

Crosbe MVB® Moisture Vapour Barrier

Crosbe MVB® Moisture Vapour Barrier is a two-part water-based epoxy coating membrane used to prime, seal and coat concrete and masonry surfaces. It cures to a tough chemical and water-resistant coating and has excellent adhesion to sound concrete surfaces.

Recommended Uses:

Crosbe MVB® has been developed for multiple uses, including moisture barrier to damp floors/walls, concrete curing membrane, waterproofing concrete slabs prior to vinyl and timber overlays, a primer for acrylic and polyurethane membranes, reverse tanking, retaining walls, planter boxes and fishponds.

Crosbe MVB® can be used over various substrates, including concrete, cement and cement render, FC and CFC sheeting, block and brickwork, masonry and stone, timber, particle board and plywood.

Advantages:

- Ultra-low VOC
- Water Based
- Excellent adhesion to fresh concrete
- Designed to be used in a wide range of applications
- Designed to be used over varying types of substrates
- Convenient 1:1 mixing ratio
- Resists hydrostatic pressure when cured
- Environmentally Friendly
- Applicable to damp surfaces
- Conforms to ASTM E96 for water vapour transmission
- Resistant hydrostatic head water pressure up to 25m (25kPa)

Surface Preparation:

Concrete floors must be structurally sound, clean, and dry. Surface must be free from dust, dirt, wax, grease, asphalt, latex and gypsum compounds, adhesives, paint, curing and sealing compounds and other contaminants which may act as a bond breaker. Concrete must be free from laitance and efflorescence. Mechanically prepare the floor using recommended preparation methods such as shot blasting, scarifying, diamond grinding, or other suitable methods to provide a roughened, clean, sound, solid and open porous surface. Acid etching is not a suitable method of preparing the subfloor.





Remove all dust and debris from the floor by vacuuming the surface with a suitable H Class industrial cleaner – must be equipped with a Hepa filter. The surface must accept water penetration.

Any substrates subject to hydrostatic pressure should be structurally sound and stable prior to coating.

Crosbe MVB® should be used in conjunction with the Crosbe CROSflow levelling system; uneven subfloors and imperfections should be repaired as per the manufacturer's instructions. Where the temperatures are outside the recommended 10°C - 35°C please contact the Crosbe technical department for specific information.

Directions for Use on Porous Surfaces

Porous concrete requires two coats of **Crosbe MVB®**. The first, acting as a primer, should be diluted 10% with water to allow penetration into the pores of the concrete. Then, apply a full coat.

Mixing:

Mixing should be done using a drill with a high shear stirrer/paddle blade, adjusting speed to approx. 250 – 300rpm. Premix the individual components in equal volume before combining the two and mixing thoroughly for a minimum of 5 minutes until a blend coating has been obtained. Only mix enough needed to be used within the pot life. Avoid trapping air during mixing, as this may cause pin holing.

Application:

Crosbe MVB® is a minimum two-coat system. Apply with a brush or roller and ensure that the material is worked into the substrate surface to fill every void and eliminate pin holing. Successive coats should be applied at right angles to the previous coats. It is recommended that the depths be tested at random points throughout the process with a wet film gauge at a height of 300 micron / 0.3mm per coat.

Precautions

Crosbe MVB® 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 **Crosbe MVB®**. It is not a waterproof membrane on its own; a dedicated waterproofing membrane should be used if needed. In enclosed areas like basements and cubicles, ventilation should enable adequate coating evaporation. Allow to cure for a minimum of 24 hours at 25°C/50% RH before applying waterproof membranes, adhesives, mortars, levellers, or other surface treatments. **Crosbe MVB®** will tend to chalk when exposed to UV light. For external use, apply a UV-resistant topcoat. Discard any material once the product's pot life or working time has expired. Do not apply over any substrate 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. **Crosbe MVB®** is not designed to bridge live cracks or expansion joints and is not recommended as a permanently trafficable membrane.

Clean Up:

Clean tools immediately after use with warm, soapy water

Cold Substrates and Climatic Conditions:

The speed of the **Crosbe MVB®** curing will be dramatically reduced if the substrate surface or ambient temperature is below 10°C. If **Crosbe MVB®** is applied in cooler climatic conditions (< 10°C), substrate temperatures can produce amine blush, resulting in an oily residue and or areas of uncured tacky discolouration's. Depending on the severity, it should be allowed to cure, then washed with clean, Methylated Spirits or Xylene. Ensure the contamination is removed before applying any further coating to ensure no delamination. Follow the mixing process, allowing an extra minute of mixing time to obtain a homogenous paste. Allow to stand for 5 minutes after mixing to accelerate the drying process. Never apply thin coats, as the rapid moisture loss will arrest or slow the drying reaction. Thin coats will also cause amine blush.

Crosbe MVB® – Product Data:

Property	Detail
Colours	Part A –Light Grey; Part B – Light Grey
Mixed Appearance	Homogenous paste, light grey in colour
Mix Ratio (Part A:Part B)	1:1 mix by volume
Volume Solids (mixed)	48%
Finish	Satin / Matt
Pot Life	1 – 2 hours at 25°C & 50% RH
Water Vapour Transmission ASTM E96	1.4g/24 hours/m ² – 1 Coat (150 micron/0.15mm dry film thickness) 0.8g/24 hours/m ² – 2 Coat (300 micron/0.3mm dry film thickness)
Hydrostatic Pressure Resistance	250kpa / 25m head of water pressure
Adhesion to concrete (ASTM 4541)	1.06 MPa
Recoat Time	2-4 hours at 25°C & 50% RH depending on concrete porosity
Application of Finishes	24hrs at 25°C & 50% RH
Full Cure	7 days at 25°C & 50% RH
Dry Film Thickness	Finished Coat - 300 microns (0.3mm). Two Coats Minimum
VOC Content	< 1g/L
Coverage	3.0m ² /L per coat 300 micron / 0.3mm wet film thickness 20L kit will cover approx 60m ² with a single coat (depending on surface porosity and roughness), and 30m ² with two coats.



The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions. It is always recommended to carry out testing on site to establish the suitability for the desired job.

Packaging:

20 Litre Kit (2 x 10 Litre Buckets)

Shelf Life & Storage:

Shelf Life

The product's shelf life is 12 months from the date of manufacture if stored indoors per recommended storage conditions.

Storage

Store in dry conditions, in unopened and undamaged pails at a temperature of 20°C. The shelf life may be reduced if stored in excessive temperature conditions, externally exposed to the elements or in high humidity conditions.

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Important notice:

A Safety Data Sheet (SDS) is available from the Crosbe website (crosbe.com). Please read the SDS carefully prior to using this product. In an emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia).

Product disclaimer:

Recommendations and advice regarding this product are to be taken as a guide only. The manufacturer of this product and any of its affiliate companies cannot be held responsible for any loss or damage arising from the incorrect usage of this product. The use of this product is beyond the manufacturer's control, and liability is restricted to the replacement of material should the product be proven faulty. The information contained herein is true and accurate to the best of our knowledge. We reserve the right to update information without prior notice. No warranty is implied or given to its completeness or accuracy in describing the performance or suitability of the product for a particular application.
