AQUASHIELD

ELASTOMERIC , ANTI-CARBONATION PROTECIVE COATING

DESCRIPTION

AQUASHIELD system consists of a silane-siloxane primer AQUASHIELD PRIMER, which penetrates deep into concrete and provides excellent water repellency and a top coat of single component acrylic polymer based high performance elastomeric coating Aquashield. The system cures to form a weatherproof coating with high diffusion resistance to carbon dioxide making it ideal for protecting RCC structure. It provides protection against aggressive atmospheric pollution and chloride ions, and is breathable allowing moisture vapour to pass through..

FEATURES & BENEFITS

- Cures to form an elastomeric membrane
- capable of facilitating movement in the substrate.
- Accommodates live crack movement up to 2mm
- Suitable for wide range of construction substrates.
- Breathable coating.
- Fast and easy application.
- High elongation and recovery rate.
- Resistances to sulphate attack.
- Excellent carbon dioxide diffusion resistance
- High diffusion resistance to chloride ions.
- Long term UV protection.
- Non hazardous – Water based acrylic formulation.

BASIC USES

AQUASHIELD system is recommended as an anti-carbonation, weather and water resistance coating for bridges, walls, marine structure, etc. It is suitable for protecting wide range of construction substrate both in new and existing structure.

PRIMARY APPLICATION

- Parking Structures
- Bridges
- Marine Platforms
- Auto/Truck repair bay
- Ramps walls
- Exterior Concrete Surfaces

DIRECTION OF USE

Surface Preparation: All surfaces to be treated should be clean and free from all contamination detrimental for bonding. Surface cracks and any nsound concrete should be removed and reinstated to a sound surface suitable for treatment. Curing compound and previously coated materials should be removed with proper tools and equipments.

Primer Application : AQUASHIELD PRIMER should be applied on the prepared surface by flood coats, preferably by spray equipment, but also can be applied by roller or brush. Under no circumstances the primer should be over-coated until the surface is completely dry. Grass, Joint sealants, asphalt and bitumen-painted areas should be protected during application.

Top Coat Applications: AQUASHIELD topcoat should be applied by roller or airless spray to the primed substrate to achieve a uniform unbroken coating. Two or more coats are recommended to achieve the required thickness and the coating should be applied perpendicular to each other. The time interval between the coats depends on the temperature and RH, however a minimum of 4 hrs., should be allowed @ 25 deg. C

TECHNICAL PROPERTIES

Solid content by volume	:	50%
CO2 diffusion resistance (Taywood Method)	:	>250m @ 200μm dft
Chloride ion Diffusion coefficient (60 days) (Taywood method)	:	Nil
Reduction in water absorption (ASTM C642)	:	92%
Reduction in chloridei on penetration	:	96%
Elongation (ASTM D412)	:	400%
Adhesion (ASTM D4541)	:	1 N/mm^2
Tensile Strength (ASTM D412)	:	3 N/mm^2
Overcoating Time	:	4hrs
Full Drying Time	:	24hrs

COVERAGE	Coverage rates will depend on the surface profile. The recommended minimum coverage rates are: **AQUASHIELD PRIMER : 0.25 Lt/m^2 AQUASHIELD TOPCOAT : 0.40 lt/m^2**
PACKAGING	AQUASHIELD PRIMER and AQUASHIELD Top Coat are packed in 20 Lt. pails.
COLOR	Available in White,Grey and Beige colours.

CLEAN-UP

Clean tools and equipment with clean water before AQUASHIELD dries.

STORAGE

AQUASHIELD PRIMER and AQUASHIELD have a shelf life of 12 months, if kept in a dry, store in the original unopened packs.

Store in a cool, dry conditions, away from sources of heat and naked flames, in the original unopened pails

PRECAUTIONS & LIMITATIONS

- New concrete / masonry surfaces should be minimum 28 days old
- Do not apply primer over membrane forming sealers.
- Ensure the temperature should be 3°C above dew point while application.
- Protect adjacent areas from overspray.
- Opened containers should be covered always when not in use.
- In high temperature, the containers should be kept closed to prevent skinning of top layer.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quailty Procedures centified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high erformance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

"High Quality Construction Chemicals"
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