



Life of Construction

CLEXOKRYST-SEAL (SURFACE APPLIED CRYSTALLINE CONCRETE WATERPROOFING SYSTEM) CECPL-1008

OVERVIEW

CLEXOKRYST-SEAL is a single component unique reactive chemical treatment for the waterproofing, protection and repair of concrete. CLEXOKRYST-SEAL consists of Portland cement, finely graded sand and active proprietary chemicals. The active chemicals diffuse into the substrate and react with moisture and the constituents of hardened concrete to cause a catalytic reaction. This reaction generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete, as well as cracks, permanently sealing the concrete and preventing the penetration of water and other liquids from any direction.

PROPERTIES

- Good resistance against aggressive media with a PH range of 3-12 and against soft water with low ion content.
- Shrinkage compensated, no spider-web cracking.
- Can be applied on damp surface.
- Does not require sealing lapping, and finishing of seams at corners, edges or between membranes
- Becomes an integral part of the substrate
- Self-healing properties of up to 0.3-0.4 mm static cracks.
- Non-toxic
- Potable water approved
- Good sulphate resistance

AREAS OF USES

- Waterproofing of basements and below grade parking structures.
- Suitable for horizontal and vertical walls.
- Waterproofing of portable water structure.
- Protection of damp and spill-ways.
- Waterproofing of elevator pits.
- Slab waterproofing (dry shake application).
- Waterproofing of Sewage structures, foundations, tunnels and subway systems

INSTRUCTIONS FOR USE

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the waterproofing system are as follows:

For further details visit: www.clexoengineering.com

October 2022 – Issued by CLEXO Technical Centre,

We are driving Waterproofing administrations supplier and waterproofing workers for hire in India. We give 5 and 10 years guarantee (relies upon the material quality) on our all administrations including new and old administrations from us.

CLEXO ENGINEERING & CHEMICALS PVT. LTD. has remained an expert waterproofing administrations worker for hire on both new developments

SURFACE PREPARATION

Concrete surfaces to be treated must be clean and free of laitance, dirt, film, paint, coating or other foreign matter. Surfaces must also have an open capillary system to provide "tooth and suction" for the **CLEXOKRYST-SEAL** treatment. If surface is too smooth (e.g. where steel forms are used) or covered with excess form oil or other foreign matter, the concrete should be lightly sandblasted, water-blasted, or etched with muriatic (HCL) acid. Refer to local regulations for sandblasting or use of muriatic acid.

STRUCTURAL CRACK REPAIRS –

For cracks larger than 0.4mm or for actively leaking cracks the following repair procedures are recommended. Chip out cracks, faulty construction joints and other structural defects to a depth of 40mm and a width of 22mm. A "V" shaped slot is not acceptable. The slot may be saw cut instead of chipped but ensure that the slot is dovetailed or otherwise shaped such that there will be mechanical interlock of materials placed into the slot at a later stage. Clean and wet the slot and apply a brush coat of **CLEXOKRYST-SEAL** Concentrate as described in steps 5 & 6 and allow to dry for 10 minutes. Fill cavity by tightly compressing Dry-Pac into the groove with pneumatic packing tool or with hammer and wood block.

ETTING OF THE CONCRETE–

CLEXOKRYST-SEAL requires a saturated surface dry (SSD) condition. Concrete surfaces must be thoroughly saturated with clean water prior to the application so as to aid the diffusion of the **CLEXOKRYST-SEAL** and to ensure growth of the crystalline formation deep within the pores of the concrete. Remove excess water before the application such that there is no glistening water on the surface. If concrete dries out before application, it must be re-wetted.

MIXING FOR SLURRY COAT –

Mix **CLEXOKRYST-SEAL** powder with clean water to a thixotropic consistency in the following proportions:

For Brush Application	For Spray Application
Spread Rate 0.65 - 0.8kg/m ²	Spread Rate 0.65 - 1.0kg/m ²
5 parts powder to 2 parts water for Vertical	5 parts powder to 3 parts water
Spread Rate 1.0-1.10 kg/m ²	(ratio may vary with equipment type)
3 parts powder to 1 part water for Horizontal	

Do not mix more **CLEXOKRYST-SEAL** material than can be applied in 20 minutes. As the mixture thickens, stir briefly to ensure mixture remains fluid; but do not add water.

DRY SHAKE METHOD FOR POSITIVE/ NEGATIVE SIDE

Sprinkle **CLEXOKRYST-SEAL** powder directly from the packaging after allowing concrete to achieve initial set. Sprinkle **CLEXOKRYST-SEAL** evenly and trowel to required finish or power float.

CURING

After CLEXOKRYST-SEAL coat has hardened, cure the treated surface with a light mist of clean water at a regular interval 3 times a day, for initial 2-3 days. In hot weather curing will be extended for several days. All brushes and tools should be cleaned by water immediately after use.

PRECAUTION:

Mix only the required quantity of material, which can be utilized within stipulated pot life to avoid solidification. Wash all the tools and tackles with industrial solvent immediately after the application is completed.

HEALTHY & SAFETY

As with all chemicals, caution should always be exercised. Avoid prolonged contact with eyes and skin. Protective clothing such as gloves and goggles should be worn. See the relevant material safety data sheet for more information.

PACKING & STORAGE

CLEXOKRYST-SEAL is pre-packaged system available in 20kgs, 25kgs PP/Paper Bags.

Shelf life is 12 months in unopened container.

Store containers in a clean dry area protected from direct sunlight and extreme heat and cold.

TECHNICAL DATA

Product	Crystalline Waterproof Coating
Final Set	16 hours Max
Flexural strength 7 days	4.8 N/mm ²
Flexural strength 28 days	8.6 N/mm ²
Compressive Strength 7 days	25 N/mm ²
Compressive Strength 28 days	45 N/mm ²
Adhesion Strength	> 1.2 N/mm ²
Pot life	25 Minutes
Setting Time	120 Minutes @ 20°C
Resistant to hydrostatic pressure When applied on negative side	≥ 1.6 MPa
Drying Time	6 hours between coats.
Packaging	20kg and 25kg PP/Paper Bags.

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PICTURES/IMAGES AT GLANCE



CLEXO ENGINEERING & CHEMICALS PVT. LTD



[An ISO 9001: 2015 Company]

SEC-C2, PLOT C-35, KASHMIRI ENCLAVE

TRONICA CITY GHAZIABAD -201102

CONTACT AT: +91-8266929206, +91-9990429206

Website: www.clexoengineering.com Email: clexoengineering@gmail.com

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