tunnels, sumps, bridge decks, marbles, granites retaining walls, pile heads, water tanks and a wide variety of extreme service class structures because on curing it forms an excellent elastomeric, tough, waterproof & protective layer over the substrate.

BENEFITS

- Provides a flexible & low permeable coating.
- Excellent adhesion to concrete, natural and artificial stone.
- Excellent resistance to chloride ion diffusion and carbon dioxide.
- Resistance to freeze-thaw cycles and de-icing salts.
- Excellent resistance to ingress of water.
- Provides slip resistant coating.
- Waterproof for concrete structures.
- Specially designed for water tanks.
- Good abrasion resistance
- Covers honeycombed and pitted poured concrete effectively
- Minimum surface preparation needed and low labour costs
- High resistance to the effects of long-term weathering, durable in all climatic conditions including UV attack.

USES

- Bathrooms and Toilets
- Water tanks, Storage tanks and Swimming pools
- Basements
- Channels
- Faces of dam walls
- Basins
- Balconies and terraces
- Cooling towers
- Underpasses
- Water retaining walls

TECHNICAL DATA SHEET

Nature	2 Component
Appearance	Milky white (Liquid) and gray (Powder)
Mixing Ratio	1:2 (Liquid: Powder)
Mix Appearance	Free flowing slurry
Pot Life at 30° C	38 mins
Application Temperature	Above 5°C
Elongation (%)	> 75 (ASTM D 412)
Tensile Strength (MPa)	0.58 (ASTM D 412)
Water Vapour Permeability gm/m²	15.7 (ASTM D 494)
Water Resistance	2.08 % (ASTM D 494)
Compressive Strength(MPa)	25 (ASTM C-39/C 39M)
Flexural Strength (MPa)	23 (ASTM C 78)
Adhesion to concrete	1.2 Mpa (ASTM D 4541)
Water Penetration	Passes the test (ASTM D 403)
Suitable for use in content with potable water	Passes The Test (BS 6920 Part1)
Coverage	1.3 kg/ sq. m of mixed material in 2 coats for 1 mm DFT depending on surface conditions

METHOD OF APPLICATION

- All surfaces should be dry and free from contamination such as soil, grease, loose particles, decayed matter, laitance, and all traces of mould release oils and curing compounds. This is best achieved by lightly grit-blasting the surface.
- Where moss, algae or similar growths have occurred, treatment with a proprietary biocide should be carried out after the grit-blasting process.
- Spalled and deeply disintegrated concrete should be removed to sound concrete and repaired with a SSPL repair system. For further advice, consult the local SSPL office.
- It is essential that all surfaces to be treated be pre-soaked with clean water prior to application of **STARCEM 2K**.

STAR SPECIALTIES POLYMERS PVT. LTD.

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Priming: To further improve waterproofing and bonding properties on porous substrates, we recommend super prime, a penetrating water repelling acrylic primer. Super primer which ensures proper adhesion of all brush able elastomeric membrane when waterproofing is done on porous substrates. It also acts as a bond layer between elastomeric coating and substrate. The surfaces to be primed must be dried before treating with super primer.

MIXING: Stir/Shake well the liquid component to a homogenous milky colour, before mixing transfer the entire quantity of liquid component into mixing container, gradually start the addition of powder component under constant mixing with a stirrer using motor stirrer at slow speed at 250 – 300 rpm for Approx. 5 minutes to a homogeneous & uniform free flowing slurry.

APPLICATION:

- Application of **STARCEM 2K** on hot substrates (i.e., over 40°C surface temperature) will need the prior application of a primer coat. Mix **STARCEM 2K** and water in slurry-like consistency and apply **STARCEM 2K** over the primer whilst it is still wet.
- For best results, surfaces should be damp. In order to obtain the protective properties of **STARCEM 2K**, it is important that the correct rates of application are observed.
- Use a short stiff brush (preferably 120 - 200mm width) and apply in one or two coats as required.
- Spray applications should use the correct mixing ratio to obtain satisfactory consistency. In hot climatic conditions, it is likely that spray application will be the best for exterior decorative finishes. Nozzle size should be 3-4mm and pressure of 6-8 bars should be used.
- It is recommended that for general resurfacing each coat should be 1mm thick. Areas subjected to light foot traffic should receive at least 2mm thickness of **STARCEM 2K** and an additional 2mm should be applied if conditions are moderate to heavy pedestrian traffic.
- If in doubt about the condition of the substrate, the local **SSPL office** should be consulted.

CLEANING

Clean tools and equipment with water before the material hardens.

PRECAUTIONS & LIMITATIONS

- Mix the entire quantity of both the components at one go.

- Do not use external powder with the liquid other than the powder offered by us, it will affect the Performance.
- Do not add water for dilution
- Where subsequent coatings or paints are required, trials should be conducted to ensure compatibility. For further advice, consult the local SSPL office.
- **STARCEM 2K** should not be applied where there is a likelihood of exposure to frost within 48 hours of the application.
- **STARCEM 2K** should not be applied in windy conditions where early-age dust adhesion may occur.
- **STARCEM 2K** should not be subjected to direct water submerged conditions unless any protective system is provided
- Do not apply when the ambient temperature is below 10°C or above 45°C.
- Do not apply during rains.
- Adhesion property may get affected over poor quality putty and very smooth surfaces.
- Make sure the surface has a pull-off strength more than 1.5 MPa.
- When applying on a concrete surface make sure the concrete is completely cured.
- Allow the coating for minimum 7 days of air curing before pond test

HEALTH & SAFETY

As with all chemicals, caution should always be exercised. Protective clothing such as gloves, masks, and goggles should be worn.

INHALATION: Inhalation of vapor or mist should be avoided. If inhaled symptoms include coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Immediately shift the victim to fresh air, and, if needed immediately start artificial respiration. Give oxygen if breathing is labored. Get emergency medical help.

EYE CONTACT: Flush eyes with water for 15 minutes and call for medical help.

INGESTION: Causes nausea, vomiting, and loss of consciousness. If accidentally swallowed do not induce vomiting rather call for medical help immediately.

SKIN CONTACT: Flush with water or soap and water until all traces have been removed. Seek medical attention if required.

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STARBOND

STARCEM 2K

Rev. No./SSPL-123/03

Product Data Sheet



SHELF LIFE & STORAGE

Shelf life is 12 months in a sealed container. Store in a cool, dry place away from sunlight at temperatures below 30°C.

AVAILABLE PACKING

STARBOND STARCEM 2K is available in 3 Kg, 15 kg & 30 kg

WARRANTY

The information given is based on our knowledge and performance of the material. Every precaution is taken in the manufacture of the product and our responsibility is limited to the quality of supplies with no guarantee of the results in the field, as the manufacturer has no control over site conditions or execution of work.

DISCLAIMER

The product information & application details given by the company & its agents have 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 the suitability of products meeting their requirements 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/warranties 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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