

X-Shield VaporStop HB

High build vapor barrier for use on high moisture concrete substrates

Product Description

X-Shield VaporStop HB is a moisture tolerant, two component solvent free epoxy primer. On curing it produce a high cross link density barrier coat that prevents the debonding of coatings and floor toppings due to high moisture vapor emission rates (MVER).

Advantages

- Easy to use
- Reduces moisture vapor emission rates
- Eliminates out-gassing of concrete
- Barrier against Radon and other gases
- Compatible with a wide range of coating and flooring systems
- Single coat application
- Coatings and floors can be applied next day

Uses

- Water and vapor barrier
- Gas barrier
- Chemical barrier

Laboratory Test Data

Property	Typical Results
Compressive strength	>80MPa
Flexural strength	>30MPa
MVER reduction	Up to 95%

Application Properties

Application temperature	10 to 35C
Pot life	30 mins at 20C

Packaging

5L kits

Shelf Life

18 months when stored at below 86F (35C) under shade in a dry environment.

Application Rates

	Minimum WFT (microns)	L/m ²
MVER Up to 15lbs/24h/1000ft²	400	0.4
MVER 15 to 20lbs/24h/1000ft²	500	0.5
MVER 20 to 25lbs/24h/1000ft²	650	0.65
Up to 90% internal relative humidity	500	0.5
90 to 100% internal relative humidity	650	0.65

When used as a gas barrier apply two coats of 500 microns.

Actual coverage will depend on wastage and surface profile. Actual coverage can be up to 20% higher than theoretical coverage.

MVER test method : ASTM F1869

International relative humidity: ASTM F2170

Test kits for both methods are available for purchase from X-Calibur.

Installation Guidelines

X-Shield VaporStop HB should be applied by experienced coating crews. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Water Vapor Emission Testing

Prior to carrying out any work the concrete should be tested to determine the moisture vapor emission (MVER) using the ASTM F1869 test method or internal relative humidity (IRH) in accordance with ASTM F2170.

For concrete slabs that have a MVER of over 20 lbs/24h/1000ft² or IRH of over 95% a trial panel must be carried out and assessed for performance for at least 60 days.

Surface Preparation

The substrate must be structurally sound. Loose or unsound concrete should be removed and made good. Surfaces must be entirely free of oil, grease, paint, corrosion deposits, dust, laitance or other surface deposits. The surface should be prepared by captive blasting or high pressure water blasting to produce a lightly exposed aggregate surface (ICRI CSP 3 or 4). Any cracks or bug holes should be filled with X-Shield BugFill after application of X-Shield VaporStop HB.

Mixing

Pre-mix both base and hardener components to disperse any settlement. Add all of the hardener component into the base component and mix using a slow speed drill (350 to 500rpm) with a X-Calibur approved mixing paddle for 5 minutes until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Application

Apply in a single coat at the specified application rate (see above) thickness using a heavy duty squeegee. Scrub the product into the pores with a long handle scrub brush and then back roll using a short hair roller to achieve a uniform finish. Apply any topping within 12 to 16 hours after application.

When the product is to be overcoated with a trowel finish resin screed. Immediately after application broadcast X-Tech Anti Skid Grains (M) on the surface at a rate of approximately 200 to 250g/m².

When the product is to be overcoated with a cementitious underlayment. Immediately after application broadcast X-Tech Anti Skid Grains (C) on the surface until the surface is fully covered.

Clean Up

Clean hands and skin immediately with industrial hand cleaner. Clean tools and equipment immediately after use with X-Shield Solvent S.

Limitations

Protect from U.V.
Will not accommodate movement cracks.
Do not apply below 10C.
Avoid excessive application.
Avoid skin contact.
Do not discard into the water system.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. E-mail taltech@norcrossa.com or call 0860 000 825 for a copy of the MSDS.

Authorized Technical Specialist

Please note that only TAL X-Calibur Authorized Technical Specialists are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product.

Datasheet Validity

TAL X-Calibur make modifications to its product datasheets on a continuous basis. To ensure you have the latest version, e-mail taltech@norcrossa.com or call 0860 000 825 to ensure you have the latest version.

Important Notice

TAL believes the information on this sheet to be correct - but does not guarantee its accuracy or completeness. Conduct your own tests of this product to determine its suitability for intended use. User assumes all risks and liability during testing and use of this product. The only obligation of TAL shall be to replace any of this product proved to be defective due to manufacturing defects. TAL shall not be liable for any injury, loss or damage, direct or consequential, relating to the use or inability to use this product. Except as expressly provided above, all products sold and samples furnished without any warranty of merchant ability or any other warranty, express or implied.

Contact the TAL X-Calibur Technical Advice Centre on 0860 000 TAL(825), or e-mail taltech@norcrossa.com
Johannesburg+27 (0)11 206 9700 Cape Town +27 (021) 386 1810 Durban +27 (031) 579 2263
www.x-calibur.co.za www.tal.co.za

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