



Crystalline Waterproofing Technology

Drytex -CW400 is a blend of Portland cement, well-graded sands, and active chemicals, when applied to concrete cause a chemical reaction in the pores and capillarity of the substrate. This reaction generates a non soluble fibrous crystalline throughout the concrete to which applied, avoiding the penetration of water from any direction.

Can waterproof underground structures from the inside against hydrostatic pressure. Drytex -CW400 works on positive and negative pressures. Can be applied to moist concrete. Drytex-CW400 requires moisture to produce the crystalline formation, therefore if the substrate is dry ,it must be pre dampened prior to application. It becomes an integral part of the concrete. This is possible due to the crystalline penetration action of Drytex -CW400.

Application Field:

Reservoirs , Sewage and Water Treatment Plants , Underground Vaults , Foundations , Tunnels and Subway systems , Swimming pools

Features:

- Protects concrete and reinforcing steel bars. Drytex -CW400 protects from concrete deterioration, efflorescence and steel oxidation by providing a highly alkaline environment and clearing up any signs of moisture in the surface.
- Avoids water condensation. it allows the passage of air. Highly resistant to aggressive of chemicals
- Is non Toxic, suitable and recommended for water tanks. Can seal hairline cracks up to 0.4mm and allow concrete to breathe

Surface Preparation:

All surface to be waterproof shall be examined from tie holes and structural defects(cracks, faulty construction joints, etc.) these shall be repaired

Surface must be clean and free from any loose material, such as paint, blooming, gypsum plasters, that could impair the products adhesion. Prior to any application of Drytex -CW400 products surfaces must be thoroughly wetted with water (free water shall be removed), to make sure the migration of crystalline chemicals into the capillary voids in the concrete.

Specification

Compressive strength N/mm²/(psi)	39.5(5616) after 7 days
Flexural strength	9.2(1308) after 7 days
Water permeability	15g/mm²/day
Adherence strength (direct pull of)	>2.5N/mm2 355 PSI
Indirect pressure	5 bar
Direct pressure	18 bar
VOC	0g/L



Dry powder shall be mixed with clean water. Materials shall be mixed in quantities which can be applied within 20-30 minutes. As the mixture thickens, it shall be stirred frequently, however, no additional water shall be added.

Mixing for brush application. Mix Drytex -CW400 using a slow speed drill(250rpm). For small jobs ,may be mixed by hand and trowel. Missing ratios shall be as follows:

Slurry Coat:5 powder to 2 water (5:2) Dry-Form:3 powder to 1 water (3:1)

Mixing for spray application –spray applications may be require slightly different ratios in order to match the type of equipment.

As orientation only the proportions are as follows: 5 powder to 3 water.

Construction Joints

Drytex -CW400 in slurry shall be applied at the rate of 0.5-1kg/m² to all joint surface between pours. Where joint surface are not accessible prior pouring new concrete the slurry shall be applied to the joint surface prior to erection of formwork.

Where it is not possible to coat the joint surface with a slurry, apply Drytex -CW400 in dry powder form at the rate of 0.5 kg/m² onto the moistened joint surface before the next pour. The powder should be sprayed lightly with clean water.

Repair of Surface defects

Apply a slurry coat of at the rate of 1-2 kg/m² to the slot. Allow the slurry to set, then fill cavity

Coves: Drytex-CW400 shall be trowelled and packed into a coves shape where as indicated on the drawings. Sealing strips shall be filled with Drytex-CW400 at minimum dept of 1.5 cm wide X 12.75 cm depth and compacted tightly using a pneumatic hammer. Spraying For larger jobs an approved spray equipment may be used. Spray nozzle shall be held close enough to ensure that slurry forced into surface pores, hairline cracks, etc.

Second Coat

A second coat shall be used in most cases after the first coat has dried, (wet again the surface before applying the second coat)

Coverage 1.5 kg/sq.m

Packaging 20 / 25 Kg Bag

Storage

12 months in original containers stored in cool, dry conditions ie, not exceeding 30°C . Storage above this temperature may reduce storage life.

Health and Safety

Wear suitable protective clothing, gloves and eye protection. If working in confined area. Suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection





