

TECHNICAL DATA

DRY CEM

CRYSTALLINE WATERPROOFING

DRY CEM 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 nonsoluble 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. DRYCEM works on positive and negative pressures.

Can be applied to moist concrete. DRYCEM requires moisture to produce the crystalline formation, therefore if the substrate is dry ,it must be predampened prior to application.

It becomes an integral part of the concrete. This is possible due to the crystalline penetration action of DRY CEM.

Protects concrete and reinforcing steel bars. DRY CEM protects from concrete deterioration, efflorescences 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.

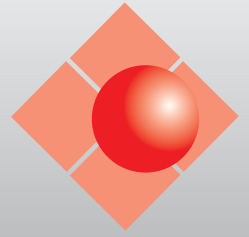
Is non Toxic. suitable and recommended for water tanks

SURFACE PREPARATION

All surface to be waterproof shall be examined from tie holes .and structural defects(craks, 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 DRYCEM products surfaces must be thoroughly wetted with water (free water shall be removed), to made sure the migration of crystalline chemicals into the capillary voids in the concrete.



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Compressive strength N/mm ² /(psi)	39.5(5616)	after 7 days
Flexural strength	9.2(1308)	after 7 days
Water permeability	15g/mm ² /day	
Adherence strength (direct pull of)	>2.5N/mm ²	355 PSI
Indirect pressure	5 bar	
Direct pressure	18 bar	

MIXING

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 DRY CEM by using a slow speed drill(250rpm). For small jobs ,DRYCEM may be mixed by hand and trowel. Missing ratios shall be as follows:

Slurry Coat:5 powder to 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

DRY CEM 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 dry cryst- seal 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.



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REPAIR OF SURFACE DEFECTS

Apply a slurry coat of dry cryst -seal at the rate of kg/m² to the slot. Allow the slurry to set, then fill cavity with a Dry Form.

Coves- dry cryst- seal shall be trowelled and packed into a coves shape where as indicated on the drawings.

Sealing strips.-shall be filled with dry cryst-seal 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

25 KG BAG

STORAGE

12 months in original containers stored in cool,dry conditions ie, not exceeding 30 0 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.

