

Backstop[®] NT and AquaFlash[®]

A seamless, liquid-applied air- and water-
resistive barrier combination ideal for
use with all cladding types



HIGH PERFORMING AND CODE COMPLIANT
PEACE OF MIND FOR ARCHITECTS

ASHRAE 189.1 - 2014

ASHRAE 90.1 - 2013

IRC
CC 2012

ASHRAE 90.1 -

CC 2012 ASHRAE 189.1 - 2
ASHRAE 90.1 - 2013 IBC NFPA 285

2013 NFPA 285
ASHRAE 189.1 - 2014

IBC NFPA 285
ICC 2012

The architect's challenge

Whatever the aesthetic design, the exterior walls of most new buildings – commercial or residential – must include protection against both incidental moisture and air leakage. In many cases, there is also a requirement for continuous insulation (CI), and all materials in the final wall assembly must be properly integrated and meet required testing in order to be code compliant. The architect must consider all these factors when writing a specification that incorporates products having vastly different material properties and performance characteristics.



Backstop NT is listed and approved by the Air Barrier Association of America (ABAA).



Does this problem look familiar? Avoid it by using Backstop NT and AquaFlash by Dryvit!

The Dryvit solution

Dryvit's Backstop NT and AquaFlash are the ideal air- and water-resistive barrier solution to this complex puzzle. Polymer based and liquid applied, Backstop NT protects the substrate and AquaFlash the rough wall openings, bonding chemically to act as an effective air and moisture barrier. Proven for over 10 years on thousands of projects worldwide, Backstop NT and AquaFlash are ideal for almost all substrates and building types, and are a superior performance choice to building papers, sheet goods and 'peel and stick' type rubber membranes.

BACKSTOP NT AND AQUAFASH

ENGINEERED FOR SUPERIOR PERFORMANCE

Backstop NT and AquaFlash have been engineered by Dryvit's R + D team to be versatile and easy to apply. This greatly assists the general contractor or builder in scheduling this work and sequencing with other trades – all of which saves time, money and hassle on the jobsite. Best of all, once fully cured, these materials can be left exposed to the elements for 30 days or more.*



* Contact Dryvit's Technical Services Department for specific details as project conditions vary and can affect exposure time.



Feature	Benefit
Meets all code requirements for AWRB and flashing	Can be specified on virtually any project with complete confidence
Backstop NT is available in both 'vapor permeable' and 'vapor barrier' options	Ideal for all climate zones, wall types and continuous insulation (CI) configurations
Compatible with a variety of materials (see DS455 and 494 for a list of acceptable substrates)	Integrates easily with transition details and diverse cladding types
Single source supply for both AWRB and flashing	Products bond chemically and are engineered and warranted to perform by Dryvit
Install Backstop NT and AquaFlash in either order and can leave exposed for extended period	Saves time, aids GC in sequencing and coordinating other trades

Premixed and ready to use. Backstop NT Spray available in 55 gallon drums.

Backstop NT Testing – Texture, Smooth and Spray (for Backstop NT-VB testing refer to DS829)

Test	Test Method	Criteria	Results
Surface Burning Characteristics	ASTM E 84	ICC and ANSI/EIMA 99-A-2001 Flame Spread <25 Smoke Developed <450	Passed
Flexibility	ASTM D 522 Method B	No ICC or ANSI/EIMA Criteria	No cracking at 2 mm diameter
Water Vapor Transmission	ASTM E 96 Procedure B ICC ES (AC212)*	ICC: Vapor Permeable No ANSI/EIMA Criteria	Backstop NT: 7 Perms ² Backstop NT - Spray: 7.9 Perms ²
Freeze-Thaw Resistance	ASTM E 2485/ICC-ES Procedure (AC212)*	ICC: 10 cycles; No deleterious effects ¹	Passed - 10 cycles: No deleterious effects ¹
Water Resistance	ASTM D 2247; ICC ES (AC212)*	ICC: 14 days exposure; No deleterious effects ¹	No deleterious effects ¹ after 14 days exposure
Tensile Strength and Elongation	ASTM D 2370	No ICC or ANSI/EIMA Criteria	Tensile strength: 160 psi Elongation: 16.8%
Wind Driven Rain	Fed TT-C-555	No ICC or ANSI/EIMA Criteria	No water penetration
Nail Sealability	ASTM D1970	No ICC or ANSI/EIMA Criteria	Passed ABAA Criteria
Air Leakage	ASTM E 283	No ICC or ANSI/EIMA Criteria	0.01 l/sec/m ² (0.002 cfm/ft ²)
Air Permeance	ASTM E 2178	No ICC or ANSI/EIMA Criteria	0.0006 l/s/m ² @ 75Pa (1.2x10 ⁻⁴ cfm/ft ² @ 1.6psf)
Air Barrier Assembly	ASTM E 2357	No ICC or ANSI/EIMA Criteria	0.05 l/sec m ² @300 Pa (<0.001 cfm/ft ² @ 6.24 psf)
Structural Performance	ASTM E 1233 Procedure A ICC ES (AC212)*	ICC: Minimum 10 positive cycles at 1/240 deflection; No cracking in field, at joints or interface with flashing.	Passed
Racking	ASTM E 72 ICC ES (AC212)*	ICC: No cracking in field, at joints or interface with flashing at net deflection of 3.2 mm (1/8 in)	Passed
Restrained Environmental	ICC-ES Procedure ICC ES (AC212)*	ICC: 5 cycles; No cracking in field; at joints or interface with flashing	Passed
Water Penetration	ASTM E 331 ICC ES (AC212)*	ICC: No water penetration beyond the inner-most plane of the wall after 15 minutes at 137 kPa (2.86 psf)	Passed 75 minutes at 299 Pa (6.24 psf)
Tensile Bond	ASTM C 297/E 2134 (formerly EIMA 101.03) ICC ES (AC212)*	ICC and ANSI/EIMA 99-A-2001 Minimum 104 kPa (15 psi)	Substrates: Minimum 131 kPa (19 psi) Flashing: Minimum 2970 kPa (431 psi)
Weathering			
UV Exposure	ICC ES Proc.; ICC ES (AC212)*	ICC: 210 hours of exposure	Passed
Accelerated Aging	ICC ES Proc.; ICC ES (AC212)*	ICC: 25 cycles of wetting and drying	Passed
Hydrostatic Pressure Test	AATCC 127; ICC ES (AC212)*	ICC: 549 mm (21.6 in) water column for 5 hours	Passed

* AC212 – Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers over Exterior Sheathing, also referred to as ASTM E 2570

1. No cracking, checking, rusting, crazing, erosion, blistering, peeling, or delamination when viewed under 5x magnification

2. Defined as a Class III vapor retarder per the 2009 IBC and IRC

AquaFlash Testing

Test	Test Method	Criteria	Results
Tensile Strength	ASTM D 5034; AC148 Sec. 4.1	Minimum 7.1 kg/cm (39.9 lb/in) for aged specimen	Passed
Nail Sealability	ASTM D 1970; AC148 Sec. 4.2	13 cm (5 in) water: 72 hrs at 4°C (40°F)	No water penetration
Accelerated Aging Prior to Peel Adhesion/Water Resistance	AC148 Sec. 4.3.1.1.1	25 cycles: 3 hrs at 49°C (120°F), 3 hrs water immersion, 18 hrs at -40°C (-40°F).	No visible damage under 5x magnification
Peel Adhesion	ASTM D3330; AC148 Sec. 4.3	Peel strength of aged specimens exceeded 75% of control specimens	Passed
Water Resistance:	AATCC Method 127; AC148 Sec. 4.5	No water leakage after UV exposure and accelerated aging cycling	Passed
Ultraviolet Exposure	AC148 Sec. 4.4	210 hours of exposure	No deleterious effects when viewed under 5x magnification
Pliability	AC148 Sec. 4.6	No cracking when bent over 3 mm (1/8 in) mandrel at 0° C (32°F)	Passed



Information contained in this brochure conforms to the standard detail recommendations and specifications for the installation of Dryvit Systems, Inc. products as of the date of the publication of this document and is presented in good faith. Dryvit Systems, Inc. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To ensure that you are using the latest, most complete information, contact Dryvit Systems, Inc.

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