

TECHNICAL DATA SHEET

DUROMIX™ HIBUILD WBE

WATER BASED TWO PACK EPOXY

Introduction

DUROMIX™ Hibuild WBE is a two component water based epoxy coating used to prime, seal and coat concrete or masonry surfaces. It cures to a tough chemical and water resistant coating having excellent adhesion to sound concrete.

Principle Characteristics:

- Water based
- Ultra low VOC
- Environmentally friendly
- Excellent water resistance
- Excellent oil resistance.
- Excellent adhesion to fresh concrete
- Applicable to damp surfaces
- Resists hydrostatic pressure when cured
- Requires a UV resistant top coat when in direct sunlight e.g. Duropond

Use Areas:

- Fish ponds
- Retaining walls
- Reverse Tanking
- Primer for acrylic & polyurethane membranes
- Dust sealing concrete floors
- Waterproofing concrete slabs prior to vinyl and timber overlays
- Concrete curing membrane
- Moisture barrier on damp walls/floors

Packaging:

- 20 Litres
- 4 Litres

Technical Specification:

Colour (Mixed)	Clear
Pot Life	1.5 hours at 20 ⁰ C
Mix Ratio	1:1 by volume
Dry Time	4 – 5 hours at 20 ⁰ C, 50% RH
Recoat Time	5 hours at 20 ⁰ C, 50% RH
Full Cure	5 days at 20 ⁰ C, 50% RH
Coverage	1 coats, each at 0.3 Litres/m ² [3m ² /Litre] Porous concrete will require min 2 coats.
Wet film per coat	0.3mm thick
VOC	<1 gram/litre
Shelf Life	12 months in unopened containers Stored above 5 ⁰ C and below 20 ⁰

Test Standards:

- Conforms to ASTM E96 for water vapour transmission
- Resistant hydrostatic head of water pressure up to 25 meters (or 25kPa)

Substrates:

Bricks, concrete, Pre cast concrete, Bricks, Masonry, Cement sheet, Masonry

Cleanup:

- Wash all equipment in water and or detergent immediately on completion.
- Duromix™ Hibuild will cure under water. Therefore, do not leave items soaking.

Surface Preparation:

All surfaces must be structurally sound and all previous coatings, adhesives, efflorescence or laitance should be removed by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or other suitable means. All surfaces must be cleaned free from dirt, grease oil or other surface contaminants. Holes, non-structural cracks and other surface deformities should be repaired.

Application:

Porous concrete will require 2 coats of Duromix™ Hibuild WBE. The first acting as a primer, should be diluted 10% with water to allow penetration into the pores of the concrete. Then apply another full coat. Mixing should be by means of a mechanical forced action mixer with a high shear stirrer. Premix each individual component then join the two components, by equal volume, mixing thoroughly for a minimum of 5 minutes until a blended coating is obtained. Avoid trapping air during mixing as this may cause pin holing. Only mix as much as may be used within the pot life of the product. Duromix™ Hibuild WBE is a minimum two-coat system. Apply with a brush or roller, and ensure to work the material into the substrate surface to fill voids and eliminate pin holing. Successive coats should be applied at right angles to the previous coat. It is recommended that the coating depth be tested at random points with a wet film gauge.

Precautions:

Refer to Durotech MSDS prior to use. Duromix™ Hibuild WBE cure rates will be dramatically reduced if the relative humidity is above 85%. Do not apply to steel or metal surfaces. Do not add cementitious products to Duromix™ Hibuild WBE. Duromix™ Hibuild WBE is not a waterproof membrane on its own. A dedicated water-proofing membrane should be used. In enclosed areas, such as water tanks or reservoirs, basements, or cubicles, ventilation should be provided to enable adequate evaporation of the coating. Allow to cure for a minimum of 24hours at 25°C/50% RH before applying waterproof membranes, adhesives, mortars, decorative coatings or other surface treatments. Duromix™ Hibuild will tend to chalk when exposed to UV light. For external use apply a UV resistant top coat. Discard any material that has exceeded the pot life or working time of the product. Do not apply over any substrates that have been previously treated or coated with curing compounds, PVA concrete bonding agents or acrylic coatings. These areas must be mechanically cleaned by grinding or shot blasting to produce a contamination free surface.

Cold Substrates and Cool Climatic Conditions:

Cure speed will be dramatically reduced if substrate surface or ambient temperature is below +10°C. If Duromix™ Hibuild WBE is applied in cooler climatic conditions, substrate temperatures can produce amine blush, resulting in an oily residue and or areas of uncured tacky discolorations. It should be allowed to cure, then washed with clean, fresh water, Methylated Spirits or Xylene depending on the severity. Ensure removal of the contamination prior to application of any further coating to ensure no de-lamination. Follow mixing instructions and allow an extra minute to ensure a homogeneous paste is obtained. Allow to stand for 5 minutes after mixing as this will accelerate the drying time. Never apply thin coats as the rapid moisture loss will arrest or slow the drying reaction. Thin coats can also cause an amine blush. Store Duromix™ Hibuild WBE in a 20°C environment 24 hours prior to use. If possible warm the substrate surface area by an air blower or use a blower after application. Always provide adequate ventilation during the curing cycle.