BACKSTOP® NTX

A high performance, polymer-based, non-cementitious water-resistive membrane and air barrier

DSC455

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Backstop® NTX is a flexible, polymer-based, non-cementitious, air/water-resistive barrier membrane, which resists water penetration, eliminates air infiltration and is vapour permeable. Backstop NTX is designed for vertical, exterior, above-grade walls.
Backstop NTX is available in two versions:

- Backstop NTX Texture is applied using a trowel or texture spray equipment.
- Backstop NTX Smooth is applied by roller, or airless spray equipment.

BASIC USES

Backstop NTX Texture and Smooth are designed for use with Dryvit EIF Systems as well as other building cladding systems. When used with the Dryvit AquaFlash® System or Dymonic® 100, Backstop NTX provides an effective air barrier and water-resistive membrane for acceptable substrates.

FEATURES & BENEFITS

- Suitable for use behind all claddings, including EIFS
- Includes options for reinforcing fabric at sheathing joints
- Bonds to most construction materials
- Fluid applied
- Fast drying
- Can be exposed for 180 days
- Provides a continuous barrier across transitions
- Easy to use
- Not subject to tear off or damage from wind

PROPERTIES

Working Time: Backstop NTX Texture and Smooth are non-cementitious, water-based materials and will not set-up in the pail. Keep pail covered when not in use to minimize skinning.

Drying Time: The drying time is dependent upon the air temperature, wind conditions and relative humidity. Under average drying conditions [21 °C (70 °F), 55% R.H.], Backstop NTX will be dry to the touch within 2 hours and cure in 6 hours.

Testing Information: For test data, refer to the chart included with this document.

Application Procedure: For complete application instructions, refer to, DSC181.

Job Conditions: Air and surface temperature for application of Backstop NTX must be from 4 °C (40 °F) minimum to 38 °C (100 °F) maximum and must remain so for a minimum of 24 hours.

Temporary Protection: Provide temporary protection at all times until membrane is dry and do not allow it to be exposed to weather for longer than 180 days prior to installation of the specified cladding.

Acceptable Substrates: All sheathing substrate joints must be treated prior to the application of the Backstop NTX WRB. Options include: Dryvit AquaFlash System, Dymonic 100, and Backstop NTX Texture and AquaFlash mesh.

Acceptable substrates include:

a. Core treated exterior grade gypsum sheathing with fiberglass mat facers meeting ASTM C 1177.
b. Exterior fiber reinforced cement or calcium silicate boards.
c. APA Exterior or Exposure 1 Rated Plywood, Grade C-D or better, nominal 12.7 mm (1/2 in) minimum 4-ply or Plywood, compliant with CSA 086, CSA O121, CSA O151, and/or CSA O153.

d. APA Exposure 1 Rated Oriented Strand Board (OSB) nominal 11.1 mm (7/16 in) minimum or OSB compliant with CSA 086, CSA O325 and/or CSA O437.
e. Unglazed, unpainted, unsealed concrete, CMU, brick, cement plaster or masonry.

SURFACE PREPARATION

- Sheathing board gaps shall not exceed 6.4 mm (1/4 in) and the surface must be flat in all directions within 6.4 mm (1/4 in) over 2440 mm (96 in). CMU mortar joints shall be struck flush (tooled mortar joints and heavily textured CMU [not split faced] shall be skimmed with Dryvit Genesis, Genesis DM or Genesis DMS) prior to application of the Backstop NTX Texture. 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 may affect adhesion.
- Concrete shall have cured a minimum of 28 days prior to application of the Backstop NTX. If efflorescence, form release agents or curing compounds are present on the concrete surface, the surface shall be thoroughly 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 NTX Texture with AquaFlash Mesh, Dryvit AquaFlash System or Dymonic 100. Any sealants used shall be tested for compatibility and comply with ASTM C920.
- 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 NTX Application Instructions, DSC181.

MIXING

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

APPLICATION

Refer to the usage/application chart for the appropriate use and application technique for a given substrate.

PACKAGING

Backstop NTX Texture is supplied in 19 L (5 gal) pails.
Backstop NTX Smooth is supplied in 19 L (5 gal) pails or in 280 L (55 gallon) drums.

COVERAGE

Coverage will vary, depending on application method and substrate. For guidance, refer to the usage chart included in this document.

STORAGE

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

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

CAUTIONS & 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 6.4 mm (1/4 in).
- When used beneath Portland cement stucco or adhered stone products, paper backed lath shall be installed over Backstop NTX as a slip sheet.
- Backstop NTX can be exposed to weather up to 180 days to provide sufficient time for installation of the cladding. Inspect the surface of the Backstop NTX for any damage, cracks, voids or other detrimental conditions and repair prior to installation of the cladding. The Backstop NTX surface shall be clean, dry and free of any detrimental conditions that may affect adhesion.

CLEAN UP

Clean tools with water while material is still wet.

TECHNICAL AND FIELD SERVICES

Available on request.

BACKSTOP NTX (BSNTX) – TEXTURE, SMOOTH, AND SPRAY USAGE/APPLICATION CHART

			APPROX. COVERAGE PER PAIL	APPROX. COVERAGE PER DRUM
FIBERGLASS FACED EXTERIOR GYPSUM SHEATHING				
Joints[a]	BSNTX Texture with AquaFlash Mesh	Trowel	91 m (300 lin. ft)	
	AquaFlash Liquid with AquaFlash Mesh	Brush or 19 mm (¾ in)	91 m (300 lin. ft) with 101.6 mm (4") wide mesh and 3.6 kg (8 lb) pail or 457 m (1500 lin. ft) per 18.1 kg (40 lb) pail	
	Dymonic 100	Putty Knife	9.8 m (32 lin. ft) at 38 mm (1.5 in) wide and 1 mm (40 mils) thick per 567 g (20 oz) sausage	
Face[e,f]	BSNTX Texture	Trowel or[i] Texture Sprayer[d]	12-14.5 m^2 (130-156 ft^2)	
	BSNTX Smooth[c]	19 mm (3/4 in) Nap Roller	30.4 m^2 (327 ft^2)	
		Airless Sprayer[d]	38-45.6-m^2 (409-491 ft^2)	380-456 m^2 (4,090-4,910 ft^2)
EXPOSURE 1, EXTERIOR GRADE, AND FIRE RETARDANT TREATED PLYWOOD; AND EXTERIOR CEMENT BOARD				
Joints[a]	BSNTX Texture with AquaFlash Mesh	Trowel	91 m (300 lin. ft)	
	AquaFlash Liquid with AquaFlash Mesh	Brush or 19 mm (¾ in)	91 m (300 lin. ft) with 101.6 mm (4") wide mesh and 3.6 kg (8 lb) pail or 457 m (1500 lin. ft) per 18.1 kg (40 lb) pail	
	Dymonic 100	Putty Knife	9.8 m (32 lin. ft) at 38 mm (1.5 in) wide and 1 mm (40 mils) thick per 567 g (20 oz) sausage	
Face[e,f]	BSNTX Texture	Trowel, 9.5 mm (3/8 in) Foam Roller[b] or Texture Sprayer	12-14.5 m^2 (130-156 ft^2)	
	BSNTX Smooth[c]	12.7 mm (1/2 in) Nap Roller	49.4 m^2 (532 ft^2)	
		Airless Sprayer[d]	38-45.6-m^2 (409-491 ft^2)	380-456 m^2 (4,090-4,910 ft^2)
APA EXPOSURE 1 RATED ORIENTED STRAND BOARD (OSB)				
Joints[a]	BSNTX Texture with AquaFlash Mesh	Trowel	91 m (300 lin. ft)	
	AquaFlash Liquid with AquaFlash Mesh	Brush or 19 mm (¾ in)	91 m (300 lin. ft) with 101.6 mm (4") wide mesh and 3.6 kg (8 lb) pail or 457 m (1500 lin. ft) per 18.1 kg (40 lb) pail	
	Dymonic 100	Putty Knife	9.8 m (32 lin. ft) at 38 mm (1.5 in) wide and 1 mm (40 mils) thick per 567 g (20 oz) sausage	
Face[e,f]	BSNTX Texture	Trowel or Texture Sprayer[b]	17.8-20.3 m^2 (192-219 ft^2)	
	BSNTX Smooth	12.7 mm (1/2 in) Nap Roller	26.6-30.4 m^2 (286-327 ft^2)	
		Airless Sprayer[d]	26.6-30.4 m^2 (286-327 ft^2)	2,660-3,040 m^2 (2,860-3,270 ft^2)
CONCRETE AND MASONRY[c]				
Face[e,f]	BSNTX Texture	Trowel or 9.5 mm (3/8 in) Foam Roller[b]	9.7-12 m^2 (104-130 ft^2)	
	BSNTX Texture	Texture Sprayer	9.7-12 m^2 (104-130 ft^2)	
	BSNTX Smooth	Airless Spray	22.8-38 m^2 (245-409 ft^2)	2,280-3,800 m^2 (2,450-4,090 ft^2)

a Embed AquaFlash Mesh in BSNTX Texture, apply the AquaFlash System, or apply Dymonic 100 at joints, and apply Backstop NTX Texture or Dymonic 100 at screw heads.

b.....Up to 1 pint (16 oz) of water may be added to a 60 lb pail of Backstop NTX Texture for spray applications only.

c Due to variations in types of concrete/masonry, apply a 1.8 m x 1.8 m (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 BSNTX Texture application.
Backstop NTX shall NOT be used as a skim coat for parging CMU joints or heavy textured units.

d Backstop NTX Texture (with up to 1 pint water addition per 27.2 kg (60 lb.) pail) or Smooth may be sprayed and backtrowelled/backrolled.

e Coverage may vary depending on the texture and porosity of the substrate. Coverage assumes a smooth, dense surface.

f Backstop NTX 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 NTX Texture	25 DFT	32 WFT
Backstop NTX Smooth	11 DFT	14 WFT

Refer to Product Data Sheets for Complete Mixing and Application Instructions

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CRITERIA	RESULTS
Surface Burning Characteristics	ASTM E84	Flame Spread <25 Smoke Developed <450	Passed
Flexibility	ASTM D522 Method B	No ICC or ANSI/EIMA Criteria	No cracking at 2 mm diameter
Water Vapour Permeance	ASTM E96 Procedure B*	Vapour Permeable	Smooth: 88.7 ng/(Ps*s*m^2) Texture: 42.3 ng/(Ps*s*m^2)
Accelerated Weathering Resistance	ASTM G154*	No cracking, delamination, or flaking	Passed
Water Absorption Coefficient	CAN/ULC S716.1:2019	<4.0 g/(m^2*$s^{1/2}$)	Passed
Tensile Strength and Elongation	ASTM D412 Die C	No ICC or ANSI/EIMA Criteria	Tensile strength:199 psi Elongation: 250%
Nail Popping Resistance	CAN/ULC S716.1:2019	No cracking, delamination, or flaking	Passed
	CAN/ULC S716.1:2019	0.02 L(s*m^2) @ 75 Pa	0.0013 L(s*m^2) Texture 0.00135 L(s*m^2) Smooth
Structural Performance	ASTM E1233 Procedure A**	Minimum 10 positive cycles at 1/240 deflection; No cracking in field, at joints or interface with flashing	Passed
Racking	ASTM E72**	No cracking in field; at joints or interface with flashing	Passed
Restrained Environmental	ICC-ES Procedure**	5 cycles; No cracking in field; at joints or interface with flashing.	Passed
Water Penetration	ASTM E331**	No water penetration beyond the inner-most plane of the wall after 15 minutes at 137 kPa (2.86 psf)	Passed
Bond Strength	CAN/ULC S716.1:2019	Wet State: avg ≥ 80 kPa Initial & Dry State: avg ≥ 250 kPa	Passed. Substrates: OSB, fiberglass-faced exterior gypsum sheathing, exterior cement board, exterior grade and fire-retardant treated plywood, concrete, masonry
Joint Durability	CAN/ULC S716.1:2019	No water transmission	Passed
VOC	Regulatory	Meets South Coast Air Quality Management District (SCAQMD) Requirements	Less than 43 g/L
Volume Solids	Calculated	N/A	Smooth: 71% Texture: 75%
Weight/Pail (Smooth & Texture)	Calculated	N/A	28.6 kg (63 lb)

*** CAN/ULC S716.1:2019**

**** 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**

For more information on Dryvit or Continuous Insulation, click here.

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