

# BACKSTOP<sup>®</sup> NTX AND AQUAFLASH<sup>®</sup>

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 90.1 - 2010  
IRC  
ICC 2012

ASHRAE 90.1 - 2010

ICC 2012  
NFPA 285  
ASHRAE 189.1 - 2012

ASHRAE 189.1 - 2010  
ASHRAE 90.1 - 2010 IBC NFPA 285

### 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.



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

### The Dryvit solution

Dryvit's Backstop NTX and AquaFlash are the ideal air- and water-resistive barrier solution to this complex puzzle. Polymer based and liquid applied, Backstop NTX 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 NTX 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 NTX AND AQUAFLASH ENGINEERED FOR SUPERIOR PERFORMANCE

Backstop NTX 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 180 days.\*

\* 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 NTX 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 NTX 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 NTX Spray available in 55 gallon drums

## Backstop NTX Texture and Smooth Testing (for Backstop NTX-VB testing refer to DS829)

| Test                            | Test Method   | Criteria  | Results   |
|---------------------------------|---|---|---|
| Surface Burning Characteristics | ASTM E 84   | ICC and ANSI/EIMA 99-A-2001<br>Flame Spread <25<br>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<br>ICC ES (AC212)*                    | ICC: Vapor Permeable<br>No ANSI/EIMA Criteria   | 17 perms  |
| Freeze-Thaw Resistance          | ASTM E 2485/ICC-ES Procedure (AC212)*                       | ICC: 10 cycles; No deleterious effects <sup>1</sup>   | Passed - 10 cycles: No deleterious effects <sup>1</sup>                   |
| Water Resistance                | ASTM D 2247; ICC ES (AC212)*                                | ICC: 14 days exposure; No deleterious effects <sup>1</sup>  | No deleterious effects <sup>1</sup> after 14 days exposure                |
| Tensile Strength and Elongation | ASTM D 2370   | No ICC or ANSI/EIMA Criteria  | Tensile strength: 240 psi<br>Elongation: 250%                             |
| Nail Sealability                | ASTM D1970  | No ICC or ANSI/EIMA Criteria  | Passed ABAA Criteria  |
| Air Leakage                     | ASTM E 283  | No ICC or ANSI/EIMA Criteria  | 0.0014 cfm/ft <sup>2</sup> (0.0071 l/sec/m <sup>2</sup> )                 |
| Air Permeance                   | ASTM E 2178   | No ICC or ANSI/EIMA Criteria  | 0.0005 cfm/ft <sup>2</sup> @ 1.6 psf (0.002 l/s/m <sup>2</sup> @ 75Pa)    |
| Air Barrier Assembly            | ASTM E 2357   | No ICC or ANSI/EIMA Criteria  | <0.0016 cfm/ft <sup>2</sup> @ 1.6 psf (0.0079 l/sec m <sup>2</sup> @75Pa) |
| Structural Performance          | ASTM E 1233 Procedure A<br>ICC ES (AC212)*                  | ICC: Minimum 10 positive cycles at 1/240 deflection;<br>No cracking in field, at joints or interface with flashing. | Passed  |
| Racking                         | ASTM E 72<br>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<br>ICC ES (AC212)*                         | ICC: 5 cycles; No cracking in field; at joints or interface with flashing   | Passed  |
| Water Penetration               | ASTM E 331<br>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  |
| Tensile Bond                    | ASTM C 297/E 2134 (formerly EIMA 101.03)<br>ICC ES (AC212)* | ICC and ANSI/EIMA 99-A-2001<br>Minimum 104 kPa (15 psi)   | Substrates: Minimum 26 psi (179.3 kPa)                                    |
| <b>Weathering</b>               |   |   |   |
| 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  |

