

HYDRO STATIC EPOXY

AMI's Waterbased 2 Pack Epoxy (Primer / Sealer / Coating / Membrane System)

Release: 1st October 2009
Review: 10 November 2015

PRODUCT DESCRIPTION:

Hydro Static Epoxy is a two-part, high solids (47%), water based epoxy primer/sealer/membrane, used for concrete, masonry, and other cementitious substrates. The product forms a waterproofing barrier thus allowing the application of other moisture sensitive coatings. Hydro Static Epoxy is non flammable, has no odour and can be applied over green concrete. The product forms an excellent binder for dusty and eroded concrete surfaces.

RECOMMENDED APPLICATIONS:

- As a moisture barrier to protect against seepage and dampness.
- As a primer for paints and membranes.
(No maximum time for over coating)
- Reverse tanking.
- As a coating in chemical spill areas.
- Ponds.
- Wear resistant non slip floor coating (with aggregate) over a waterproofing membrane.
- A binder for dusty and eroded concrete surfaces.
- As a waterproofing membrane over green concrete.
- As a waterproofing membrane/ barrier in waste water drains and pits as well as retaining walls (1.5sm/litre)
- Hydro Static Epoxy can be used in potable (drinking) water tanks - conforms with AS/NZS 4020.2000
- As a waterproofing membrane required to contain water seepage and dampness penetration through walls, retaining walls, basement floors etc.
- As part of AMI's swimming pool waterproofing system.

ADVANTAGES:

Very strong cured finish; low odour; easy to use; water clean-up; excellent adhesion to old, new and green concrete, stone, timber, masonry and concrete block. High chemical resistance - prevents rising damp. Safe for use around food - water clean-up.

TECHNICAL /PERFORMANCE DATA:

Resin Base:
Appearance – White viscous liquid
Chemical base – epoxy resin
Solids – 47%
Viscosity – 3,000 cps
Water Vapor Transmission ASTM E96
WVT: 1.39g/m²/24hr Permeance 0.0013ug/N.s
Dry Film Thickness - 390 microns (*2 coats).

HARDENER:

Appearance – Light Grey liquid
Chemical base – polyamine adduct
Mixing ratio – Equal parts of A and B by volume.
Pot life – 2 hours approx. at 25°C.

GENERAL:

Surface appearance – Semi Gloss progressing to matt over time in exposed applications.
Recoat Time – 4 hours at 25°C
Hard dry – overnight at 20°C and reducing with higher temperatures.
Complete cure – 7 days at 25°C.
Minimum curing temperature – 5°C.
WFT: around 390 microns.

APPLICATION TYPICAL FEATURES:

Ideal Temperature Range: 15–30°C. Do not apply below 5°C and above 35°C. Do not apply when humidity is above 85%. Optimum curing Temperature range is 15–25°C.

- Will resist hydrostatic pressure up to 30 metres of water (390 micron DCT - 3.0sm / litre.)
- Prevents rising damp and the formation of efflorescence.
- Suitable for indoor and outdoor application.
- Resistant to oil, petrol, detergents, common soils and detergent cleaners.
- Tolerates poorly prepared surfaces.
- Suitable for potable water, conforms to AS/NZ4020.2000.
- As a light flooring system after being top coated with a paving paint type product.
- Dilution: The product can be diluted up to 20% with clean water for the first penetration coat only.
- As a below ground negative side waterproofing barrier.
- As a waterproofing membrane in tanking applications.

RECOMMENDED COVERAGE:

Dependent on surface porosity and expected service conditions. Recommended coverage as a primer is around 5 - 8 m² per litre at a thickness of 50 microns dry coat. The coverage for hydrostatic applications reduces to 3m² per litre, applied in several coats. (This depends on the application system employed (brush or roller) and the porosity of the substrate).

PRIMING WITH HYDRO STATIC EPOXY

Dilute HydroStatic Epoxy 20% with water as the first priming/penetrating coat..

PRODUCT PREPARATION:

Add hardener to the resin (Part A) and mechanically mix for several minutes until the hardener is completely absorbed into the resin. Allow mixture to mature for 5 – 15 minutes before application. Where only part of the product pack is to be used, it is recommended that the resin base be thoroughly mixed before decanting the amount needed. The application should be completed before the expiry of the pot working life - (2 hours) at 25°C.

APPLICATION: Hydro Static Epoxy may be applied to new (green) concrete as soon as the latter has hardened. Otherwise, the general recommendations for the preparation of concrete surfaces for overcoating should be adhered to. Each successive coat should be applied at right angles to the previous coat.

Hydro Static Epoxy is tolerant with regard to surface preparation. Nevertheless; to maximise adhesion, it is important that application is made to sound clean substrates. For concrete surfaces; remove the laitance by mechanical abrasion, shot blasting, acid etching or diamond grinding. Old concrete should be thoroughly cleaned, preferably with high pressure water cleaning. Severe contamination with oil or grease should be removed by repeated degreasing or steam cleaning. If penetration of the pores has occurred, grinding back to clean concrete may be required.

Apply one coat for dust sealing or priming; two coats for waterproofing or three coats for wear resistant industrial flooring no-slip applications. Over-coating may be undertaken when the product is touch dry. Cured at room temperature (20°C), Hydro Static Epoxy will be ready for light foot traffic the next day.

Hydro Static Epoxy has been formulated to show optimum curing and application characteristics in the temperature range 15 – 30°C. At lower temperatures the rate of cure will slow down considerably and at higher temperatures the working life of the mixed composition will shorten.

APPLIED AS A WATER BARRIER:1.5sm/Lt

APPLIED AS A CEMENT PAINT, CEMENT PRIMER OR CEMENT FILLER:

Hydro Static Epoxy can be used to repair damaged or worn concrete or as a priming base for laying concrete over old slabs and as one of the priming coats when preparing swimming pools for waterproofing.

- Mix 33% cement, 33% epoxy Part A and 33% Part B. For an increase in solids, increase the amount of cement that is added. The addition of cement tends to slow the curing time of the epoxy system.

As with all water based coatings, it is inadvisable to use Hydro Static Epoxy under conditions of low temperature or high humidity.

OVERCOAT:

Depending on the weather - from 4 hours - there is no maximum time.

CLEAN UP:

Clean brushes and roller sleeves using soapy water.

PACKAGING:

20 litre, 10 litre, 4 litre and 2 litre kits.

HAZARD & FIRST AID:

Refer to manufactures Material Safety Data Sheet.

AMI PRIMER RANGE:

GP Primer – Wet area latex based primer for internal waterproofing priming over concrete and many other substrates.

GPS & Screed Block – Latex systems for use in screed waterproofing, concrete and general waterproofing.

Bayroot Priming Epoxy – Inexpensive two pack water-based priming epoxy.

Sealpoxy – Waterbased, two-pack epoxy suitable for waterproofing, priming and sealing. Use Sealpoxy to avoid adhesion failure..

Hydro Static Epoxy – High quality, two-pack, water-based epoxy for use in all areas of waterproofing and general priming.

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