

KrystalMix FH

CRYSTALLINE WATERPROOFING DRY-SHAKE FLOOR HARDENER

Description: KrystalMix FH is an innovative cementitious compound infused with reactive agents designed to enhance the performance and waterproofing capabilities of freshly poured concrete surfaces. When evenly dispersed over newly laid concrete, KrystalMix FH combines cement with meticulously graded quartz sand and active agents that initiate a chemical reaction within the concrete itself. This reaction results in the formation of insoluble crystals, effectively sealing capillary pores and filling voids within the concrete structure. The outcome is a concrete surface that boasts superior resistance to water penetration and improved overall durability.

Application:

KrystalMix FH is a versatile solution suitable for a wide range of applications where waterproofing is essential. Some of its key applications include:

Basements and Foundations: Ideal for ensuring the waterproofing of below-ground structures, providing added protection against moisture.

Water Tanks and Reservoirs: Enhances the durability and waterproofing of containers used for water storage.

Sewage Treatment Plants: Helps fortify concrete structures in sewage treatment facilities, which are exposed to constant moisture and harsh chemicals.

Underground Parking Structures: Protects parking garages from water ingress, extending their lifespan.

Tunnels and Subway Stations: Ensures the integrity of underground transportation systems by preventing water infiltration.

Swimming Pools and Water Features: Provides excellent waterproofing for pools, fountains, and other water-based installations.

Warehouse Floors: Strengthens concrete surfaces in warehouses, offering resistance against moisture and heavy loads.

Traffic Bearing Surfaces: Enhances the durability of roads and other traffic-bearing surfaces exposed to varying weather conditions.

KrystalMix FH is a valuable asset in safeguarding concrete structures against water damage, making it a reliable choice for various construction and infrastructure projects.

Advantages:

Provides permanent waterproofing solution

Reduces permeability and prevents water penetration

Resists hydrostatic pressure

Protects concrete against chemical attack

Increases durability and service life of concrete

Easy to apply, no special equipment required

Can be applied to both new and existing concrete

Zero VOC

Can seal hairline cracks up to 0.5mm

Typical Properties @ 25°C

Properties	Standard	Values
Colour & Appearance	Visual	Grey Powder
Bulk Density	Visual	Approx. 1.6-1.7 g/cm ³
Compressive Strength	ASTM C 109 – 02	Class R3 > 25 Mpa
Chloride Content	ASTM C 144 -09	< 0.05%

Note: Testing was performed under laboratory conditions.

Other compliance:

BSEN 1504 Part 3

DIN 1048 Part 5 depth of water penetration

NSF 61 (USA) Non toxicity

Application Procedure:

Step 1: Sprinkle Application

Sprinkle the KrystalMix FH dry-shake material evenly onto the concrete surface immediately after finishing, while the concrete is still in its plastic (workable) state.

Step 2: Distribution

Ensure even distribution of the dry-shake material. This can be achieved using either a mechanical spreader or by hand, using gloved hands. The goal is to uniformly cover the entire concrete surface with the dry-shake.

Step 3: Moisture Absorption

Allow the dry-shake to naturally absorb moisture from the concrete. This process helps the dry-shake material bond with the concrete surface.

Step 4: Floating

Use a bull float or power float to float the dry-shake into the surface of the concrete. This step helps to integrate the dry-shake material with the concrete, enhancing its effectiveness.

Step 5: Second Application (if necessary)

After power floating, apply the remaining dry shake material perpendicular to the first application. This additional layer helps ensure comprehensive coverage and waterproofing.

Step 6: Final Finish

Finish the concrete surface as desired, making sure that the dry-shake is fully incorporated into the top layer of the concrete. This final step is essential for achieving a smooth and durable concrete finish.

By following these application steps, you can effectively utilize KrystalMix FH to enhance the waterproofing and performance of your concrete surfaces.

Curing: Curing is important and should begin as soon as final set has occurred but before surface starts to dry. Conventional moist curing procedures such as water spray or plastic covers may be used. Curing should continue for at least 48 hours. In hot, dry sunny conditions consult manufacturer for specific instructions.

Dosage: The recommended dosage of KrystalMix FH is 0.2-0.4 lb/ft² (1-2 kg/m²) depending on the desired level of waterproofing

Packaging: KrystalMix FH is available in 55-lb (25-kg) bag or pail.

Storage/Shelf Life: KrystalMix products must be stored dry at a minimum temperature of 45°F (7°C). Shelf life is one year when stored under proper conditions.

Technical Services: For more detailed instructions, alternative application methods, or information concerning the compatibility of the KrystalMix FH treatment with other products or technologies, contact the KrystalMix Technical Department or your local KrystalMix representative.

Safe Handling Information: KrystalMix FH contains cement, that is alkaline, will irritate the eyes and skin and may cause skin sensitization. Wear appropriate eye, skin, and breathing protection when using this product. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. For further information, please refer to Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN. Contact KrystalMix International, Ltd. or your local KrystalMix representative to obtain copies of Safety Data Sheets prior to product storage or use.