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Product Bulletin

HP+Flash™

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

HP+Flash 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

HP+ Flash 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:

1. Apply a bead of HP+ Flash in each corner of the rough opening, ensuring that corners are fully sealed. Where wood bucks are used, apply a bead of

HP+ Flash into gaps between bucks and between the buck and building structure.

2. Apply additional HP+ Flash in a zigzag pattern onto head, sill, jambs and exterior substrate. Spread HP+ Flash evenly across the rough opening to form a uniform, continuous, void- and pinhole-free membrane with a 12-20 mil thickness. Extend HP+ Flash membrane minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
3. Extend HP+ Flash at a minimum 4 inches onto the exterior wall, maintaining 12-20 mil thickness.
4. Allow HP+ Flash to skin before applying BASF fluid-applied air/water-resistive barrier to sheathing. Lap the air/water-resistive barrier a minimum of 2 inches onto HP+ Flash, creating a continuous, monolithic air/water-resistive barrier membrane.
5. Allow HP+ Flash to cure prior to the installation of windows, doors and other wall assemblies.

Sheathing Joints:

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

Inside and Outside Corners:

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

HP+ Flash Liquid Flashing Membrane

HP+ Flash evenly a minimum of 1-inch beyond the joint on either side to form a uniform, continuous void and pinhole-free membrane.

2. Spot fastener heads with HP+ Flash or BASF fluid-applied air/water-resistant barrier.
3. Allow HP+ Flash to skin before applying BASF fluid-applied air/water-resistant barrier to sheathing.

Penetrations through wall construction:

1. HP+ Flash can be used to seal penetrations up to 1/2 inch gap.

CURING

HP+ Flash 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. HP+ Flash 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

1. The application of HP+ Flash should not exceed 30 mils for non-combustible construction.
2. HP+ Flash 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.
5. Protect HP+ Flash 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 800-706-0712 for applications not covered within this product bulletin.

HP+ Flash 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 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 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 7.2 perms @ 30 mils

Note: All testing with HP+ Flash 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

Tensile Bond 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 AC212 Sec 4.2	Pass, 10 cycles, no deleterious effects such as cracking, checking, crazing or erosion, viewed at 5x magnification
Water Resistance AC212 Sec 4.3, ASTM D2247	Pass, 14 day exposure, no deleterious effects such as cracking, checking, crazing or erosion
Water Vapor Permeability AC212 Sec 4.4, ASTM E96 Method B	19.9 perms @ 12 mils 7.2 perms @ 30 mils
Water Penetration AC212 Sec 4.5, ASTM E331	Pass, testing performed with HP+ Flash 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 2. Racking ASTM E72 3. Restrained Environmental AC212 Sec 4.7.3 4. Water Penetration ASTM E331	Pass, testing performed with HP+ Flash exposed over sheathing joints No cracking at joint or interface of flashing 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 AC212 Sec 4.8 1. UV Exposure AC212 Sec 4.8.1 2. Accelerated Aging AC212 Sec 4.8.2 3. Hydrostatic Pressure AATCC 127	Pass 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
Air Permeance of Building Materials ASTM E2178	0.00410 L/s-m ² @ 75 Pa (0.00082 cfm/ft ² @ 1.57 psf), performed on 12 mil thick free film sample

Note: All testing with HP+ Flash 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 ¼”) 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 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 AAMA 711 Sec 5.8	Pass, no deleterious effects such as wrinkling, distortion, blistering, expansion, shrinkage or warpage after 7 days
Peeling Resistance 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 HP+ Flash at 12 mils unless otherwise noted

Additional Testing

Air Permeance of Building Materials ASTM E2178	0.00410 L/s-m ² @ 75 Pa (0.00082 cfm/ft ² @ 1.57 psf), performed on free film sample
Air Leakage of Air Barrier Assemblies ASTM E2357	0.0463 L/s-m ² @ 75 Pa (0.00926 cfm/ft ² @ 1.57 psf), tested over C1177 sheathing, sheathing joints and penetration details treated with HP+ Flash, 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 ASTM E84	Class A flame spread <25 Class A smoke developed <450 Tested at 30 mils

Note: All testing with HP+ Flash 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

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