



Master Wall Inc.
Building a Culture of Excellence

PRODUCT DATA

SUPERIORSHIELD SMP

Master Wall® SuperiorShield SMP is a one component, low modulus, solvent free Silyl Modified Polyether Sealant for Master Wall® Systems and other approved substrates. This hybrid sealant has excellent color stability, adhesion capability with long-lasting elastomeric properties. Typical applications include Master Wall CIFS®, EIFS and stucco systems, vinyl window perimeter sealing, fiber cement board, engineered trim board, flexible flashing materials, most metals, and other siding and exterior applications.

FEATURES & BENEFITS

- Seals joints between common building materials.
- Interior and exterior bonds—transitional seal between building materials including SuperiorShield Rollershield and SuperiorFlash.
- Perimeter seals for windows, doors, and other wall penetrations.
- +100%/-50% movement Suitable for low and high movement joints
- Easy to gun and tool, fast cure and tack-free time
- Bonds to most metals
- May be used as a seam sealant or flexible flashing in Rollershield LAB applications as well as an interior air seal.
- Non-yellowing
- Paintable with acrylic coatings
- **Extends Master Wall® System warranties an additional two years**

BASIC USES

SEALANT JOINT DESIGN AND PREPARATION

Joint Design: In general, more joint movement can be accommodated in a thin bead of sealant than a thick bead. Master Wall® SuperiorShield SMP should be no thicker than 1/2" (12.7 mm) and no thinner than 1/4" (6.4 mm). In joints between 1/2" and 1", the ratio of sealant width to depth should be approximately 2:1. Sealant depth in joints between 1/4" and 1/2" should be 1/4" deep. Joints with dynamic movement should not be designed in widths less than 1/4". Please reference Master Wall Technical Bulletins #148 and #149 for common sealant joint types and design calculations.

Surface Preparation: Surfaces must be structurally clean, dry (no frost) and structurally sound, free of contaminants, including, but not limited to, dust, dirt, loose particles, tar, asphalt, rust, mill oil, etc. If substrate is painted or coated, scrape away all loose and weakly bonded paint or coating. Any paint or coating that cannot be removed must be tested to verify adhesion of the sealant or to determine the appropriate surface preparation if needed.

Packaging/Shelf Life/Storage

10.1 fl. oz. Cartridges, 24 Cartridges/Case[†]

20 fl. oz. Sausages, 12 Sausages/Case

[†] special order, minimums apply

Shelf Life: 18 months in original, unopened, properly stored packaging.

Storage: Store in a cool (less than 80 °F [27 °C]), dry area in original unopened packaging. Protect from extreme heat (90 °F [32 °C]), freezing, wet areas, heat sources, and direct sunlight. Store away from sources of ignition.

Colors

White*, Antique White* Limestone*, Tan*

Light Gray, Aluminum Gray, Medium Bronze, Black

*always stocked

Applicable Standards

- ASTM C920, TYPE S, GRADE NS, CLASS 50, USE NT, A, O
- CARB and SCAQMD Compliant
- Meets VOC Requirements for OTC Regulation
- AAMA Compliant 713-10, 808.3-10
- AAMA 719-19 Compliant as flashing material
- ASTM E-84 Class A rated Liquid Flashing
- US. Federal Specification TT-S-00230C, CAN/CGSB 19.13-M87

SEALANT JOINT DESIGN AND PREPARATION

To remove laitance and any other loose material, clean concrete, stone, or other masonry materials with non-alcoholic based solvent by washing, grinding, sandblasting or wire brushing as necessary. Do not use water to clean substrates. Dust must be thoroughly removed after cleaning.

- Concrete: Remove form release agent, ensure surface is clean, dry, and free of laitance or other weak surface conditions.
- Masonry: Wire brush to a sound, solid surface free of laitance or other weak surface conditions.
- Galvanized Metal or Aluminum: Solvent wipe with clean cotton cloth and allow to dry.
- Wood (uncoated): Ensure surface is clean and dry.
- Fiber Cement (uncoated) Ensure surface is clean and dry.
- Stucco Casing Bead: Solvent wipe with clean cotton cloth and allow to dry.
- Stucco: Ensure Portland cement stucco is clean, dry, and free of laitance or other weak surface conditions.
- CIFS®/EIFS: Ensure reinforcing mesh is fully embedded in base coat and the surface is smooth and free of laitance, efflorescence or other weak surface conditions.
- SuperiorShield Applications (Rollershield RS/TG/VB, WeatherSTOP Tape): Ensure surface is clean and dry.

Backer Rods and Bond Breaker Tapes: Closed-cell polyethylene or hybrid backer rods are used to control depth of the sealant bead, provide a firm tooling surface, and avoid three-sided adhesion. Where the depth of joint prevents use of backer rods, a polyethylene strip or tape must be used as a bond breaker to prevent 3-sided adhesion. Do not prime or damage the surface of the bond breaker. Refer to instructions given by rod and tape manufacturers for the correct backer rod and tape size related to joint size.

Priming: In general, application of Master Wall® SuperiorShield SMP does not require priming the substrates. It is the user's responsibility to check adhesion of the cured sealant on typical test joints at the project site before and also during application as weather conditions may affect the adhesion results. Refer to ASTM C1521, Standard Practice for Evaluating Adhesion of Installed Weatherproofing Sealant Joints, for field testing procedures.

VOC: Less than 20 g/L.

Bonds to

Master Wall® Base Coats, Cemplaster
Fiberstucco, Rollershield RS/TG/VB Bonds to most common building materials without priming.
Stucco
Exterior gypsum sheathing (ASTM C1396)
Glass Fiber Exterior Sheathing (ASTM C1177)
Cement Board Substrates
Concrete
Brick
Masonry
Exterior Plywood, Treated dry plywood
Oriented Strand Board
Metals, coated metals
PVC
Others approved in writing

White

Antique White

Light Gray

Limestone

Tan

Aluminum Gray

Medium Bronze

Black

APPLICATION PROCEDURE

Tooling: Master Wall® SuperiorShield SMP comes ready-to-use. Cut spout or tip to desired bead size. Apply moderate pressure to break seal inside the nozzle. Apply by using a professional caulking gun. Use opened cartridges and sausages the same day they are opened. Apply Master Wall® SuperiorShield SMP in a continuous operation using positive pressure to the bottom of the joint to properly fill and seal the joint. When applying, avoid air entrapment and overlapping. Tool the sealant before the skin forms with adequate pressure to spread the sealant against the backup material at the bottom and sides of the joint. A dry tool with a concave profile is recommended for that operation. Do not use water or soapy water for this operation. Avoid smearing and feathering of the sealant to allow full performance of the cured seam. Excess sealant should be dry wiped or joints should be properly taped.

SUPERIORSHIELD APPLICATIONS

Filling Joints, Seams and Cracks

Apply a thick bead of SuperiorShield SMP to all sheathing joints, seams and cracks for sheathing board joints from butted to 1/4” joint width. Treat joints ranging from 1/4” to 1/2” with backer rod or expanding foam before applying SuperiorShield SMP. 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 SuperiorShield components.

Flashing Transitions

Apply a generous bead of SuperiorShield SMP 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.

COVERAGE AS SUPERIORSHIELD FLASHING*				
	Square Feet	Square Meter	2" Wide Lineal Feet	51 mm Wide Lineal Meters
Sausage	15-17	1.3-1.5	90-102	25.5-29.4
Cartridge	7.6-8.6	.66-.76	45-51.5	12.9-14.8

*At 12-15 linear mils. All coverage is approximate and depend upon substrate, details and individual application.

CLEAN UP

Cleaning: After dry-wiping uncured sealant from substrates and tools, remaining uncured sealant can be removed by using Xylene, Toluene, or similar aromatic solvents. Please refer to the SDS provided for these solvents before use.

Cured sealant is usually difficult to remove without altering or damaging the surface to which the sealant has been misapplied. Cured sealant can be removed by abrasion or other mechanical means (scrapers, putty knives).

CURING, PAINTING AND MAINTENANCE

Curing Time: Master Wall® SuperiorShield SMP is a moisture cure sealant. On wood, with ambient air at 50% relative humidity and at 73°F (23°C), SuperiorShield SMP will generally skin in less than one hour and cure 1/16 of an inch per day. Lower temperature and lower relative humidity will significantly increase the skin time and cure time.

Painting and Coating: Master Wall® SuperiorShield SMP may be painted with SuperiorCote, Elasto-flex or other latex-based paints after the product has cured. Verify compatibility with other paint manufacturers. Due to differences in gloss and texture, color matched paints/coatings may not necessarily match adjacent materials and may crack or delaminate with age depending upon joint movement.

Maintenance: If the sealant becomes damaged, replace the damaged portion by removing the old sealant completely, cleaning the surfaces and reapplying a fresh and appropriate amount of new sealant in accordance with the directions and information contained in this data sheet.

COVERAGE FOR 10.1 FL. OZ. (298 ML) CARTRIDGE

depth	width							
	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/8"	99	49	33	24	20	16	14	12
1/4"		24	20	12	10	8	7	6
3/8"			11	8	6	5	5	4
1/2"				6	5	4	3	3

Linear Feet Per 10.1 FL. OZ. Cartridge

COVERAGE FOR 20 FL. OZ. (600 ML) SAUSAGE

depth	width							
	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
1/8"	288	145	95	71	58	48	40	36
1/4"		71	58	36	29	23	20	17
3/8"			32	23	17	16	13	11
1/2"				17	14	11	10	8

Linear Feet Per 20 fl. oz. sausage

TYPICAL UNCURED PROPERTIES*

Tool/Work Time	<30 min.	Lab Test Method
Skin Time	30-45 min.	Lab Test Method
Curing Time @770°F (250°C)	3-4 days	Varies w/relative humidity
Flow, Sag or Slump	0.3-inch	Lab Test Method

TYPICAL CURED PROPERTIES*

(AFTER 14 DAYS CURE AT 77°F AND 50% RH)

Hardness (Shore A)	38	ASTM D 2240
Modulus @ 100% Elongation	70 psi	ASTM D 412
Tensile Strength @ Break	180 psi	ASTM D 412
Elongation @ Break	950%	ASTM D 412
Adhesion Peel	>35 piw	TT-S-00230C / ASTM C 794
Joint Movement Capability	+/-50%	TT-S-00230C / ASTM C 719
UV Resistance	Pass	ASTM C 793

* Values given above are not intended to be used in specification preparation purposes

APPLICATION LIMITATIONS

- Do not apply over damp, contaminated, loose surfaces, old sealants or other foreign substances that may impair the adhesion bond. Avoid air entrapment.
- Dampness and substrates with high moisture will trigger extensive curing of the sealant within a short period of time.
- Porous substrates such as, but not limited to, marble, limestone and granite might absorb components of the Master Wall® SuperiorShield SMP leading to staining of the substrate. Testing with sufficient aging is mandatory to assess this potential issue.
- Compatibility to copper-based substrates (i.e., flashing) can vary due to, but not limited to, age and joint size.
- The ultimate performance of Master Wall® SuperiorShield SMP depends on proper joint design and proper application with joint surfaces properly prepared. Master Wall® SuperiorShield SMP is not recommended for joints with dimension less than or greater than what is recommended below.
- Master Wall® SuperiorShield SMP must not be used to seal narrow joints, small fillet joints and nail face holes.
- Smearing and feathering Master Wall® SuperiorShield SMP over joints is not recommended.
- Master Wall® SuperiorShield SMP is not recommended for horizontal joints or traffic bearing joints where abrasion resistance is required (walkways, driveways, runways, etc.).
- Master Wall® SuperiorShield SMP is not recommended for continuous immersion in water or any other fluid. When fully cured avoid exposure, even incidental, to fuels, chlorinated, acid and alkaline solutions. Master Wall® SuperiorShield SMP is not recommended for exterior or interior sealing below the waterline.
- During the curing of Master Wall® SuperiorShield SMP, do not expose to alcohol, acids, or solvent-based materials.
- Lower relative humidity and temperature will significantly extend the curing time. Confined areas, deep joints and moisture barrier substrates may also affect the full cure time and extend it by many days. Apply sealant in ambient air temperature of 40° F. and rising.
- Until the sealant is fully cured, do not expose the sealant to any mechanical stress. Uncured sealant will not respond properly to cyclic expansion and contraction of the joint specified for the cured sealant only.
- The surface of a Master Wall® SuperiorShield SMP seal when exposed to UV rays and sunlight will not yellow but over time its gloss may change. Master Wall® SuperiorShield SMP may remain tacky for a few hours and attract dust and dirt from the jobsite which may affect the appearance of the sealant. Check tack-free time to prevent dirt pickup.
- Master Wall® SuperiorShield SMP is not recommended for glazing applications. Bond line strength can be affected by UV rays through the clear material (glass, acrylic glass, polycarbonate, etc.).

Information contained in this product data sheet conforms to the standard detail recommendations and specifications for the installation of Master Wall Inc.® products and is presented in good faith. Master Wall Inc.® assumes no liability, expressed or implied as to the architecture, engineering, or workmanship of any project. This information may be concurrent with, or superseded by other applicable documents, such as specifications and details. Contact Master Wall Inc.® for the most current product information. ©2024 Master Wall Inc.®



Health & Safety

CAUTION IRRITANT. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT.

Methanol may form during curing. Do not breathe fumes. Do not get in eyes, on skin or on clothing. Use with adequate ventilation or wear mask. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container.

KEEP OUT OF THE REACH OF CHILDREN.

HEALTH & SAFETY DANGER! May damage the fertility or the unborn child. Health Precautions Breathing large amounts of vapor may be harmful. Can cause eye or throat irritation. Symptoms include redness and burning of skin. Swallowing large amounts may be harmful. If irritation persists consult a physician. Safety Precautions Use adequate ventilation. Safety goggles and protective gloves are recommended Remove contaminated clothing immediately. First Aid SKIN CONTACT: Remove contaminated clothing and shoes. Use a waterless hand cleaner to remove as much material as possible. Wash with soap and water. Wash clothing and decontaminate shoes before re-use. Get medical attention if irritation develops and persists. Avoid repeated, prolonged contact with skin. EYE CONTACT: Do not attempt to remove solids or gums from the eye. Immediately rinse eyes with lukewarm gently flowing water for 20 minutes, holding the eyelids open. After 5 minutes, remove contact lenses, if present and possible, and continue rinsing. Get medical attention immediately. RESPIRATORY PROBLEMS: Remove from area to fresh air. If not breathing clear airway, start mouth-to-mouth artificial respiration or use a bag mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen. INGESTION: DO NOT induce vomiting. DO NOT give anything by mouth to an unconscious or convulsing person. Have victim rinse out mouth and drink 8-10 oz (240-300 ml) of water to dilute the material in stomach. Get immediate medical attention. HYGIENE: Wash hands immediately after use. Wash clothing before re-use. Spills Collect with suitable absorbent material such as cotton rags. Disposal Dispose of in accordance with local, state, or federal regulations. Warning KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Safety Data Sheet (SDS) for further health and safety information.

LIMITED WARRANTY

This product is subject to a written limited material or system warranty. Obtain a warranty from the Tech Support tab of our website. Refer to Specifications for more complete information on proper use and handling of this product.