

MasterProtect® H 440 VT

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

FORMERLY HYDROZO® CLEAR 40 VOC

PACKAGING

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

COLOR

Clear

YIELD

- Concrete:
125–250 ft²/gal (3.1–6.1 m²/L)
- Stucco:
90–130 ft²/gal (2.2–3.2 m²/L)
- Brick (regular):
100–150 ft²/gal (2.4–3.7 m²/L)
- Brick (hard burnt, dense):
125–175 ft²/gal (3.1–4.3 m²/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
Active alkylalkoxysilane content, % by weight	> 40
Penetration, in (mm) average depth depending upon substrate	0.20 (5)
Surface appearance after application	Unchanged

Test Data

PROPERTY	RESULTS	TEST METHOD
Flash point, ° F (° C)	53 (12)	SETA, IPA
Waterproofing after abrasion, % at 220 ft²/gal (5.5 m²/L)	88.4	Alberta Transportation and Utilities Type 1B
Resistance to chloride ion penetration, lb/yd³ Criteria of 1.5 at ½" Criteria of 0.75 at 1"	< 0.22 < 0.00	AASHTO T259 and T260
Water weight gain, % reduction, at 200 ft²/gal (5 m²/L)	86 – exceeds criteria	NCHRP 244 Series II-cube test
Absorbed chloride, % reduction, at 200 ft²/gal (5 m²/L)	92 – exceeds criteria	NCHRP 244 Series II-cube test
Absorbed chloride, % reduction, at 200 ft²/gal (5 m²/L)	99 – exceeds criteria	NCHRP 244 Series IV - Southern climate
Moisture-vapor transmission rate, %	102	OHD-L-35

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

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.

CLEAN UP

Clean equipment with xylene or MasterSeal 990.

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 master-builders-solutions.basf.us to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

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.basf.us, e-mailing your request to basfbscst@basf.com or calling 1(800)433-9517. Use only as directed.

**For medical emergencies only,
call ChemTrec® 1(800) 424-9300.**

LIMITED WARRANTY NOTICE

BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the sole option of BASF. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. BASF reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.