

SUPERIORSHIELD SUPERIORFLASH

Master Wall Inc.® SuperiorShield SuperiorFlash is a gun-grade flashing and waterproofing. Formulated with STPE polymers, SuperiorFlash uses moisture curing to produce a highly durable, seamless, elastomeric flashing membrane that is compatible with our Rollershield RS and TG products. Fast curing it allows for same day installation of windows, doors and other wall assembly, waterproofing or air barrier components.

FEATURES & BENEFITS

- One Step Eliminates the need for reinforcement in Rollershield LAB
 applications at corners and seams
- Bonds directly to damp or dry surfaces
- Moisture curing, cures in wet weather
- Cold weather applications down to 32°F (0°C)
- Solvent free. Isocyanate free. Phthalate free.
- Service temperatures: -75°F to 300°F (-59°C to 149°C).

JOB CONDITIONS

Surface and ambient temperatures should ideally be 40°F (4°C) and rising and below 110°F (43°C) during application and drying. Wind, humidity and high temperatures will accelerate drying.

Hot Weather Precautions: If air or surface temperatures exceed $95^{\circ}F$ (35° C), apply to shaded surfaces and before daytime air and surface temperatures reach their peak. Hot surfaces may be cooled with a mist of fresh water. Keep containers closed and out of direct sunlight when not in use.

Cold Weather Conditions: May be applied to frost-free substrates at temperatures below $32^{\circ}F$ (0°C). Product will not start curing and drying until temperature rises to and remains above $32^{\circ}F$ (0°C).

Low Humidity Conditions: Curing may take longer than 12 hours. Lightly misting treated surfaces with fresh water will accelerate curing.

 ${\rm SuperiorFlash} \circledast$ may be applied to damp surfaces and tolerates rain immediately after application, do not apply to surfaces with standing water or frost.

PREPARATION

To ensure best results, apply to clean surfaces free of contaminants. Chemical residues, surface coatings or films may adversely affect adhesion. Pressure-treated wood and other contaminated surfaces should be cleaned with a solvent wipe before application. Protect people, vehicles, property, plants and all other surfaces not intended to receive SuperiorFlash. Remove and replace damaged sheathing. In rough openings, prime all raw gypsum board edges with BA57. Any gaps or joints greater than 1 inch should be structurally repaired or readied for an appropriate transition membrane. Ensure positive drainage at all rough openings.

Application Conditions

| Application | Temperature: | 32°-110°F |
|-------------|--------------|-----------|
| (0°-43°C) | | |

Working Time: 1/4 hr

Cure Time: 12 hrs at room temperature, working and drying time will vary with temperature and humidity. Humidity and water speed cure.

Coverage per sausage (sf/sm)*

15–17 sq.ft. (1.3-1.5 sm) per 20-oz sausage applied at 12–15 mils *All coverage is approximate and depend upon substrate, details and individual application

Packaging/Shelf Life/Storage

Packaging: 20 oz (591 ml) sausages, 20 sausages per case.

Shelf Life: 1 after date of manufacture year in tightly sealed, unopened container and stored below $80^{\circ}F$ (27 °C). This shelf life assumes upright storage of factory-sealed containers.

Storage & Handling: Store in a cool, dry place. Keep container tightly closed when not dispensing. Do not open container until preparation work has been completed. Do not alter or mix with other chemicals. Do not double stack pallets. Dispose of unused product and container in accordance with local, state and federal regulations.

Regulatory Compliance

SuperiorFlash is compliant with the following national, state and district VOC regulations:

- US Environmental Protection Agency
- California Air Resources Board SCM Districts
- South Coast Air Quality Management District
- Maricopa County, AZ
- Northeast Ozone Transport Commission

APPLICATION PROCEDURE

Equipment: Apply using a professional caulking gun. Use a DRY joint knife, trowel, or spatula to spread the product. Do not use soapy water when tooling or spreading.

Prepare all surfaces as described above under "Preparation." Once preparation is complete, cut open tip of threaded fitting, install sausage into professional caulking gun.

Waterproofing Rough Openings

• Apply a bead of product in each corner of the rough opening. Apply additional product in a zigzag pattern over the exterior framing inside the rough opening. Spread the wet product to create an opaque, monolithic flashing membrane.

• Apply a thick bead of SuperiorFlash in a zigzag pattern to the exterior wall surrounding the rough opening. Spread the product to create an opaque, monolithic flashing membrane at 12–15 mils which surrounds the rough opening and extends 4 to 6 inches (100–152 mm) over the face of exterior wall. NOTE: When using with existing sheet weather resistive barriers, extend SuperiorFlash 8-10 inches (203-254 mm) over the face of the exterior wall to ensure positive drainage.

• Allow treated surfaces to skin before installing windows, doors and other wall assembly, waterproofing or air barrier components.

Filling Joints, Seams and Cracks

• Apply a thick bead of SuperiorFlash to all sheathing joints, seams and cracks. Treat joints ranging from $\frac{1}{4}$ to $\frac{1}{2}$ inch with backer rod before applying SuperiorFlash. On plywood, spot wood knots, deep cracks or surface irregularities.

• Use a DRY joint knife, trowel or spatula to tool and spread the product. Spread 1-inch beyond seam at each side to a thickness of 12–15 mils.

• Allow to skin before installing other waterproofing or air barrier components.

Flashing Transitions

 \bullet Apply a generous bead of SuperiorFlash $\ensuremath{\mathbb{R}}$ to the top edge of the flashing leg.

• Spread the wet product to create a monolithic "cap flash" flashing membrane that extends 2 inches (51 mm) up the vertical face of the exterior wall and down over the fastener heads of the metal flashing.

CURING AND DRYING

At 70°F (21°C) and 50% relative humidity, product skins within 30 minutes and dries in 12 hours. SuperiorFlash is moisture curing. Low temperatures and low relative humidity slow dry time. High temperatures and high relative humidity accelerates dry time.

CLEAN UP

Clean tools and equipment with mineral spirits or similar solvent immediately after use. Follow all safety precautions. Remove cured SuperiorFlash mechanically using a sharp edged tool. Hazard: This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

VOC: Less than 30 g/L.

TYPICAL TECHNICAL DATA

Form: viscous paste, mild odor Specific Gravity: 1.45–1.55 pH: not applicable Weight/Gallon: 12.5 lbs Total Solids: 99% Flash Point: >200° F (>93° C) Freeze Point: not applicable <u>Cured Properties</u> Hardness, Shore A: 35–45 Tensile Strength: >150 psi Elongation at Break: >350% Corrosive Properties: Non-corrosive Transfer Free Time: 20–40 minutes

APPROVED SUBSTRATES

Bonds to most common building materials without priming.

Master Wall® Base Coats, , Stucco, Rollershield RS/TG/VB

Exterior gypsum sheathing (ASTM C1396)

Glass Fiber Exterior Sheathing (ASTM C1177): Dens Glass Gold®, GlasRoc®, FiberBond®, Gold Bond e2xp®, etc.

Cement Board Substrates: Durock®, PermaBase®, ProTEC®, SelectCrete, Util-A-Crete®, etc.

Concrete

Brick

Masonry

Exterior Plywood, Treated dry plywood

Oriented Strand Board

Metals, coated metals

PVC

Others approved in writing

PRODUCT DATA

SUPERIORFLASH TEST RESULTS

| Adhesive Strength to Substrates | ASTM C794 | | ≥5 pli | Pass | |
|---|-------------------|---|---------------------------------|-----------------|--|
| Water Penetration Around Nails | Modified ASTM D19 | 70AAMA 711 Section 5.3 | Shall pass 31 mm (1.2 in) of wa | ter Pass | |
| Accelerated UV Aging Peel Adhesion Appearance | ASTM G154, UVA cy | cle 1ASTM C794, Visual | ≥ 5 pli | Pass | |
| Elevated Temperature Exposure, Level 3=176° F for 7 days | AAMA 711, ASTM C | | ≥ 5 pli | Pass | |
| Thermal Cycling (10 cycles) Peel Adhesion | AAMA 711, ASTM C | 794 | ≥5 pli | Pass | |
| Crack Bridging | ASTM C1305 | Water holdout of 550 millimet per ASTM C1305, 10 cycles. | ers for 24 hrs, 1/8-inch crack | Pass | |
| Water Immersion | AAMA 711, ASTM C | 794 | ≥ 5 pli | Pass | |
| Water Vapor Permeability | ASTM E96 Wet Cup | Minimum of 10 perms at man application thickness | | Pass - 21 perms | |
| Damp Surfaces | ASTM C794 | | ≥ 5 pli | Pass | |
| ICC-ES AC212: Acceptance Criteria for Water-Resistive Coatings Used as Water-Resistive Barriers Over Exterior Sheathing | | | | | |
| (*SuperiorFlash Tested as Part of an Assembly) | | | | | |
| *Tensile Bond | ASTM C297 | | Minimum 15 psi (105 kPa) | Pass | |

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|---|------------------------|---|------|--|
| *Freeze-Thaw | ICC-ES AC212 | No cracking, checking, crazing, erosion, delamination or other deleterious effects | Pass | |
| *Water Resistance | ASTM D2247 | No cracking, checking, crazing, erosion, delamination or other deleterious effects | Pass | |
| *Water Penetration | ASTM E331 | No visible water penetration at sheathing joints as viewed from back of the panel. | Pass | |
| *Weathering | ICC-ES AC212AATCC2 127 | No cracking of the coating; no water penetration. | Pass | |
| ABAA: Air Barrier Association of America Acceptance Criteria for Liquid Applied Membranes | | | | |

(*SuperiorFlash Tested as part of an Assembly)

| | *Air Leakage of Air Barrier Assemblies | ASTM E 2357, \leq 0.2 L / s·m ² at 75 Pa | Pass: 0.0105 L / s·m ² at 75 Pa (0.0021cfm / ft ² at 1.57 psf) | | | |
|--------------|--|---|--|--|--|--|
| Fire Tecting | | | | | | |

Fire Testing

Surface Burning CharacteristicsASTM E84 Criteria for ICC and NFPA Class A Building Material:Meets Class A Building Material:Meets Class A Building Material:Flame Spread ≤ 25Smoke Developed ≤ 45015, Smoke Developed: 10

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