

# MasterProtect<sup>®</sup> H 440 VT

Clear, breathable, solvent-based, silane penetrating water-repellent sealer

FORMERLY HYDROZO<sup>®</sup> CLEAR 40 VOC

## PACKAGING

- 5 gallon (18.9 L) pails
- 53 gallon (201 L) drums

## COLOR

Clear

## YIELD

- Concrete:  
125–250 ft<sup>2</sup>/gal (3.1–6.1 m<sup>2</sup>/L)
- Stucco:  
90–130 ft<sup>2</sup>/gal (2.2–3.2 m<sup>2</sup>/L)
- Brick (regular):  
100–150 ft<sup>2</sup>/gal (2.4–3.7 m<sup>2</sup>/L)
- Brick (hard burnt, dense):  
125–175 ft<sup>2</sup>/gal (3.1–4.3 m<sup>2</sup>/L)

Coverage may vary greatly with porosity of the substrate; extremely porous substrate may require 2 coats. Perform test panels to ensure desired results and coverage rates.

## STORAGE

Store in unopened containers in a clean, dry area between 35 and 110° F (2 and 43° C).

## SHELF LIFE

18 months when properly stored

## VOC CONTENT

Less than 600 g/L less water and exempt solvents

## DESCRIPTION

MasterProtect H 440 VT is a clear, breathable, solvent-based, water-repellent sealer containing 40% silane.

## PRODUCT HIGHLIGHTS

- No masking of windows necessary and requires no cleaning after application
- No residue, will not harm glass windows, metal frames, or painted surfaces
- 40% silane
- Excellent depth of penetration
- Breathability allows interior moisture to escape without damaging sealer
- Solvent based, excellent for cold weather applications
- Water repellent so it helps to protect the structure from damage caused by wind-driven rain and chloride intrusion
- Does not alter surface appearance
- Surface sealer helps reduce efflorescence, atmospheric staining, and mildew

## APPLICATIONS

- Vertical
- Exterior
- Above grade

## SUBSTRATES

- Concrete
- Brick and masonry
- Stucco

## HOW TO APPLY

### SURFACE PREPARATION

1. Clean new surfaces to remove all laitance, construction dust, and cured materials before application.
2. Thoroughly clean older surfaces to remove surface materials, previous coatings, alkali, efflorescence, sand, surface dust and dirt, oil, or grease.
3. Repoint any loose, disintegrated, or cracked mortar and allow a minimum of 72 hours drying time before application.
4. Air, substrate, and material temperatures should be 20° F (-7° C) and rising at the time of the application. Substrate must be frost free. Do not apply sealer when temperatures are expected to fall below 20° F (-7° C) within 12 hours or when rain is expected within 4 hours following application. Maximum application temperature is 95° F (35° C). May be applied to slightly damp surfaces.
5. Caulking and sealant work may be done before or after the application of the sealer. Sealant must be fully cured prior to application. Following the application, remove excess product that might pond on a concave sealant joint.

**Technical Data**

**Composition**

MasterProtect H 440 VT is an alcohol-based alkylalkoxysilane.

**Typical Properties**

PROPERTY	VALUE
<b>Active alkylalkoxysilane content, % by weight</b>	> 40
<b>Penetration, in (mm) average depth depending upon substrate</b>	0.20 (5)
<b>Surface appearance after application</b>	Unchanged

**Test Data**

PROPERTY	RESULTS	TEST METHOD
<b>Flash point, ° F (° C)</b>	53 (12)	SETA, IPA
<b>Waterproofing after abrasion, % at 220 ft<sup>2</sup>/gal (5.5 m<sup>2</sup>/L)</b>	88.4	Alberta Transportation and Utilities Type 1B
<b>Resistance to chloride ion penetration, lb/yd<sup>3</sup></b>		AASHTO T259 and T260
Criteria of 1.5 at ½"	< 0.22	
Criteria of 0.75 at 1"	< 0.00	
<b>Water weight gain, % reduction, at 200 ft<sup>2</sup>/gal (5 m<sup>2</sup>/L)</b>	86 – exceeds criteria	NCHRP 244 Series II-cube test
<b>Absorbed chloride, % reduction, at 200 ft<sup>2</sup>/gal (5 m<sup>2</sup>/L)</b>	92 – exceeds criteria	NCHRP 244 Series II-cube test
<b>Absorbed chloride, % reduction, at 200 ft<sup>2</sup>/gal (5 m<sup>2</sup>/L)</b>	99 – exceeds criteria	NCHRP 244 Series IV - Southern climate
<b>Moisture-vapor transmission rate, %</b>	102	OHD-L-35

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

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#### APPLICATION

1. Test a small area of the surface (minimum 5 by 5 ft [1.5 by 1.5 m]) before general application to ensure desired performance results, aesthetics and coverage rates and to verify application technique. Allow 5–7 days for the product to fully react before evaluating. Contact Technical Service for detail.
2. Mix material before and during application.
3. Apply by low-pressure, non-atomizing sprayer.
4. Apply from the bottom up for uniform distribution of the sealer. Apply to saturation, with a controlled rundown of 8" (20 cm). In certain cases, a mist coat before general application will help break the surface tension and assure maximum penetration of saturation coat.

#### DRYING TIME

Typical drying time for MasterProtect H 440 VT is 4 hours at 70° F (21° C) and 50% relative humidity. Cooler temperatures or higher relative humidity can extend the drying time.

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#### CLEAN UP

Clean equipment with xylene or MasterSeal 990.

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#### FOR BEST PERFORMANCE

- Do not apply during inclement weather or when inclement weather is anticipated within 12 hours.
- Protect asphalt-based products such as roofing materials or plastic products from overspray.
- To prevent damage to nearby shrubbery and landscaping, cover or protect with drop cloth.
- Caution should be taken with specialty coated glass. Small areas should be tested prior to application to ensure the product does not discolor the coating. Plastic windows will turn opaque when sprayed with this product.
- Variations in the texture and porosity of the substrate will affect the coverage and performance of the product.
- MasterProtect H 440 VT will not inhibit water penetration through unsound or cracked surfaces or surfaces with defective flashing, caulking, or structural waterproofing.
- Windows or other non-absorbent substrates subject to overspray should be clean and contaminate free at the time of application. Cleaning may be required after application if dirt or dust is present for the silane to react with.
- Make certain the most current versions of product data sheet and SDS are being used; visit [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by Master Builders Solutions personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

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#### HEALTH, SAFETY AND ENVIRONMENTAL

Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting [www.master-builders-solutions.com/en-us](http://www.master-builders-solutions.com/en-us), e-mailing your request to [mbsbscst@mbcc-group.com](mailto:mbsbscst@mbcc-group.com) or calling 1(800)433-9517. Use only as directed.

**IN CASE OF EMERGENCY: Call CHEMTEL +1 (800) 255-3924 or if outside the US or Canada, +1 (813) 248-0585.**

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