



HEY'DI POWDER X SYSTEM

WATERPROOFING COMPOUND FOR ACTIVE LEAKS

DESCRIPTION

HEY'DI POWDER X SYSTEM is a combination of cementitious and silicate based materials used on negative side surfaces to seal and stop leakage caused by hydrostatic pressure. HEY'DI POWDER X SYSTEM is a 3 coat, two component system consisting of a powder and a liquid. HEY'DI POWDER X is a dry powder that hardens in seconds when exposed to water. HEY'DI SEALING LIQUID (ordered separately) penetrates through HEY'DI POWDER X into the capillaries of the substrate. It reacts with moisture and the constituents of the substrate to form crystals. While moisture is present, the crystallization process will continue for approximately six months. HEY'DI POWDER X SYSTEM is not designed to be used as a wearing surface. Horizontal surfaces subject to vehicle or heavy foot traffic must be covered with a protective topping.

PRIMARY APPLICATIONS

- Interior/exterior walls below grade
- Slabs on grade and basements
- Foundations
- Reservoirs
- Tunnels
- Dry docks

FEATURES/BENEFITS

- Leaking and weeping concrete or masonry from the negative side
- Protects against hydrostatic water pressure
- Will not debond from the surface by water pressure

TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

Material Properties: Values are typical and not necessarily referenced to create specifications.

Test Method	Criterion	Results
Adhesion ASTM E149, psi (MPa), 3 day cure	Open structure concrete	84.6 (0.58)
	Closed structure concrete	42.2 (0.29)
	Steel formed concrete	61.4 (0.42)
Tensile Strength ASTM C190, psi (MPa)	100% RH	380 (2.62)
	50% RH	325 (2.24)
Permeability CRD 48-55	Water head @ 4.3 ft	7.6×10 to 11^{-11}
	Water head @ 144 ft	8.1×10 to 10^{-10}

PACKAGING

HEY'DI POWDER X is packaged in 30 lb (13.6 kg) pails and HEY'DI SEALING LIQUID is packaged in 5 gal (37.9 L) pails.

SHELF LIFE

1 year in original, unopened package

COVERAGE

HEY'DI POWDER X applied dry at 0.28 lb/ft² (1.16 kg/m²) and depends on the extent of the active leaking areas HEY'DI SEALING LIQUID used as received, 60 ft²/gal (1.47 m²/L)

DIRECTIONS FOR USE

General Surface Preparation: New concrete and masonry surfaces should be cured a minimum of 7 days. Surface must be structurally sound, clean, and free of contaminants including curing compounds, form release agents, dust, dirt, oil, efflorescence, old coatings, and paint. Concrete honeycomb, cavities, joints, cracks, voids, tie holes, and other defects must be opened and routed to sound material. Rout broken or uneven brick or block to sound material. Substrates must be roughened and absorptive. Smooth precast or formed concrete must be opened to an exposed aggregate surface. The surface must have an open capillary system for adhesion and optimum crystalline growth. Remove form marks and other protrusions.

Application: For application to actively leaking surfaces, wear rubber gloves and immediately rub HEY'DI POWDER X well into the wet surface until the surface is dry. This application should not be greater than 1/32" (0.8 mm) in thickness. As soon as the POWDER X has been applied, brush the area with HEY'DI SEALING LIQUID using a clean brush. As soon as the SEALING LIQUID is applied, rub another batch of POWDER X into the wet surface. The entire procedure may be repeated for difficult to control leaks. Upon completion of the three steps, protect the surface from rain, hot sun, or wind, and freezing or frost for 24 hours while monitoring the area to ensure leaks have been stopped and have not been re-directed to new locations. To produce an uninterrupted waterproof membrane, apply two coats of HEY'DI K-11 over the entire surface, including the repaired surface and the surrounding wall area. Apply HEY'DI K-11 as described in the HEY'DI K-11 Technical Data Sheet.

Moderate leakage or small holes: Clean and prepare the surface as described above. Press a generous handful of dry HEY'DI POWDER X into the hole and maintain constant pressure until leakage stops.

High pressure leakage or heavy flow: Premix HEY'DI POWDER X with potable water into a thick putty and use it as a plug. Finish sealing off the remaining flow using dry HEY'DI POWDER X as directed above.

Dynamic and Static Cracks: Cut out the crack 3" (7.6cm) wide at the surface and 2" to 3" deep (5cm to 7.6cm). Use HEY'DI POWDER X System to stop active leaking. Dampen area, and apply HEY'DI K-11 to the sides and bottom of the cut and overlap onto the sides and bottom of the cut and overlap onto the adjacent surfaces.

Following cure of the HEY'DI K-11, apply a bond breaker tape in the bottom of the cut and install a waterproof flexible joint sealant. Maintain top surface of sealant 1½" (3.8cm) below the top of the substrate. Following cure of sealant, install a bond breaker tape to only the cured surface of the sealant. Fill the remaining cut with TAMMSPATCH II to the level of the substrate. To create a joint for movement control, cut into the center of the fill mortar 1/8" wide and a minimum one half of the depth of the fill mortar.

Floor/Wall Joint Leakage: Cut an area approximately 1/2" (12mm) deep a minimum 3" to 4" (7.6cm to 10cm) up the wall, and 3" to 4" (7.62 cm to 10.16 cm) onto the floor. Use HEY'DI POWDER X SYSTEM to stop active leaking. Dampen the area and apply HEY'DI K-11 to the sides and bottom of the area and overlap the adjacent surfaces. Following cure, use TAMMSPATCH II to level the area with the floor surface.

CLEAN-UP

Clean all mixing and application equipment with water immediately after use. Clean all splatter or spills with water before material sets. HEY'DI POWDER X is a cementitious product and if allowed to dry on the surface, removal becomes very difficult.

PRECAUTIONS/LIMITATIONS

- HEY'DI POWDER X is a dark gray waterproofing compound and is not intended to be a decorative finish.
- Do not apply to frozen or frost filled surfaces or when temperature is below 40°F (4°C) or expected to fall below 40°F (4°C) in 48 hours.
- Do not apply in temperatures above 90°F (32°C).
- Protect with a topping when used as a traffic wearing surface.
- When applied to the inside of open cisterns, tanks, pools, etc., do not fill with water for at least 7 days after application. Ensure that adequate ventilation is available during the application and the full curing period when using HEY'DI POWDER X SYSTEM in enclosed tanks or reservoirs.
- Allow minimum 7 days drying time before backfilling.
- Allow 7 days cure before covering or before the application of a waterbased decorative coating.
- Do not apply lime based products over HEY'DI POWDER X SYSTEM.
- Do not substitute HEY'DI SEALING LIQUID.
- Apply a test patch to evaluate performance and appearance on concrete or block substrates which have been subjected to contamination.
- In all cases, consult the Safety Data Sheet before use.