TREMCO

TECHNICAL DATA SHEET

Backstop NT-VB®

A Liquid Applied Water Resistive Membrane Air Barrier and Class I Vapor Retarder

PRODUCT DESCRIPTION

Backstop NT-VB is a flexible, polymer-based, noncementitious, air/vapor/water-resistive barrier, which resists water penetration, eliminates air infiltration and is classified as a Class I Vapor Retarder over vertical above grade walls. Available in two versions:

• Backstop NT-VB is applied using a trowel, or texture spray equipment.
• Backstop NT-VB Spray is applied by airless spray equipment.

BASIC USES

Backstop NT-VB is designed for use with all building claddings, as well as Dryvit EIF systems. When used with the Dryvit AquaFlash® System,Dryvit Flashing Tape™, or Dymonic 100, Backstop NT-VB provides an effective air/vapor/water-resistive barrier for acceptable substrates.

FEATURES & BENEFITS

- Includes a reinforcing fabric at sheathing joints
- Bonds to most construction materials
- Fluid applied/Fast drying
- Can be exposed for 180 days
- Ensures a continuous film barrier across transitions
- No need for multiple products
- Easy to use
- Not subject to tear off or damage from wind

AVAILABILITY

Backstop NT-VB is immediately available from your local Tremco Sales Representative or Distributor. For Distributor locations, visit www.tremcosealants.com

PACKAGING

5-gal (19-L) pails

STORAGE

Backstop NT-VB must be stored at a minimum of 40 °F (4 ° C) and a maximum of 100 °F (38 °C) in tightly sealed containers protected from weather and out of direct sunlight.

SHELF LIFE

The shelf life is 2 years from date of manufacture when properly stored in unopened pails.

LIMITATIONS

- Apply to acceptable substrates only.
- Shall not be used below grade or on surfaces that will be subjected to water immersion.
- Shall not be used to treat holes or sheathing joints exceeding 1/4 in (6.4 mm).
- When used beneath Portland cement stucco or adhered stone products, paper backed lath or other slip sheet material shall be installed over Backstop NT-VB.
- Backstop NT-VB can be exposed to weather up to 180 days to provide sufficient time for installation of the cladding. Inspect the surface of the Backstop NT-VB for any damage, cracks, voids or other detrimental conditions and repair prior to installation of the cladding. The Backstop NT-VB surface shall be clean, dry and free of any detrimental conditions that may affect adhesion.

SURFACE PREPARATION

- Sheathing board gaps shall not exceed 1/4 in (6.4 mm) and the surface must be flat within 1/4 in (6.4 mm) in any 4 ft (1.2 m) radius. CMU mortar joints shall be struck flush (tooled mortar joints and heavily textured CMU, not split faced, shall be skim coated with Dryvit Genesis®,
- Genesis® DM or Genesis® DMS) prior to application of the Backstop NT-VB or Backstop NT-VB Spray. CMU shall be clean, unpainted and free of efflorescence. All substrates shall be dry and free of foreign materials such as dirt, dust, oil, paint, wax, water repellants or other materials that inhibit adhesion.
- Concrete: Shall have cured a minimum of 28 days prior to application of the finishes. If efflorescence, form release agents or curing compounds are present on the concrete surface, the surface shall be throughly washed with muriatic acid and flushed to remove residual acid. All projections shall be removed and small voids filled with Dryvit Primus®, Primus®DM, Genesis®, or Genesis®DM mixture (see product data sheets for mixing and application).
- All substrate transitions and gaps between openings and penetration components such as windows, doors, electrical boxes, etc., shall be treated with Backstop NT-VB, Dryvit AquaFlash®, or Dryvit Flashing Tape™. Any sealants used shall be tested for compatibility and comply with ASTM C 920.
- All opening terminations, roof/wall intersections, transitions between different materials, chimneys, decks, roof, windows, etc., must be properly flashed, wrapped and sealed as required by the building code, good construction practice and/or Dryvit Backstop NT-VB Application Instructions, DS831.

MIXING

Material is ready for use after an initial spin-up using a drill with paddle mixer. **DO NOT ADD CEMENT.**

APPLICATION

Backstop NT-VB Application: Refer to the usage/application chart for the appropriate use and application technique for a given substrate.

WARRANTY

Tremco warrants its Products to be free of defects in materials but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or to refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

BACKSTOP® NT-VB™ USAGE/APPLICATION CHART

			Approx. Coverage Per Pail[d]
Exterior Grade Gypsum Sheathing			
Joints[a]	BSNT-VB	Trowel	300 lin. ft (91 m)
Face[e,g]	BSNT-VB	Trowel[b], or Texture Sprayer	For both tools 200 ft² (18.6 m²) max (2 coats)
	BSNT-VB Spray	Airless Spray	300-375 ft² (28-35 m²) (2 coats)
Fiberglass Faced Exterior Gypsum Sheathing			
Joints[a]	BSNT-VB	Trowel	300 lin. ft (91 m)
Face[e,g]	BSNT-VB	Trowel or Texture Sprayer	For both tools 200 ft² (18.6 m²) max [includes joints] (2 coats)
	BSNT-VB Spray	Airless Spray	300-375 ft² (28-35 m²) (2 coats)
APA Exposure 1, Exterior Grade, and Fire Retardant Treated Plywood; and Exterior Cement Board			
Joints[a]	BSNT-VB	Trowel	300 lin. ft (91 m)
Face[e,g]	BSNT-VB	Trowel[b], or Texture Sprayer	For both tools 200 ft² (18.6 m²) max (2 coats)
	BSNT-VB Spray	Airless Spray	300-375 ft² (28-35 m²) (2 coats)
APA Exposure 1 Rated Oriented Strand Board (OSB)			
Joints[a]	BSNT-VB	Trowel	300 lin. ft (91 m)
Face[e,g]	BSNT-VB	Trowel[b]	200 ft² (18.6 m²) max (2 coats)
		Texture Sprayer	200 ft² (18.6 m²) max (2 coats, backrolled)
	BSNT-VB Spray	Airless Spray	300-375 ft² (28-35 m²) (2 coats, backrolled)
Concrete and Masonry [c]			
Face[e,g]	BSNT-VB	Trowel	100-125 ft² (9-12 m²)[f] (2 coats)
		Texture Sprayer	100-125 ft² (9-12 m²)[f] (2 coats, backrolled)
	BSNT-VB Spray [g]	Airless Spray	150-375 ft² (14-35 m²)[f] (2 coats, backrolled)

[a] Tape the joints with Dryvit Grid Tape prior to application of Backstop NT-VB at joints and screw heads.
b Up to 1 pint (16 oz) of water may be added to a 60 lb pail of Backstop NT-VB for spray applications only.
c Due to variations in types of concrete/masonry, apply a 6 ft x 6 ft test area with coverage as indicated in the chart, before proceeding with the entire job. If there are voids in the substrate, particularly at the mortar joints, the job should be parged with Genesis®, 24 hours prior to BSNT-VB application. Backstop NT-VB shall NOT be used as a skim coat for parging CMU joints or heavy textured units.
d Backstop NT-VB should be applied at the recommended coverage rates to form a continuous film free of voids
e Backstop NT-VB (with up to 1 pint water addition per 60 lb. pail).
f Coverage may vary depending on the texture and porosity of the masonry substrate. Coverage based on smooth, dense block surface.
g Backstop NT-VB should be applied at the recommended coverage rates to form a continuous film free of voids, pinholes or other discontinuities. The following approximate mil thicknesses are recommended:

Backstop NT-VB	24 DFT	40* WFT
Backstop NT-VB Spray	18 DFT	30* WFT

*Based on volume solids
Refer to Product Data Sheets for Complete Mixing and Application Instructions

BACKSTOP® NT-VB™ TESTING

Test	Test Method	Criteria	Results
Tensile Bond	ASTM C 297/E 2134*	Minimum 15 psi (104 kPa)	Substrates: Minimum 19 psi (131 kPa) Flashing: Minimum 431 psi (2970 kPa)
Tensile Strength and Elongation	ASTM D 2370	No ICC or ANSI/EIMA Criteria	Tensile strength:160 psi Elongation: 16.8%
Flexibility	ASTM D 522 Method B	No ICC or ANSI/EIMA Criteria	No cracking at 2 mm diameter
Freeze-Thaw Resistance	ASTM E 2485 Method B	No deleterious effects after 10 cycles[1]	Passed - No deleterious effects after 10 cycles
Water Resistance	ASTM D 2247*	No deleterious effects after 14 days exposure[1]	No deleterious effectsafter 14 days exposure
Water Vapor Transmission	ASTM E 96 Procedure A (Dessicant Method)	Class I Vapor Retarder Less than 0.1 Perms	Backstop NT- VB: 0.088 Perms[2] Backstop NT-VB Spray: 0.07 Perms[2]
Wind Driven Rain	Fed TT-C-555	No ICC or ANSI/EIMA Criteria	No water penetration
Air Leakage	ASTM E 283	No ICC or ANSI/EIMA Criteria	0.002 cfm/ft^2 (0.01 l/sec/m^2)
Air Permeance	ASTM E 2178	No ICC or ANSI/EIMA Criteria	1.2x10^{-4} cfm/ft^2 @1.6psf (0.0006 l/s/m^2 @ 75Pa)
Air Barrier Assembly	ASTM E 2357	No ICC or ANSI/EIMA Criteria	<0.001 cfm/ft^2 @6.24 psf (0.05 l/sec m^2 @300 Pa)
Nail Sealability	ASTM D 1970	No ICC or ANSI/EIMA Criteria	Passed ABAA Criteria
Structural Performance	ASTM E 1233 Procedure A*	Minimum 10 positive cycles at 1/240 deflection; No cracking in field, at joints or interface with flashing.	Passed
Racking	ASTM E 72*	No cracking in field, at joints or interface with flashing at net deflection of 1/8 in (3.2 mm)	Passed
Restrained Environmental	ICC-ES Procedure*	5 cycles; No cracking in field; at joints or interface with flashing	Passed
Water Penetration	ASTM E 331*	No water penetration beyond the inner-most plane of the wall after 15 minutes at 2.86 psf (137 kPa)	Passed
Weathering UV Exposure Accelerated Aging Hydrostatic Pressure Test	 ASTM D 2898 Method B* ICC ES Procedure* AATCC 127*	 210 hours of exposure 25 cycles of wetting and drying 21.6 in (549 mm) water column for 5 hours	 Passed Passed Passed
Surface Burning Characteristics	ASTM E 84	ICC and ANSI/EIMA 99-A-2001 Flame Spread <25 Smoke Developed <450	Passed

* ASTM E 2570 Standard Test Method for Evaluating Water-Resistive Barrier (WRB) Coatings Used under Exterior Insulation and Finish Systems (EIFS) or EIFS with Drainage, also referred to as AC212 – Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers over Exterior Sheathing

1. No cracking, checking, rusting, crazing, erosion, blistering, peeling, or delamination when viewed under 5x magnification
2. Defined as a Class I vapor retarder per the 2009 IBC and IRC

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

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