



# MaxFlash™

# Liquid Flashing Membrane

# **COLOR**

Dark grey

#### **PACKAGING**

20 oz. propack 20 propacks per case

#### PRODUCT HIGHLIGHTS

- Can be applied to damp substrates
- Withstands rainfall immediately after application
- 180 days UV exposure
- Fast cure and tack-free time
- Bonds to a wide range of substrates
- Does not contain solvents, phthalates or isocyanates.

#### APPROXIMATE COVERAGE

35 – 60 lineal feet per propack when applied at 20 mils to 1-inch on each side of the sheathing joint. 12-20 square feet per propack when applied at 20 mils to rough openings.

#### **STORAGE**

Store in original, unopened containers in a cool, dry place away from sources of heat and direct sunlight at a minimum of 40 deg F. In cold weather, keep containers at room temperature for at least 24 hours before using. Storage at elevated temperatures will reduce shelf life.

# **SHELF LIFE**

1 year when stored in cool, dry conditions away from sources of heat and sunlight.

#### DESCRIPTION

MAXFLASH is a one-component elastomeric material for use as a flexible waterproofing flashing membrane for rough openings. It can also be used to prepare sheathing joints for subsequent application of BASF air/water-resistive barrier membranes.

# **USES**

MAXFLASH can be used as a membrane for flashing rough openings, small penetrations and as a detailing compound for preparing sheathing joints for application of an air/ water-resistive barrier membrane. Acceptable substrates include poured concrete/ unit masonry, ASTM C1177 sheathings including DensGlass™ exterior sheathing, DensElement™, 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) Exposure 1 or exterior plywood sheathing (grade C-D or better), Exposure 1 OSB, gypsum sheathing (ASTM C79 / ASTM C1396) pressure or fire retardant treated wood, steel and aluminum.

# **SURFACE PREPARATION**

Apply to clean surfaces free of frost, debris, contamination and materials that may inhibit bonding. Remove any standing water such that no water is visible or transferred to skin upon touching the surface. Test bonding performance on a small area before proceeding with overall application.

# **APPLICATION**

# Flashing Rough Openings:

 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.
- 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, voidand pinhole-free membrane with a 12-20 mil thickness. Extend MAXFLASH membrane minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
- Extend MAXFLASH at a minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
- Allow MAXFLASH to skin before applying BASF fluid-applied air/water-resistive barrier to sheathing. Lap the air/waterresistive barrier a minimum of 2 inches onto MAXFLASH, creating a continuous, monolithic air/water-resistive barrier membrane.
- Allow MAXFLASH to cure prior to the installation of windows, doors and other wall assemblies.

#### **Sheathing Joints:**

- Apply a thick bead of MAXFLASH to sheathing joints.
- Spread MAXFLASH evenly a minimum of 1-inch beyond the joint on either side. Apply 20 mils of MAXFLASH across the sheathing joint.
- 3. Spot fastener heads with MAXFLASH or BASF fluid-applied air/water-resistive barrier.
- Allow MAXFLASH to skin before applying BASF fluid-applied air/water-resistive barrier to sheathing.

#### **Inside and Outside Corners:**

 At the inside and outside corners, apply a bead of MAXFLASH vertically into the joint. Apply additional MAXFLASH in a zigzag pattern onto the joint. Spread

- MAXFLASH evenly a minimum of 1-inch beyond the joint on either side to form a uniform, continuous void and pinhole-free membrane.
- Spot fastener heads with MAXFLASH or BASF fluid-applied air/waterresistive barrier.
- Allow MAXFLASH to skin before applying BASF fluid-applied air/waterresistive barrier to sheathing.

# **Penetrations through wall construction:**

1. MAXFLASH can be used to seal penetrations up to 1/2 inch gap.

#### **CURING**

MAXFLASH typically skins in 25 to 40 minutes and cures in 4 to 6 hours of application at 75°F and 50% relative humidity. Warmer and more humid conditions will accelerate curing. Cure times will be extended in dry and cold conditions. MAXFLASH can be applied to frost-free, dry substrates above 25°F, but curing will not be initiated until temperature rises and remains above 32°F.

# **LIMITATIONS**

- The application of MAXFLASH should not exceed 30 mils for noncombustible construction.
- 2. MAXFLASH is not designed to bridge gaps greater than 1/2 inch.
- 3. Damp substrates should be free of standing or visible water.
- 4. Do not apply to frozen surfaces.
- Protect MAXFLASH during transportation & storage to avoid physical damage.

# **CLEANING**

Immediately after use, clean equipment with Xylene or other appropriate solvent. Use proper precautions when handling solvents. Remove cured membrane by cutting with a sharp-edged tool. Remove thin films by abrading.

# **TECHNICAL SUPPORT**

Contact BASF Technical Services at 800-589-1336 for applications not covered within this product bulletin.

# **MAXFLASH TEST SUMMARY**

| AAMA 714-15 Voluntary Specification for Liquid Applied Flashing Used to Create a Water-Resistive Seal Around Exterior Openings in Buildings   |  |  |
|---|--|--|
| Peel Adhesion ASTM C794 Control AAMA 714 Sec 5.1 UV exposure Sec 5.3, ASTM G154 Elevated temperature AAMA 714 Sec 5.4 Thermal cycling AAMA 714 Sec 5.5 7 day water immersion AAMA 714 Sec 5.7 | Tested over ASTM C1177 sheathing, plywood, OSB, concrete (mortar), CMU, galvanized steel, aluminum  Pass control and after conditioning, min. 5 pli    |  |
| Crack Bridging AAMA 714 Sec 5.6, ASTM C1305   | Pass, no failure after 10 cycles with 1/8" gap and water holdout of 550 mm (21.7") for 24 hours, tested at 60 mils per ASTM C1305 instructions         |  |
| Nail Sealability AAMA 714 Sec 5.2 (AAMA 711 Sec 5.2), modified ASTM D1970 sec 7.9   | Pass, before and after thermal cycling, 24 hours at 40°F with 31.75 mm (1 1/4") head of water  |  |
| Accelerated Aging AAMA 714 Sec 5.3, ASTM G154, Cycle 1  | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 14 days (336 hours) to Cycle 1 of G154   |  |
| Elevated Temperature<br>AAMA 714 Sec 5.4  | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage at 50°C (122°F), 65°C (149°F) and 80°C (176°F) |  |
| Thermal Cycling AAMA 714 Sec 5.5  | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 10 cycles                                |  |
| Water Immersion<br>AAMA 714 Sec 5.7   | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 7 days                                   |  |
| Adhesion to Damp Substrates AAMA 714 Sec 6.1 and 6.2  | Pass, min 5 pli, over OSB and mortar (absorptive substrates)   |  |
| Water Vapor Permeability AAMA 714 Sec 6.3, ASTM E96 Method B  | 19.9 perms @ 12 mils<br>7.2 perms @ 30 mils  |  |

Note: All testing with MaxFlash at 12 mils unless otherwise noted

| ICC-ES AC212 Acceptance Criteria for Water-Resistive Coatings used as Water-Resistive Barriers over Exterior Sheathing, approved February 2015 |  |  |
|--|--|--|
| <b>Tensile Bond</b> AC 212 Sec 4.1, ASTM C297  | Tested over ASTM C1177 sheathing, plywood, OSB, cement board, PVC, aluminum, galvanized steel and stainless steel  |  |
|  | Pass, > 105 kPa (15 psi)   |  |
| Freeze-Thaw<br>AC212 Sec 4.2   | Pass, 10 cycles, no deleterious effects such as cracking, checking, crazing or erosion, viewed at 5x magnification   |  |
| Water Resistance<br>AC212 Sec 4.3, ASTM D2247  | Pass, 14 day exposure, no deleterious effects such as cracking, checking, crazing or erosion   |  |
| <b>Water Vapor Permeability</b> AC212 Sec 4.4, ASTM E96 Method B   | 19.9 perms @ 12 mils<br>7.2 perms @ 30 mils  |  |
| Water Penetration<br>AC212 Sec 4.5, ASTM E331  | Pass, testing performed with MaxFlash exposed over sheathing joints. No water penetration at 137 Pa (2.86 psf), 299 Pa (6.24 psf) or 575 Pa (12psf)                          |  |
| Sequential - Structural, Racking, Restrained Environmental and Water Penetration AC212 Sec 4.7  1. Structural ASTM E1233                       | Pass, testing performed with MaxFlash exposed over sheathing joints  No cracking at joint or interface of flashing   |  |
| <ol> <li>Racking ASTM E72</li> <li>Restrained Environmental AC212 Sec 4.7.3</li> <li>Water Penetration ASTM E331</li> </ol>                    | No cracking at joint or interface of flashing  No cracking at joint or interface of flashing  No water penetration at 137 Pa (2.86 psf), 299 Pa (6.24 psf) or 575 Pa (12psf) |  |
| Sequential – Weathering Test<br>AC212 Sec 4.8  | Pass   |  |
| UV Exposure AC212 Sec 4.8.1     Accelerated Aging AC212 Sec 4.8.2     Hydrostatic Pressure AATCC 127   | No cracking or bond failure after 210 hrs No cracking or bond failure after 25 cycles No water penetration under 550 mm (21.7") head of water                                |  |
| <b>Air Permeance of Building Materials</b> ASTM E2178  | 0.00410 L/s-m <sup>2</sup> @ 75 Pa (0.00082 cfm/ft <sup>2</sup> @ 1.57 psf), performed on 12 mil thick free film sample  |  |

Note: All testing with MaxFlash at 20 mils unless otherwise noted

| AAMA 711-13 Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products   |  |  |
|---|--|--|
| Peel Adhesion ASTM D3330 Method F Control AAMA 711 Sec 5.3 UV exposure Sec 5.4, ASTM G154 Elevated temperature AAMA 711 Sec 5.5 Thermal cycling AAMA 711 Sec 5.6 7 day water immersion AAMA 711 Sec 5.8 | Tested over ASTM C1177 sheathing, plywood, OSB, PVC, galvanized steel, aluminum  Pass control and after conditioning, min. 1.5 pli                   |  |
| Tensile Strength AAMA 711 Sec 5.1, ASTM D5034   | Pass, min 2.9 pli, at 12 and 30 mils   |  |
| Nail Sealability AAMA 711 Sec 5.2, modified ASTM D1970 Sec 7.9  | Pass, before and after thermal cycling, 24 hours at 40°F with 31.75 mm (1 1/4") head of water  |  |
| Accelerated Aging AAMA 714 Sec 5.4, ASTM G154, Cycle 1  | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 14 days (336 hours) to Cycle 1 of G154 |  |

| AAMA 711-13 Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products (continued) |  |  |
|---|--|--|
| Elevated Temperature AAMA 714 Sec 5.5   | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage at 50°C (122°F), 65°C (149°F) and 80°C (176°F) |  |
| Thermal Cycling AAMA 714 Sec 5.6  | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 10 cycles                                |  |
| Cold Temperature Pliability<br>AAMA 711 Sec 5.7, ASTM D1970 Sec 7.6   | Pass, no cracking of 12 or 30 mil samples bent around 25 mm (1") mandrel at -18°C (0°F) and -29°C (-20°F)  |  |
| Water Immersion<br>AAMA 711 Sec 5.8   | Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 7 days                                   |  |
| Peeling Resistance<br>AAMA 711 Sec 5.9, Annex 2   | Pass, no signs of peeling after 7 days exposure to elevated temperatures - 50°C (122°F), 65°C (149°F) and 80°C (176°F)                                 |  |

Note: All testing with MaxFlash at 12 mils unless otherwise noted

| Additional Testing                                      |  |
|---|--|
| Air Permeance of Building Materials ASTM E2178          | 0.00410 L/s-m <sup>2</sup> @ 75 Pa (0.00082 cfm/ft <sup>2</sup> @ 1.57 psf), performed on free film sample   |
| <b>Air Leakage of Air Barrier Assemblies</b> ASTM E2357 | 0.0463 L/s-m <sup>2</sup> @ 75 Pa (0.00926 cfm/ft <sup>2</sup> @ 1.57 psf), tested over C1177 sheathing, sheathing joints and penetration details treated with MaxFlash, no other coating used |
| Nail Sealability ASTM D1970 Sec 7.9                     | Pass, before and after thermal cycling, 3 days at 40°F with 127 mm (5") head of water  |
| Surface Burning<br>ASTM E84                             | Class A flame spread <25 Class A smoke developed <450 Tested at 30 mils  |

Note: All testing with MaxFlash at 12 mils unless otherwise noted

# **HEALTH, SAFETY AND ENVIRONMENTAL**

Read, understand and follow all Safety Data Sheets (SDS) and product label information for this product prior to use. The SDS can be obtained by visiting www.wallsystems.basf.com or e-mailing a request to bwscustomerservice@basf.com. Use only as directed. For medical emergencies only, call ChemTrec® at 800-424-9300.

#### **VOC Content**

30 g/l or 0.25 lbs/gal less water and exempt solvents per ASTM D2369 (based in part on EPA method 24)

# Solids

99% solids

#### 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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