Chemind Product Data Sheet

Waterstop Plug

Fast Set, Non Shrink, Leak Sealing Compound

Description

Technically advanced, fast setting, hydraulic cement powder blended with specially selected fillers and a chemically controlled set activation system.

It is used in applications where conventional mortars would be washed away and other accelerated cement compounds; resin mortars and patching putties will not bond. Waterstop Plug mixes with water to form putty, which stops water flow through concrete and masonry instantly.

It is commonly used in conjunction with other Chemind products including Krystol, Chemcote W and Epocote F100W, where water flow, weeping or constant seepage presents a problem.

Uses

Waterstop Plug is designed to stop the ingress of water, even under extreme conditions and high-pressures. Once cured it will withstand continuous pressure, exposure to moisture or total immersion.

It is the ideal product to stop problem leaks before applying any Chemind or Grace waterproofing system.

Waterstop Plug is used for patching, filling, pointing, sealing or waterproofing of in-situ concrete, concrete panels, concrete masonry, concrete pipes and brick.

Features

Waterstop Plug works instantly to stop water loss from tanks or prevent further damage within structures. It has similar physical characteristics to concrete and together with its very low porosity, provides a stable and permanent repair.

- Simple application and rapid set.
- Easy to mix powder
- Only addition of water is needed
- Contains no chlorides

Typical Properties

Initial Set @ 20°C	30 seconds
Compressive Strength After 1 hr	10 MPa
Ultimate Compressive Strength	40 MPa
Peak Exotherm (approx.)	40°C
pH of Mixed Product	11

Preparation

Surfaces to be sound and free from all dust, loose matter, oil, grease other contaminants.

Cracks should be chased out to 20 mm wide and 20 to 30 mm deep. The width of the chase should not exceed the depth. Do not form a “V” section. Preferably undercut the sides to give maximum binding strength for the “plug”. Holes should be opened out to 20 mm diameter and 20 mm deep.

The prepared surface may be flushed with water to remove debris. Dry surfaces should be dampened prior to application of Waterstop Plug.

Mixing

- Wear rubber gloves and eye protection at all times during mixing, handling & application of this material. Splashes to the eyes should be immediately flushed with copious quantities of water.
- Because of the quick setting characteristics of Waterstop Plug, mix only enough material that can be used before setting occurs. Make trial mixes first to better judge the cure parameters for the specific job conditions.
- Add clean water to Waterstop Plug in a clean container at ratio of approximately 3 parts Waterstop Plug to 1 part water.
- Mix quickly to give a stiff, putty-like consistency.

Application

- Using a rubber gloved hand or trowel press and compact the mixed plug into place.
- Where hydrostatic pressure and/or water are present, apply force by pressing firmly into the prepared recess until setting has occurred. This may take up to 1 minute depending on conditions.
- Long, leaking cracks should be fully chased open cleaned free of debris then progressively sealed off with Waterstop Plug as previously described.

  Starting at the least active or highest point and work in stages to the most active or lowest point.

  Sealing the last section of such a repair is best achieved by inserting a short length of 10-15mm plastic hose into the most active end of chased crack and packing up to it with Waterstop Plug. This relieves water pressure on the repair. The hose can then be removed and the last plug inserted to fully seal off water flow.
- Waterstop Plug may be applied directly as a dry powder to pack into wet voids or to dry-up “sweating” surfaces.

Surfacing

Overcoat the cured Waterstop Plug repair with Chemind Krystol, Chemcote W or Epocote F100W to give a permanent waterproof barrier to the entire surface. This additional treatment is required to prevent blistering of applied paint coatings and further lateral migration of water or future destabilisation of the repaired area by structural movement etc. Please consult the Chemind Technical department for specific advice in correct selection and use of surfacing product for a particular job.

Packaging

Waterstop Plug is supplied in 15 kg metal pails plus 5 kg and 2.5 kg tins.

Shelf Life

Unopened or resealed pails of Waterstop Plug will have a shelf life of 1 year from date of manufacture, when stored in a dry, cool place.

Clean-up

Remove uncured Waterstop Plug with water.

Chemind CONSTRUCTION PRODUCTS

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