Technical Data Sheet

Description
Maximum-Stretch is a white Elastomeric Acrylic Roof Coating and Sealant with added high-performance Rubber Technology. With 650% elongation it is more elastic than any other product on the market today. This important feature allows it to expand and contract with the roof.

Maximum-Stretch helps to maintain and prolong the life of existing roofs and avoid expensive tear-offs. It is designed for low-slope roof maintenance on metal, Built-Up Roofing, Rolled Roofing, Modified Bitumen Concrete, EPDM, Wood and more.

The lasting, energy-saving benefits of bright white Maximum-Stretch keep roofs naturally cooler during hot summer months and result in lower air-conditioning costs. Maximum-Stretch is 88% reflective of the sun’s powerful UV and infrared rays and helps protect roofs from deterioration. Easily applied, it creates a uniform seamless surface that remains flexible at low temperatures without becoming brittle, cracking or peeling. Premium commercial quality Maximum-Stretch also resists mold and mildew.

Maximum-Stretch may be used as a monolithic stand-alone waterproof roof coating and sealant, or as a topcoat in our multi-layer Roof Coating System to maintain and revitalize very aged and deteriorated roofs. Eco-friendly, water clean-up Maximum-Stretch is recognized as the premium elastomeric roof coating on the market today and comes with a 12-year warranty on metal roofs.

Features and Benefits
- Simple application broom, squeegee, roll or spray
- Ready Mixed
- 650% Elongation- 3X more elastic that any other product on the market
- Cold Temperature Flexibility Type I (-10C 14F) and Type II (-26C -15F)
- Reflects 88% of the Sun’s rays to reduce roof temperature
- 12-year Warranty on Metal Roofs
- Commercial and Residential

Acceptable Substrates and Uses
- Existing Metal Standing Seam and Corrugated Roofs
- Existing EPDM Rubber Membrane Roofs*
- Existing Concrete Roofs
- Existing Plywood Roofs
- Contact Ames Technical Services if roof conditions are suspect or prone to leaking for guidance

* when used in conjunction with Ames Blue Max or Ames Elasto-Barrier

Packaging Information
- 1 gallon
- 5 gallons
- in 55-gallon drum or 275 gallon totes

Limitations
- Do not allow product in packaging to freeze.
- Do not apply in inclement weather, rain or if rain is anticipated.
- Do not apply if temperature is expected to drop below 32F in the next 24 hours.
- Do not store in areas of high temperature.

Protection
- Protect the curing roof coating membrane from rain and inclement weather.
- Protect jobsite stored materials from freezing or extreme heat.

Accessories
- Peel and Stick Seam Tape
- Ames Poly-Bridge Polyester Reinforcement fabric for seams
- Contouring roof fabric for laminating a reinforcing layer into Elasto-Barrier or Blue Max.
- Elasto-Barrier or Blue Max for embedding fabric and intermediate coat if needed
- Mil Gauge for checking coating thickness during application.
Tools Needed

- Pressure Washer or Garden Hose & Long Handled Soft Deck Brush
- Floor Style Squeegee or Soft Bristled Push Broom
- 9" or 18" wide long handled paint roller frame & ¾" to 1 ¼" roller covers
- 4" throwaway paint brushes
- Scissors for cutting seam tape or polyester fabric
- Bucket Opener

Project Conditions

- Project site conditions and existing roof conditions can vary from roof to roof.
- We highly recommend you take a moment and contact our Technical Service Representatives to discuss your specific roof condition for supplemental recommendations.
- With a smart phone it can take just a few minutes to take pictures of your project then email them to us to verify we match up application procedures to your specific roof.

Pre-Application Suggestions

- Read all instructions on TDS and Maximum Stretch Bucket before beginning.
- Always run a test patch first in an inconspicuous area to ensure that proper adhesion and drying occurs with your product and the product works to your satisfaction before proceeding. Do not proceed unless you are satisfied.
- Refer to the Technical Data Sheet for all specifications, tests, guidelines and further information for professional installation or call our Ames Technical Service Team.

Application

Our application guidelines for a Maximum Stretch Roof System vary depending on type of roof and roof condition. Maximum-Stretch should be applied on a properly and adequately drained roof. Surface must be in savable condition, clean and dry with proper and adequate drainage. Some areas may require periodic preventative maintenance. Our technical services representatives are a phone call away and available to assist in determining the correct Maximum Stretch Roof System for your specific roof. All specifications are suggestions only.

Maximum Stretch Application

- Maximum-Stretch is best applied between 50° to 90° F (10° to 32° C) on warm dry surfaces.
- Spray or pour out Maximum-Stretch. Spread in 1- or 2-gallon increments if applying by squeegee, push broom or roller.
- Even up the coating application with a roller as needed to maintain a uniform thickness.
- Work on manageable sections of roof allowing you time to properly apply the materials prior to materials beginning to dry.
- If spraying it may be advantageous to back roll through the first coat during application to infill rough surfaces. Always contact Technical Services when in doubt. Airless Sprayer guidelines and sizing information are available on our website or from Technical Services.

Curing of Product

- Dry times are dependent upon the thickness of application, humidity and weather.
- Product should be dried and cured after 24 hours.
- Low temperature, high humidity, evening and morning dew will increase drying and curing times.
- Always test the roof after initial cure to determine if cooler temperatures and high humidity may have slowed down the drying time before walking on the roof or beginning a second coat.

Coverage Rate

- We recommend a minimum of 2 coats at the rate of 1 gallon per 100 sq. ft. per coat.

Clean-up, Storage, and Disposal

- Clean tools and small spills with water.
- Store unused product in its original can, tightly sealed and protected from freezing.
- Dispose of this product in accordance with local, state, or federal requirements.

Health and Safety

- Use hand and eye protection when using this product.
- Wash with soap and water after contact with skin.
- If eye contact occurs rinse with clean water and seek medical advice if symptoms continue.
- Keep out of the reach of children.
## Maximum-Stretch®
Typical Physical and Performance Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Mold and Mildew resistance</td>
<td>ASTM G21 Excellent</td>
</tr>
<tr>
<td>Vapor Permeability</td>
<td>ASTM E96 Desiccant Method 0.96 perms</td>
</tr>
<tr>
<td>Weight per gallon</td>
<td>ASTM D1475 9.67 lbs./ gallon</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D2370 up to 650%</td>
</tr>
<tr>
<td>Tear Resistance</td>
<td>ASTM D624 77.0 lbs./in</td>
</tr>
<tr>
<td>Viscosity</td>
<td>ASTM D2196 6000-7000 cps spindle # 6@100 rpm</td>
</tr>
<tr>
<td>pH as shipped</td>
<td>ASTM E70 8.75-9.25</td>
</tr>
<tr>
<td>Humidity</td>
<td>Best applied at 50% humidity or below.</td>
</tr>
<tr>
<td>Cure time</td>
<td>At 40° - 80° F. 2 to 8 hours. allow 24 hours total curing. For best adhesion allow product to cure for up to 7-10 days.</td>
</tr>
<tr>
<td>VOC Content</td>
<td>Less than 25 gram per liter.</td>
</tr>
<tr>
<td>Initial Reflectance %</td>
<td>ASTM C1549 88.0%</td>
</tr>
<tr>
<td>Initial Emittance</td>
<td>ASTM C1371 0 .85</td>
</tr>
<tr>
<td>Reflectance % After 3 years</td>
<td>ASTM C1549 75.63</td>
</tr>
<tr>
<td>Accelerated Low Temperature Flex</td>
<td>ASTM D522 Type I Pass</td>
</tr>
<tr>
<td></td>
<td>ASTM D522 Type II Pass</td>
</tr>
<tr>
<td>Adhesion to Various substrate</td>
<td>ASTM D903 PLI&gt; 5.00 Dry</td>
</tr>
<tr>
<td></td>
<td>Galvanized Steel</td>
</tr>
<tr>
<td></td>
<td>Plywood</td>
</tr>
<tr>
<td></td>
<td>Concrete</td>
</tr>
<tr>
<td></td>
<td>Aluminum</td>
</tr>
<tr>
<td>Flash point</td>
<td>ASTM D93 &gt;200°F</td>
</tr>
</tbody>
</table>
Spray Application

- Airless Equipment sizing should be a flow rate of 1.5 to 2 GPM, 2500 to 3000psi, Heavy Duty Reverse-clean tip (without diffuser pin) sizes 629 (12” fan .029 orifice size) to 633 (12” fan -033 orifice size) Hose size ¾” reduced to ½” before connection to gun swivel.
- If airless has a machine filter in addition to the intake rock screen we recommend either a 40-mesh filter or temporarily removing the machine filter cartridge altogether.
- Airless equipment should be cleaned after use without delay.

Existing Metal Roof Application

**ON RUSTY METAL ROOFS, USE ONE COAT OF BLUE MAX PRIOR TO TAPing AND MAXIMUM-STRETCH**
EXISTING TAR ROOF APPLICATION *BADLY DETERIORATED

- AMES' POLY-BRIDGE REINFORCING FABRIC EMBEDDED IN ELASTO-BARRIER
- 1ST COAT ELASTO-BARRIER
- ROOF FABRIC
- 2ND COAT ELASTO-BARRIER (EMBEDDING COAT)
- 3RD COAT ELASTO-BARRIER
- 1ST COAT MAXIMUM-STRETCH
- 2ND COAT MAXIMUM-STRETCH
- RAISED EDGE OR FLUSH STYLE FLASHING
- WALL
- TAR ROOF
## Product Selection and Application Guidelines

To determine what products you need, you first need to know the condition of your roof. Is it savable? How old is it? Is it leaking? Is it badly or severely deteriorated? What is the size of the roof in square feet? The answers to these questions will help determine the products and quantity you may need.

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal, Tin, Aluminum without Rust</td>
<td>Apply Ames Peel &amp; Stick Seam Tape over seams. Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch over entire roof surface, including seams.</td>
</tr>
<tr>
<td>Metal, Tin, Aluminum with Rust</td>
<td>Prime with Blue Max at 1 gallon per 100 sq. ft. Apply Ames Peel &amp; Stick Seam Tape. Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch.</td>
</tr>
<tr>
<td>EPDM</td>
<td>Prime with Ames Blue Max (1-2 gallons per 100 sq. ft). Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch.</td>
</tr>
<tr>
<td>Rolled Roofing</td>
<td>If silver coating is on surface, prime with Ames Blue Max (1 gallon per 100 sq. ft.). Follow with Maximum-Stretch (2 gallons per 100 sq. ft.). If roof is badly deteriorated, old and leaking, prime with Blue Max (1-2 gallons per 100 sq. ft.) and then apply Maximum-Stretch (2 gallons per 100 sq. ft.).</td>
</tr>
<tr>
<td>Built-Up Roofing (BUR)</td>
<td>A minimum of 2 gallons per 100 sq. ft. of Maximum-Stretch if the roof is in good condition and the goal is preventative maintenance. If old and leaking with low areas, then 2-3 gallons per 100 sq. ft. of Elasto-Barrier with an optional reinforcement fabric embedded between Elasto-Barrier layers. Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch.</td>
</tr>
<tr>
<td>Tar and Gravel</td>
<td>A minimum of 3 gallons per 100 sq. ft. of Elasto-Barrier followed by 2 gallons per 100 sq. ft. of Maximum-Stretch. Loose gravel must be removed first. Carefully power wash and do not use reinforcement fabric.</td>
</tr>
<tr>
<td>Old Tar and Asphalt</td>
<td>Refer to Ames’ Roof Maintenance Coating Systems diagram “Good – Better – Best.” The system you choose will be determined by whether your goal is preventative maintenance or roof restoration. (Note: Elasto-Barrier optionally reinforced with embedded fabric.)</td>
</tr>
<tr>
<td>Modified Bitumen</td>
<td>Apply Ames Peel &amp; Stick Seam Tape on overlap seams. Prime with Ames Blue Max (1-2 gallons per 100 sq. ft.). Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch.</td>
</tr>
<tr>
<td>Cement</td>
<td>If leaking, prime with Ames Blue Max at 2 gallons per 100 sq. ft. Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch. If no leaks, prime with Blue Max at 1 gallon per 100 sq. ft. Follow with 2 gallons per 100 sq. ft. of Maximum-Stretch.</td>
</tr>
<tr>
<td>Wood</td>
<td>Ames products can create a water-tight and long-lasting rubber roof over plywood roofs, but you should consult local codes as it is not classified as a primary roof system. However, the products have been successfully used on outbuildings, tool sheds and pump houses with long-lasting results.</td>
</tr>
</tbody>
</table>

Do not use on shingle roofs

Revision 051320

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05272020
AMES ROOF MAINTENANCE COATING SYSTEMS

GOOD

- MAXIMUM-STRETCH 4TH COAT
- MAXIMUM-STRETCH 3RD COAT
- ELASTO-BARRIER 2ND COAT
- ELASTO-BARRIER 1ST COAT
- OLD TAR ROOF

BETTER

- MAXIMUM-STRETCH 5TH COAT
- MAXIMUM-STRETCH 4TH COAT
- ELASTO-BARRIER 3RD COAT
- ELASTO-BARRIER 2ND COAT
- ELASTO-BARRIER 1ST COAT
- OLD TAR ROOF

BEST

- MAXIMUM-STRETCH 5TH COAT
- MAXIMUM-STRETCH 4TH COAT
- ELASTO-BARRIER 3RD COAT
- ROOF FABRIC EMBEDDED IN ELASTO-BARRIER 2ND COAT
- ELASTO-BARRIER 1ST COAT
- OLD TAR ROOF

Visit our website at www.amesresearch.com