

Strutop® Brush

Flexible Acrylic Polymer Modified Protective & Decorative Coating for Concrete & Masonry

Uses

To protect atmospherically exposed reinforced concrete structures from attack by acid gases, chloride ions, oxygen and water. The product is also suitable to protect other cementitious substrates and masonry. It is suitable for use on all types of structures, including those in coastal environments. It is equally suitable for new and existing structures.

The product is designed to re-face and even out variations in concrete and masonry surfaces and bridge shrinkage cracks. It provides a seamless, flexible waterproof coating which is suitable for water tanks, reservoirs and rooves. The product provides a tough durable wear resistant coating which can withstand light pedestrian traffic, has excellent weather resistance for exterior applications and provides a decorative function.

Advantages

- Excellent barrier to carbon dioxide, chloride ions & water
- Allows water vapour to escape from the structure
- Waterproof
- Suitable for water retaining structures
- High resistance to the effects of long-term weathering, durable in all climatic conditions including UV attack
- Minimum surface preparation needed low labour costs
- Nontoxic
- Ideal for potable water tanks
- Flexible, with thermal expansion similar to concrete
- Covers honeycombed & pitted poured concrete effectively

Description

Strutop Brush comprises a two component acrylic polymer modified cementitious coating supplied in ready mix kits. It requires only the site addition of clean water to produce an easily Strutop Brush coating. Strutop Brush can be simply applied by stiff brush, roller, spray or trowel to obtain the desired texture.

Properties

Appearance	Gray & White Cementitious Powder (special colours on request)
Coverage	Brush applied: 18 – 20 m ² per kit / 1 coat Spray applied: 22 – 24 m ² per kit / 1 coat Trowel applied: 14 – 16 m ² per kit / 1 coat
Application temp.	Not less than 5°C

Specification clauses

The protective coating shall comprise specially selected cements, graded hardwearing aggregates and additives supplied in powder form together with a liquid component of blended acrylic co-polymers and wetting agents. The total dry film thickness of the coating shall not be less than 2 mm and shall be capable of providing resistance to wear and weather and good chemical resistance to mild inorganic acid solution, diesel oil, gasoline, chlorides, de-icing salts, effluents and organic solvents. It shall exhibit positive water pressure resistance up to 7-meter head, dependent on coating thickness.

Instructions for use

Surface preparation:

All surfaces should be dry and free from contamination such as oil, grease, loose particles, delayed matter, moss, algal growth, laitance and all types 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 STRUMIX repair system.

Mixing:

Strutop Brush liquid concentrate should be poured from the plastic container in to the metal drum provided. An equal volume (1 to 2 liters) of clean fresh water is added for brush application consistency and mixing commenced with a propeller agitator attached to a slow speed drill (500 r.p.m.). The powder component should be added gradually to the liquid to avoid lump formation

Strutop Brush

and mixed for 2 to 4 minutes. Strutop Brush should be immediately used after mixing.

Do not mix more material than can be used within the pot life. Keep mixing Strutop Brush during the application.

Mixing ratio: powder: Liquid: Water: 10: 4: 1 to 2 (kg)

Application:

For best results, surface should be damp. In order to obtain the protective properties of Strutop Brush, it is important that the correct rates of application are observed. Use a short stiff brush preferably 120 – 200 mm width and apply in one or two coats as required. Spray or trowel 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 - 4 mm and pressure of 6 – 8 bars should be used.

The application of Strutop Brush should not commence if the temperature of the substrate is below 5°C. Application of Strutop Brush on hot substrates, i.e. over 40°C surface temperature will need the application of a primer coat of mixed Strutop Brush and water in slurry like consistency and supply Strutop Brush over the primer whilst it is still wet.

It is recommended that for general resurfacing each coat should be 1 mm thickness. Areas subjected to light foot traffic should receive at least 2 mm thickness of Strutop Brush and an additional 2 mm should be applied if conditions are moderate to heavy pedestrian traffic.

Cleaning:

Immediately following the application of Strutop Brush, clean all tools and equipment with clean water. Cured material can only be removed mechanically.

Limitations

Strutop Brush is formulated for application to clean; sound concrete or masonry. Where subsequent coatings or paints are required, trials should be conducted to ensure compatibility. Strutop Brush is compatible with most forms of subsequent coating. Compatibility and soundness should be accessed on a trial area.

Application of Strutop Brush should not commence if the temperature of the Strutop Brush is below 5°C. Strutop

Brush should not be applied where there is a likelihood of exposure to frost within 48 hours of the application. The product should not be applied in windy conditions where early age dust adhesion may occur, or where rain is likely within 2 hours at 20°C or 20 hours at 5°C (up to 80% RH). It should not be applied when the prevailing relative humidity exceeds 90%.

Packaging

14 kg packs consist of:

Powder: 10 kg bag

Liquid: 4 kg container

Storage

Strutop Brush has a minimum shelf life of 12 months at 20°C if kept in a dry store in the original, unopened packs. The shelf life will be reduced at higher ambient temperatures.

Precautions**Health and safety:**

Strutop Brush is alkaline and should not come into contact with skin and eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust mask should be worn. If contact with skin occurs, wash with water. Splashes to eyes should be washed immediately with plenty of clean water and medical advice sought.

Fire:

Strutop Brush is non-flammable.

