

HYGARD

PRODUCT DESCRIPTION

HYGARD is a cementitious capillary crystallization waterproofing material. HYGARD consists of cement, quartz sand and active chemicals. The active chemicals react with the free lime and moisture present in the concrete producing crystals. These crystals fill cracks, voids, capillary tracts within the concrete resulting in the prevention of water leaks while still allowing the substrate to breathe.

The waterproofing effect is produced by the active chemicals in the HYGARD coating that reacts with the free lime of the concrete producing non-soluble crystal. The crystallization process in the capillaries produces a barrier to water and thus HYGARD becomes an integral part of the structure. HYGARD is effective in any direction of water or osmotic pressure which means it may be applied to either internal or external surface. However, where ever possible, it is preferable to apply HYGARD to the surface with which water is in direct contact. This will create an accelerated rate of penetration and crystallization into the concrete structure.

HYGARD is non-toxic. It is safe to be applied on surfaces in contact with drinking water or foodstuffs.

USES & APPLICATIONS

HYGARD is suitable for use on reinforced concrete basement retaining wall & slabs, tunnels, roof decks, parking decks, plaza and terraces, plant boxes, toilet & bath, water reservoirs, sewage treatment and water treatment plants, swimming pool.

INSTALLATION PROCEDURE

Surface Preparation

All concrete must be structurally sound. Remove all forms of scale, oil form release agents, laitance and any foreign materials which will impair the bond, penetration and performance of the HYGARD waterproofing. Employ acid etching, water pressure blasting or light sand blasting if necessary. Existing water seepage must be stopped using HYGARD PLUG fast setting plug. All visible cracks, construction joints, cold joints, concrete & pipe penetration joints must be routed out at approximately 3/4" deep & treated with recommended sealing material. Rinse all surfaces thoroughly with water the day prior to HYGARD application. Moisture must be present in the concrete substrate to assure maximum chemical penetration. Surfaces should be moist only, not wet when HYGARD coatings are applied.

Application

HYGARD is mixed in a proportion of 2 parts HYGARD to 1 part water by volume. Always add water to HYGARD and never on the reverse order. However, a mixture of 1 part HYGARD to 1 part water is recommended for very rough concrete surfaces, but an additional coat is added to attain the same material usage rate of 1.0 to 1.5 kg. per square meter for 2 coats. HYGARD can be applied using brush at the recommended dosage. Apply first coat on prepared & moist substrate. The second coat is applied at right angles to the first coat and as soon as the first coat is dry enough to receive the second coat.

Curing

HYGARD treated surfaces should be moisture cured for a period of two to three days starting with fine water fog spraying the day following the completion of HYGARD applications. Backfill material can be placed on HYGARD applications after moisture curing has been completed. No protection boards are required. The HYGARD application has to be aged for a minimum period of two (2) weeks before application of epoxy tank lining for water reservoirs.

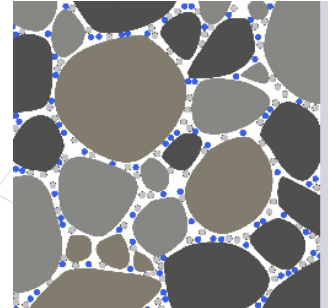
PACKAGING & COVERAGE

HYGARD is available in 25 kg. bag. For a two-coat slurry application, the usage rate of HYGARD should be between 0.5 and 0.75 kg per square meter per coat.

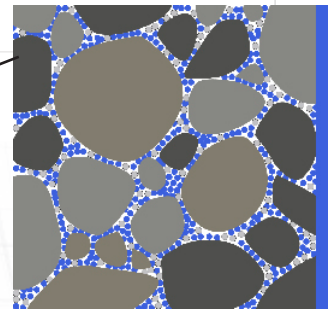
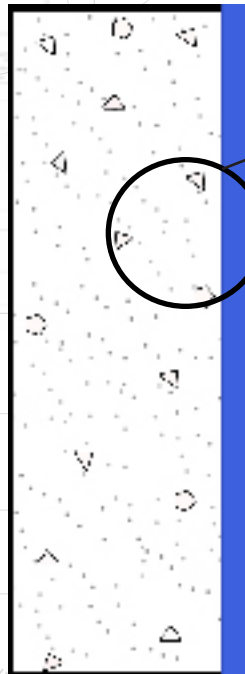
ADVANTAGES OF HYGARD OVER OTHER WATERPROOFING PRODUCTS

- HYGARD is effective on positive and negative applications.
- HYGARD is non-toxic and safe for use on structures containing potable water or foodstuffs.
- HYGARD is economical. It does not require costly mortar or concrete protection during backfilling or during placement of other materials. It can be left exposed to pedestrian & vehicular traffic.
- HYGARD is practical to use and does not require good weather or a dry surface prior to application. It is applied directly on bare structural concrete.
- HYGARD is durable. It will not puncture, tear, peel-off, or come apart at the seams unlike other waterproofing products.
- HYGARD is a complete waterproofing system. It is used together with these allied products thereby providing a complete waterproofing system that will truly waterproof a structure according to its needs.

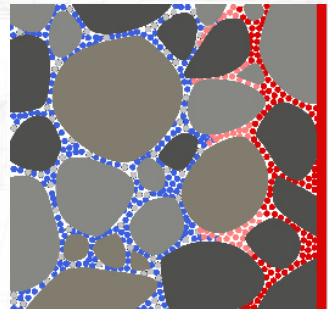
HYGARD Plug
HYGARD Plast
REBINJECT Epoxy
REBGROUT Epoxy
REBOND Adhesive
Polyurethane Sealant
REBINJECT PU Polyurethane Injection



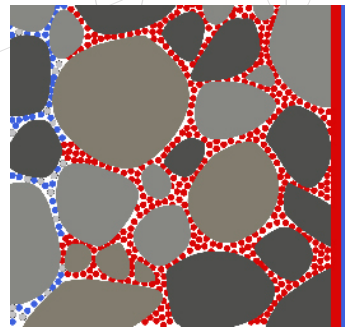
Dry concrete showing its natural free-lime, moisture & capillary tracts



Water in contact with the concrete, penetrating into the capillary tracts.



Concrete structure applied with HYGARD. Chemicals penetrate & react with free lime & moisture, forming non-soluble crystals as it goes deep into the capillary tracts of the concrete.



Complete crystallization takes place, making the concrete water-tight. HYGARD becomes an integral part of the structure.

PRODUCT

TECHNICAL DATA

Property	Data
Form	Powder
Color	Gray
Packaging	25 kgs. / bag
Coverage	1 to 1.5 kg./m ² @ 2 coats
Shelf Life	12 Months
Setting Time	1-2 hours
VOC	Zero
Flexural Strength (ASTM C348)	49 MPa
Bond Strength (ASTM C321)	6,640 Lbs
Compressive Strength (ASTM C109)	46 MPa (@28 Days)
Non Toxicity / Potability as Food Contact Material (BFAD)	Passes BFAD Standard