Softcoat® AP

Two Component, Polymer Modified Cementitious Waterproof Repair Mortar

Uses

Softcoat AP is designed for application to imperfections in concrete and masonry surfaces in wet Area.
It is suitable for application in the range ۰ to ۳۰ mm, and can be used in the following situations:
- Concrete repair in marine climates
- General reprofiling over large areas
- Filling blow holes prior to overcoating
- Vertical repairs

Advantages

- Low permeability provides good protection against carbon dioxide and chlorides
- Excellent bond to concrete substrate
- Formulated for use in hot climates
- Shrinkage compensated
- Contains no chloride admixtures

Description

Softcoat AP 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 general purpose concrete and masonry repairs.
Softcoat AP contains no metallic aggregate and is chloride free.
Softcoat AP is formulated for sprayed or trowelled applications; in thicknesses upto ۳۰ mm in one layer by hand application. Greater thicknesses can be achieved when spray applied.

Properties

Appearance	Gray Cementitious Powder	
Compressive strength (MPa) (ASTM C۱۰۹/۱۰۹M۰۲-)	۷ Days	۳۵
	۲۸ Days	٦۰
Flexural strength (MPa) (BS٦۳۱۹, Part ۱۹۹۸ : ۳)	۷ Days	۷
	۲۸ Days	۱۱
Bond Strength (MPa) (BS ۱۸۸۱, Part ۲۰۷)	> ۱	
Application temperature	°٤۰ - ٥C	
Water permeability (DIN ۱۰٤۸)	< ٤ mm	
Water absorption (BS ۱۸۸۱, Part ۱۲۱)	< ٪۱	

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 ۱۰ mm and the edges cut as neatly as possible keeping the sides square.
Feather-edging is not permitted and a minimum thickness of ۱۰ mm must be maintained over the whole area. The substrate should be prepared to provide a rough surface having at least ٥ mm amplitude at ۲۰ 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 basting (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 AP should be mixed mechanically with a Heavy Duty, slow speed drill or a forced action mixer fitted.
Add ۳ 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 °۲۰C, so that the temperature of the final mixed material is not greater than °۳۰C.
With the mixer in action, add one full bag of Softcoat AP and mix for ٥ - ۳ minutes, until the mix becomes fully homogeneous. (Water levels may be adjusted to allow good spray techniques between ٤,٥ & ۳,٥ litres per bag)

Application:
After mixing, Softcoat AP can be sprayed or trowel applied. When applying by hand, Softcoat AP 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 AP 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 AP should be removed from tools and equipment with clean water immediately after use.

Limitations

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

Softcoat® AP

Packaging
24 kg packs consist of:
Powder: 20 kg bag
Liquid: 4 kg container

Storage
Softcoat AP has a minimum shelf life of 6 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 AP 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 AP is non-flammable.