Acrostop RS
Vapor Permeable Air/Water-Resistive Barrier Membrane
Product Bulletin
**Acrostop RS**

**DESCRIPTION**

Acrostop RS is a one-component, fluid-applied vapor permeable air/water-resistive barrier. This waterproof, resilient coating may be spray-, roller-, or brush-applied directly to approved above grade wall substrates. It provides excellent secondary moisture protection behind most wall claddings including EIFS, stucco, brick, siding and metal panels. A slipsheet is required for stucco claddings.

**USES**

For use over the following exterior wall substrates:

- Poured concrete/unit masonry, ASTM C1177 type sheathings, including DensGlass™ or DensElement exterior sheathing, eXp™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, Weather Defense™ Platinum sheathing, GreenGlass® sheathing, PermaBase™ cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior), untreated Exposure I or exterior plywood sheathing (grade C-D or better), untreated Exposure I OSB, gypsum sheathing (ASTM C79/ASTM C1396).

Do not use ACROSTOP RS for below-grade applications or on surfaces subject to water immersion.

**COLOR**

Light gray

**COVERAGE***

<table>
<thead>
<tr>
<th>Substrate</th>
<th>Coverage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C1177 Type Sheathing</td>
<td>48 m² (525 ft²) per pail</td>
</tr>
<tr>
<td>Cement Board</td>
<td>53 m² (575 ft²) per pail</td>
</tr>
<tr>
<td>Plywood*</td>
<td>27 m² (296 ft²) per pail</td>
</tr>
<tr>
<td>Oriented Strand Board (OSB)*</td>
<td>27 m² (296 ft²) per pail</td>
</tr>
<tr>
<td>Concrete Masonry Units (CMU)*</td>
<td>24 m² (265 ft²) per pail</td>
</tr>
<tr>
<td>Poured Concrete</td>
<td>48 m² (575 ft²) per pail</td>
</tr>
</tbody>
</table>

Note: Coverage for ASTM C1177 sheathing, cement board, poured concrete is at 12 mils WFT; for plywood OSB and CMU are at 20 mils WFT.

**PACKAGING**

- 27.2 kg per 19-liter pail (60 lbs per 5-gallon pail)
- 4” SHEATHING FABRIC: 101.5 mm x 54.8 m (4" x 180 ft) roll
- 6” SHEATHING FABRIC: 152.4 mm x 54.8 m (6" x 180 ft) roll
- 9” SHEATHING FABRIC: 228.5 mm x 54.8 m (9” x 180 ft) roll

* Roll or spray / backroll for optimum coverage rate. Other application methods may provide less coverage. Actual results may vary depending on surface porosity, roughness, moisture uptakes, type of OSB or other factors.

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**Features**

- Can be used with most code-compliant claddings
- Meets ASTM D1970 nail sealability requirements with and without Sheathing Fabric
- One component, low-VOC formulation
- Nonflammable as applied
- Mineral oil and plasticizer free
- Water based
- Tough, abrasion resistant
- Low temperature performance with LT ADDITIVE
- 180 day outdoor exposure rating (30 days if used as part of an adhesively fastened wall system)

**Benefits**

- One continuous air/water-resistive barrier for buildings with multiple claddings
- Self sealing performance
- Easy to apply, meets VOC requirements in all 50 states
- Workplace safety
- Will not dry out or crack due to loss of oil / plasticizer over time
- Cleans up with water; solvents and citrus based cleaners not required
- Rugged membrane resists damage after installation
- Extends minimum application temperature to 4˚ C (25˚ F)
- Flexible construction scheduling
Multi-Clad Wall Assembly using Acrostop RS

<table>
<thead>
<tr>
<th>TEST</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Air Leakage of Air Barrier Assemblies</strong></td>
<td>0.0007 l/s-m² (0.0001 cfm/ft²) @ 75 Pa (1.57 psf) positive / post conditioning</td>
</tr>
<tr>
<td><strong>Air Permeance of Building Materials</strong></td>
<td>0.0049 l/s-m² @ 75 Pa (0.00098 cfm/ft² @ 1.57 psf)</td>
</tr>
<tr>
<td><strong>Rate of Air Leakage</strong></td>
<td>0.0185 l/s-m² @ 75 Pa (0.0037 cfm/ft²)</td>
</tr>
<tr>
<td><strong>Water Vapor Transmission</strong></td>
<td>18 Perms (grains/Hr. in Hg. ft²) @ 12 mils wet film thickness</td>
</tr>
<tr>
<td><strong>Pull-Off Strength of Coatings</strong></td>
<td>Pass - Min. 110 kPa (15.9 psi) or substrate failure (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood; PVC and galvanized flashing)</td>
</tr>
<tr>
<td><strong>Nail Sealability (without Sheathing Fabric)</strong></td>
<td>Pass - No water penetration at galvanized roofing nail penetration under 127 mm (5&quot;) head of water after 3 days at 4° C (40° F)</td>
</tr>
<tr>
<td><strong>Surface Burning</strong></td>
<td>Class A flame spread &lt;25</td>
</tr>
<tr>
<td><strong>Radiant Heat Multi-Story Tests</strong></td>
<td>Pass using many wall designs; including Acrocrete EIFS cladding with 12&quot; EPS insulation Engineering analyses available on request</td>
</tr>
<tr>
<td><strong>Water-Resistive Barriers under EIFS</strong></td>
<td>Pass (Meets all criteria in the standard)</td>
</tr>
<tr>
<td><strong>Compound Stability (Elevated Temperature)</strong></td>
<td>No flowing, dripping, or drop formation up to 177° C (350° F)</td>
</tr>
<tr>
<td><strong>Fire Resistance</strong></td>
<td>Will not add or detract from the rating of a fire resistive wall assembly</td>
</tr>
<tr>
<td><strong>Drainage Efficiency</strong></td>
<td>99%</td>
</tr>
</tbody>
</table>

**ICC-ES AC 212** Acceptance Criteria for Water-Resistant Coatings used as Water-Resistant Barriers over Exterior Sheathing

**Sequential Testing - Structural, Racking, Restrained Environmental Conditioning and Water Penetration**

1. **Structural:** ASTM E 1233 Procedure A
   - No cracking at joints or interface of flashing
2. **Racking:** ASTM E 72
   - No cracking at joints or interface of flashing
3. **Restrained Environmental Conditioning:** ICC-ES AC 212
   - No cracking at joints or interface of flashing
4. **Water Penetration:** ASTM E 331
   - No water penetration after 90 min @ 299 Pa (6.24 psf)
   - Tested over OSB and gypsum sheathing

**Sequential Testing - Weathering**

1. **UV Light Exposure:** ICC-ES AC 212
   - No cracking or bond failure to substrate
2. **Accelerated Aging:** ICC-ES AC 212
   - No cracking or bond failure to substrate
3. **Hydrostatic Pressure Test:**
   - No water penetration under 55cm (21.7") head of water for 5 hours
## TEST RESULTS

### ICC-ES AC 212  (Continued from the previous page)

<table>
<thead>
<tr>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeze-Thaw</td>
<td>No sign of deleterious effects after 10 cycles (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood)</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>No sign of deleterious effects after 14 day exposure (Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood)</td>
</tr>
<tr>
<td>Tensile Bond</td>
<td>&gt;103 kPa (15 psi) Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood, CMU, PVC and galvanized flashing</td>
</tr>
<tr>
<td>Tensile Bond (before &amp; after freeze-thaw)</td>
<td>&gt;103 kPa (15 psi) avg; no failure of the lamina after 10 cycles freeze-thaw (Tested over various substrates)</td>
</tr>
</tbody>
</table>

### ICC-ES AC 148  Acceptance Criteria for Flexible Flashing Materials

<table>
<thead>
<tr>
<th>Sequential Testing - Weathering</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. UV Light Exposure: ICC-ES AC 148</td>
<td>No cracking or bond failure to substrate</td>
</tr>
<tr>
<td>2. Accelerated Aging: ICC-ES AC 148</td>
<td>No cracking or bond failure to substrate</td>
</tr>
<tr>
<td>3. Hydrostatic Pressure Test: AATCC 127-1985</td>
<td>No water penetration under 55cm (21.7&quot;) head of water for 5 hours</td>
</tr>
<tr>
<td>Peel Adhesion</td>
<td>Tested over ASTM C1177 glass-mat sheathing, OSB, plywood, PVC and uncoated aluminum</td>
</tr>
<tr>
<td>After UV Exposure</td>
<td>Pass</td>
</tr>
<tr>
<td>After Accelerated Aging</td>
<td>Pass</td>
</tr>
<tr>
<td>After Elevated Temperature Exposure</td>
<td>Pass</td>
</tr>
<tr>
<td>After Water Immersion</td>
<td>Pass</td>
</tr>
<tr>
<td>Nail Sealability after Thermal Cycling</td>
<td>Pass</td>
</tr>
<tr>
<td>Tensile Strength after UV Exposure</td>
<td>All samples meet the minimum requirement of 3.5 N/mm (20 lbs/in)</td>
</tr>
<tr>
<td>Cold Temperature PliabilityASTM D 1970, AAMA 711</td>
<td>No cracking after bending around a 25 mm (1&quot;) mandrel after 2 hour exposure to -18° C (0° F)</td>
</tr>
<tr>
<td>Resistance to Peeling</td>
<td>No signs of distress or failure after 24 hours of exposure at room temperature, 50° C (122° F), 65° C (149° F), 80° C (176° F)</td>
</tr>
</tbody>
</table>
MIXING
1. Use directly from original packaging or prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product.
2. Mix ACROSTOP RS with a clean, rust-free paddle and drill until thoroughly blended. Dilution of ACROSTOP RS is not recommended.
3. Additives, other than LT ADDITIVE, are not permitted.
4. Close container when not in use.
5. Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically.

APPLICATION
Job Conditions
To apply to ACROSTOP RS at ambient temperatures below 4°C (40°F) but greater than -4°C (25°F), thoroughly blend 1 full quart of LT ADDITIVE with one full 5-gallon pail of ACROSTOP RS. When using LT ADDITIVE, extended drying time can be expected. Do not apply ACROSTOP RS to frozen or frost-faden substrates.

Do not apply ACROSTOP RS in ambient temperatures below 4°C (40°F) or onto substrates below 4°C (40°F) unless LT ADDITIVE is used.

Walls shall be capped to prevent moisture and precipitation from entering wall during construction.

Limit the weather exposure of ACROSTOP RS to a maximum of 180 days. When ACROSTOP RS is applied under adhesively attached ACROTEX systems, the insulation board must be applied within 30 days of the ACROSTOP RS. If exposure limits are exceeded, clean and recoat with ACROSTOP RS. Verify surfaces are free of dirt, contaminants, or other deleterious conditions before application of cladding. Report and correct any such conditions prior to cladding application. Dry/cure times of adhesively applied EPS insulation board installed over ACROSTOP RS may be prolonged, particularly in cool and/or damp weather. Non-cementitious adhesives are not recommended for EPS insulation board attachment to ACROSTOP RS. Proper application is the responsibility of the user.

Surface Preparation
Substrate shall be dry, clean, sound and free of release agents, paint or other residue or coatings. Verify substrate is flat, free of fins or planar irregularities greater than 6.4 mm in 3 m (1/4” in 10’). Unsatisfactory conditions shall be reported to the general contractor and corrected before application of ACROSTOP RS.

Equipment
Airless spray equipment capable of spraying a minimum of 1 gallon per minute with a minimum size reversible tip of 0.019 is required. Airless equipment capable of greater deliveries can use larger tips. Tip sizes of 0.021 to 0.025 are recommended. Tip sizes greater than 0.025 provide too much material and effect the overall consumption of the material affecting the coverage rates. If pump filters are used, minimum size of filter recommended is a 60 mesh filter.

When spraying over plywood and OSB, back rolling is recommended to completely encapsulate and create a pinhole free application.

For roller application, use a 13 mm (1/2”) nap roller.

Procedure
1. Substrate shall be of a type acceptable by BASF and shall be installed per substrate manufacturer’s instructions and local code requirements.
2. Rough openings and sheathing joints can be treated with MAXFLASH Liquid Flashing Membrane or SHEATHING FABRIC saturated with ACROSTOP RS. See following sections for additional steps.

USING MAXFLASH

Flashing Rough Openings:
A. Apply a bead of MAXFLASH in each corner of the rough opening, ensuring that corners are fully sealed. Where wood bucks are used, apply a bead of MAXFLASH into gaps between bucks and between the buck and building structure.
B. Apply additional MAXFLASH in a zigzag pattern onto head, sill, jambs and exterior substrate. Spread MAXFLASH evenly across the rough opening to form a uniform, continuous, void- and pinhole-free membrane with a 12-20 mil thickness. Extend MAXFLASH membrane minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
C. Extend MAXFLASH at a minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
D. Allow MAXFLASH to skin before applying ACROSTOP RS to sheathing. Lap the air/water-resistive barrier a minimum of 2 inches onto MAXFLASH, creating a continuous, monolithic air/ water-resistive barrier membrane.
E. Allow MAXFLASH to cure prior to the installation of windows, doors and other wall assemblies.

Sheathing Joints:
MAXFLASH can be used to fill sheathing joints up to ½” wide.
A. Apply a thick bead of MAXFLASH to sheathing joints.
B. Spread MAXFLASH evenly a minimum of 1-inch beyond the joint on either side. Apply 20 mils of MAXFLASH across the sheathing joint.
C. Spot fastener heads with MAXFLASH or ACROSTOP RS.
D. Allow MAXFLASH to skin before applying ACROSTOP RS to sheathing.
See the MAXFLASH product bulletin for coverages and additional product highlights.

- OR -

USING SHEATHING FABRIC

Flashing Rough Openings:
Wrap openings with SHEATHING FABRIC. Apply a generous amount of mixed ACROSTOP RS to all surfaces and immediately embed SHEATHING FABRIC, completely saturating the SHEATHING FABRIC. If necessary, apply a second coat of ACROSTOP RS to ensure a complete, void-free membrane.

Sheathing Joints:
A. Spot all fasteners and precoat sheathing joints, terminations, inside and outside corners with mixed ACROSTOP RS using a 101 mm (4”) wide by 13 mm (1/2”) nap roller, brush or spray.
B. 1. Immediately place and center SHEATHING FABRIC over wet ACROSTOP RS at all sheathing joints, terminations, inside and outside corners, as well as knot holes and check cracks that may exist in plywood or OSB. Ensure SHEATHING FABRIC extends evenly on both sides of the sheathing joint. Completely saturate SHEATHING FABRIC with ACROSTOP RS.
2. Lap SHEATHING FABRIC 63.5 mm (2 1/2”) minimum at intersections.
3. If using roller or brush application, allow to dry to the touch before applying ACROSTOP RS to entire wall surface. If spraying, “wet on wet” application is acceptable.

3. A. Apply ACROSTOP RS to concrete, DensGlass™ or DensElement exterior sheathing, eX™ sheathing, GlasRoc® sheathing, Securock® glass-mat sheathing, Weather Defense™ Platinum sheathing, GreenGlass® sheathing, PermaBase™ cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior) and gypsum sheathing (ASTM C79/
ASTM C1396) with airless spray equipment by roller, or brush to a consistent, minimum 12 wet mil thickness that is free of voids and pin holes. If rolling, a fully loaded roller pad is required to obtain a consistent, minimum 12 wet mil thickness.

Note: Refer to Spray Application technical bulletin for spray application equipment and application instructions.

B. Apply ACROSTOP RS to plywood, OSB or CMU substrate(s) with airless spray equipment or 13 mm (1/2") nap roller a consistent, minimum 12 wet mil thickness. Prior to application of the second coat, visually inspect to assure sheathing surface is blister free and coating is free of voids and pinholes. Repair if needed and then apply a second coat after the initial coating is sufficiently dry.

Note: A minimum of two (2) 12 mil wet coats of ACROSTOP RS is required over OSB, plywood and CMU. ACROSTOP RS may be sprayed to a 20-mil thickness over OSB and plywood in one wet application. Backrolling may be needed to produce a pinhole-free film.

C. When spraying keep the spray gun as close to 90° angle to the substrate as possible. Overlap spray patterns to ensure uniform coverage, free from pinholes.

D. Verify thickness using a wet film mil gauge.

Drying Time
Allow to dry completely, typically 2 to 10 hours, before proceeding with EIFS or other cladding installation. Protect from rain and from temperatures less than 4°C (40°F) for 24 hours.

For Best Performance
Prior to application of EPS insulation boards for EIFS or alternative claddings, visually inspect the ACROSTOP RS for voids, pinholes, surface deficiencies, etc. Repair deficiencies and areas that are not intact. Apply additional ACROSTOP RS as necessary such that ACROSTOP RS is free of voids, pinholes, etc. All sheathing joints, terminations, inside and outside corners must be reinforced with 4", 6" or 9" SHEATHING FABRIC embedded in ACROSTOP RS; WS FLASH 4 or 9; or MAXFLASH. Reference Air/Vapor/ Water-Resistive Barrier Guidelines technical bulletin for proper treatment of rough openings and sheathing joints.
LIMITATIONS

Shipping & Storage
Protect BASF materials during transportation and installation to avoid physical damage. Store BASF materials in a cool, dry place protected from freezing. Store at no less than 4°C (40°F) and below 49°C (120°F). Protect from extreme heat and direct sunlight.

Stacking
Do not stack pallets.

Shelf Life
Two (2) years, properly stored in original containers.

TECHNICAL SUPPORT
Consult the BASF Wall Systems Technical Services department for specific recommendations concerning all other applications. Consult the Acrocrete website, www.acrocrete.basf.com, for additional information about products and systems and for updated literature.

HEALTH AND SAFETY
Follow good safety and industrial hygiene practices during handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read Safety Data Sheet (SDS) and related literature on this product before specification and/or installation.

Solids
73% solids

VOC Content
12 g/l, or 0.10 lbs/gal less water and exempt solvents per ASTM D3960 (based in part on EPA method 24).

For medical emergencies only call CHEMTREC at (800) 424-9300.

Warranty
BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin, 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 shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of BASF. In the absence of an extended warranty issued by 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.

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