

Softcoat®

Shrinkage Compensated, Fibre Reinforced, Repair Mortar System

Uses

Softcoat is suitable for sprayed or trowelled applications, with high build characteristics.

Typical applications would include, but not be limited to, the following:

- All types of structural repair which can be applied by trowel or wet spray
- Repair of structural members subjected to repetitive loading including application in trafficked areas
- Repairs to reinforced or pre-stressed beams or columns
- Repairs in industrial area, especially those containing mineral oils, lubricants etc
- Repairs in marine environments

Advantages

- Wet or dry spray application- rapid application of large quantities
- Low rebound - when dry spray applied rebound is minimal with subsequent saving in material cost
- Low permeability - gives excellent resistance to attack by aggressive elements

Description

Softcoat is supplied as a ready to use blend of dry powders, which requires only the addition of clean water to produce a highly consistent cementitious repair mortar suitable for structural concrete and masonry repairs.

Softcoat contains no metallic aggregate and is chloride free. Softcoat is formulated for sprayed or trowelled applications, in thicknesses upto 30 mm in one layer by hand application. Greater thicknesses can be achieved when spray applied.

Properties

Appearance	Gray Cementitious Powder	
Compressive strength (MPa) (ASTM C109/109M-02)	1 Day	25
	7 Days	45
	28 Days	60
Flexural strength (MPa) (BS6319, Part 3 : 1998)	1 Day	3.5
	7 Days	7
	28 Days	9.5
Bond Strength (MPa) (BS 1881, Part 207)	> 0.5	
Application temperature	5 - 40°C	
Water permeability (DIN 1048)	< 10 mm	

Instructions for use

Preparation:

It is essential that the substrate to be repaired is sound, clean and free of all contamination.

The damaged areas of concrete to be removed must be clearly identified. The Perimeter of the area should be saw cut to a depth of 10 mm and the edges cut as neatly as possible keeping the sides square.

Feather-edging is not permitted and a minimum thickness

of 10 mm must be maintained over the whole area. The substrate should be prepared to provide a rough surface having at least 5 mm amplitude at 20 mm frequency.

If unsound or oil contaminated concrete is found to extend beyond the pre-marked area, consult the engineer in charge. Subject to approval cut back to clean sound concrete.

If reinforcement is corroded ensure that the back of the steel has been exposed. Reinforcement should have all rust removed by the use of power tools, abrasive blasting (wet or dry) or wire brushing.

Water Saturation:

Thoroughly saturate the surface of the concrete to provide a saturated surface dry condition. Poor quality concrete may require soaking for a significant length of time. Any surface water should be removed using an oil free compressed air-jet.

Mixing:

Softcoat should be mixed mechanically with a Heavy Duty, slow speed drill or a forced action mixer fitted.

Add 3 litres of water into a suitably sized mixing vessel for full bag mixing. Do not use part-bags. It is suggested that the temperature of the water should not exceed 20°C, so that the temperature of the final mixed material is not greater than 30°C.

With the mixer in action, add one full bag of Softcoat and mix for 3 - 5 minutes, until the mix becomes fully homogeneous. (Water levels may be adjusted to allow good spray techniques between 3 & 3.5 litres per bag)

Application:

After mixing, Softcoat can be sprayed or trowel applied. When applying by hand, Softcoat must be forced tightly into the substrate to ensure intimate contact with the pre-wetted substrate.

Leveling and initial finishing should be carried using a wooden or plastic float. Final finishing should be carried out using a steel float.

When the material has stiffened to the point where finger pressure lightly marks the surface, a final firm troweling should be given using a steel float.

Curing:

Softcoat demands good curing. Particular care is required in hot/windy conditions. Curing is to be commenced immediately either by applying a single coat of Capcobond MO40 or by covering the work with plastic sheet fixed over wet hessian and taped at all edges.

Cleaning:

Softcoat should be removed from tools and equipment with clean water immediately after use.

Limitations

- Softcoat should not be used when the ambient temperature is below 5°C and falling
- Softcoat should not be exposed to running water either during application or prior to final set

Softcoat®

Packaging

Softcoat is available in 25 kg bags.

Storage

Softcoat 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:

Softcoat 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:

Softcoat is non-flammable.