* Products within "Assemblies" are considered to be compatible"
** Multiple products within assemblies may interact

with multiple products from other assemblies

Cement Plaster Assembly



Corporate Headquarters

263 North Covina Lane City of Industry, CA 91744 Phone: 800.775.2362 Fax: 626.330.7598

Manufacturing Facilities

City of Industry, CA • 800.775.2362 Denver, CO • 303.572.3626 Ft. Worth, TX • 817.568.1525 Pittsburg, CA • 925.473.9340

Structural Engineering/Design

1001-A Pittsburg Antioch Hwy Pittsburg, CA 94565 Phone: 925.473.9340 Fax: 925.743.9341

Technical Services

263 North Covina Lane City of Industry, CA 91744 **Phone:** 800.416.2278 **Fax:** 626.249.5005

SELF-FURRED METAL LATH (GROOVED) WITHOUT PAPER

Introduction

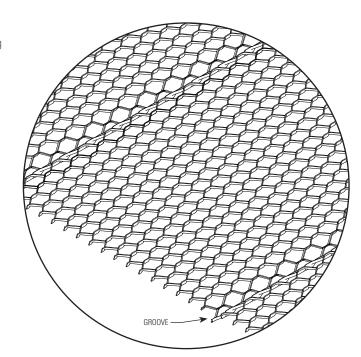
CEMCO's Self Furred Diamond Metal Lath "Grooved" is manufactured with 5 "V"-grooves in the lath in lieu of standard "dimples." These 5 grooves provide the necessary ¼" furring off the sheathing's surface to allow for proper embedment and keying of the scratch coat on all types of walls. All CEMCO expanded metal lath is produced from standard G60 hot-dipped galvanized steel. G90 is available upon special request.

Packaging

Weight per Square Yard (lb/yd²)	Sheet Size	Pieces per bundle	Yards per Pallet
1.75	27.5" x 97"	10	1000
2.5	27.5" x 97"	10	1000
3.4	27.5" x 97"	10	1000

Note: 50 bundles per pallet.

per 2.4.3-5



ASTM's & Code Standards

- ASTM A653
- ASTM C841 (Installation)
- ASTM C847
- ASTM A924
- ASTM C1063 (Installation)
- ICC ESR-1623
- ANSI A42.3, ANSI A42.4
- U.S. HUD 4930.1

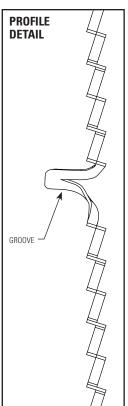
LEED Points and Recycled Content

By using CEMCO metal lath products, your project can contribute to earning points for:

- LEED Credit MR 4.1/4.2 Recycled Content Requirements (Applies for all projects)
- LEED Credit MR 5.1/5.2 Requirements (Applies for all projects)

CEMCO cold-formed steel framing products contain 30% to 35% recycled steel.

■ Total Recycled Content: 35%
■ Post-Consumer: 19.8%
■ Pre-Consumer: 14.4%



Technical Services

Technical Services: 800.416.2278 Structural Engineering/Design: 925.473.9340 www.cemcosteel.com









JUMBOTEX WEATHER-RESISTIVE BARRIER

Part of a Complete Moisture Control System

Two-Ply Jumbo Tex is a member of the Jumbo Tex family – a product line that has set the industry standard for effectiveness and durability as a weather-resistive barrier behind all major exterior wall claddings. It has been chosen by builders and architects to protect over *five million* homes and commercial buildings from the problems caused by water

intrusion and excessive moisture.

Provides the ideal balance between water protection and vapor permeability, to keep walls dry and homes comfortable... ??

Two-Ply Jumbo Tex is engineered for production and custom residential construction applications that require a tough water and moisture barrier that offers outstanding water and moisture protection. It delivers over *ten times* the water resistance of regular Grade "D" building paper, while having the durability to endure rugged jobsite conditions. The product is part of a complete Moisture Control System for walls

engineered by the Fortifiber Building Systems Group[®], which helps manage and eliminate moisture-related problems – including water-related structural failures, mold and mildew.

Two-Ply Jumbo Tex provides the ideal balance between water protection and vapor permeability, to keep walls dry and homes comfortable. The product also reduces air infiltration in exterior walls, contributing to energy savings.

Two-Ply Jumbo Tex is comprised of two layers of asphalt-saturated building paper, which is considered by many building science experts to provide the ideal drainage plane behind exterior claddings, and to increase the drying potential of the wall system when wet. Dual layers result in better sealing around attachment fasteners and better building envelope integration. Unlike some housewraps, it will retain its weather-resistive properties when exposed to either job site surfactants or wood extracts and tannin derivatives from wood siding.

Unique Weather-Resistive Properties

The product's pliability and 40 inch wide roll size make it easier to install and store on the jobsite than other weather-resistive building materials. It is also a very cost-effective solution, while providing solid protection against water intrusion and moisture problems. When the code requires two layers of Grade "D" building paper, Two-Ply Jumbo Tex does the job in one pass, saving costly labor dollars. In fact, it is possible to pay up to three times more for other weather-resistive barriers that cannot surpass its reliable performance behind stucco, fiber cement siding, brick, vinyl and wood siding.

since 1939

Decades of Proven Performance

Two-Ply Jumbo Tex is a product manufactured by the Fortifiber Building Systems Group. With more than a seventy-five year history of proven performance, technical expertise and practical know-how, the company has become a trusted partner to builders, architects and code officials.



Two-Ply Jumbo Tex

protects against
water intrusion from the
outside, while allowing moisture
to escape from the inside.

3-Coat

Stucco

Exterior Sheathing

SOLID PROTECTION AGAINST
MOISTURE PROBLEMS

EXCEPTIONAL WATER
RESISTANCE

SOLID PRICE-PERFORMANCE

IDEAL BALANCE BETWEEN
WATER RESISTANCE AND
PERMEABILITY

FOR STUCCO, FIBER CEMENT SIDING, BRICK, VINYL AND WOOD SIDING

LABOR SAVINGS FOR TWO-PLY CODE REQUIREMENTS



TWO-PLY JUMBO TEX

Product Description: Two-Ply Jumbo Tex is a premier grade weather-resistive barrier designed for use behind a variety of exterior wall claddings. It provides excellent protection from internal wall damage due to moisture leakage and condensation.

Composition: Two-Ply Jumbo Tex is an asphalt-saturated kraft **Grade** "D" breather type sheathing paper.

Size & Weight: Two-Ply Jumbo Tex is available in 40" x 162 sq. ft. and 40" x 250 sq. ft. rolls. Product weight is approximately 7.2 lbs/100 sq. ft.

Applicable Standards: Exceeds Federal Specification UU-B-790a, Type 1, Grade "D", Style 2.

Complies with the International Code Council Evaluation Services Acceptance Criteria for Water Resistive Barriers (AC 38).

Complies with the Uniform Building Code Standard 14-1.

Complies as an alternative to the water-resistive barrier specified in Section 1404.2 of the International Building Code®.

Complies as an alternative to the weather-resistant sheathing papers specified in Section R703.2 of the International Residential Code®.

ICC Evaluation Service Report 1027.

American Society for Testing & Materials (ASTM):

- ASTM D-779 Standard Test Method for Water Resistance of Paper, Paperboard and Other Sheet Materials by the Dry Indicator Test Method
- ASTM D-828 Tensile Properties of Paper and Paperboard Using Constant-Rate-of-Elongation Apparatus
- ASTM E-96 Water Vapor Transmission of Materials

Physical Properties: Two-Ply Jumbo Tex is continually tested in accordance with ASTM procedures. The values shown in Table 1 are typical values obtained in these tests.

Limitations: Product should be covered as soon as possible. Inspect product to insure it is free of any protrusions or damage which may detract from the weather-resistive barrier integrity. Holes, tears or punctures should be sealed with

Moistop® Sealant or Fortifiber Sheathing Tape. This product is not recommended for horizontal, below grade or roofing applications.

Installation: Two-Ply Jumbo Tex should be installed in accordance with the local applicable building code. The International Residential Code Section R703.2 and Uniform Building Code Standard 14-1, section 1402.1, state that weather-resistive barriers should be applied horizontally, with the upper layers overlapping the lower layer by a minimum of 2" (3" is recommended), and all vertical joints should be lapped a minimum of 6". To ensure the integrity of the weather-resistive barrier system, Fortifiber strongly recommends the use of a Two-Ply Jumbo Tex product or two layers of a single ply Jumbo Tex product when used with a three-coat stucco system. Do not tape horizontal or vertical seams.

Availability: The Fortifiber Building Systems Group's products are distributed nationwide. For product information and pricing, please call a Fortifiber distributor near you. If you need assistance locating a participating distributor, please call our Customer Service Department at 1-800-773-4777.

Fortifiber Warranty: Fortifiber Corporation warrants that its products are in compliance with their published specifications and are free from defects in materials and workmanship for a period of two years from the date of purchase. This warranty does not apply to loss due to abuse. Material found to be defective will be replaced at no charge by Fortifiber, but in no event shall Fortifiber be liable for any other costs or damages, including any labor costs.

THIS EXPRESS WARRANTY IS GIVEN IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Fortifiber's sole obligations under this warranty are as set forth herein. In no event shall Fortifiber be liable for any lost revenue or profits, direct, indirect, special, incidental or consequential damages of any kind.

This product may be eligible for Fortifiber's FortiShield 15 year warranty when used in conjunction with other Fortifiber products. Please see our website at www.fortifiber.com/warranty.htm for details.

SPECIFICATION SUMMARY: Provides secondary weather protection behind exterior cladding to prevent moisture penetration and condensation in exterior wall assemblies.

WEATHER-RESISTIVE BARRIER: Fortifiber/Two-Ply Jumbo Tex asphalt saturated kraft Grade "D" breather type sheathing paper.

REFERENCE SPECIFICATION: Federal Specification UU-B-790a, Type 1, Grade "D", Style 2.

Table 1- Physical Properties						
CHARACTERISTIC	TEST METHOD	RESULTS	INDUSTRY STANDARD			
Water Vapor Transmission	ASTM E-96 (A)	95 grams 14 perms (MVT)	35 grams (min.) 5 perms (MVT)			
Water Resistance	ASTM D-779	110 minutes	10 minutes per ply			
Tensile Strength	ASTM D-828	MD - 144 lb. ^f /inch CD -58 lb. ^f /inch	MD - 20 lb. ^f /inch CD - 20 lb. ^f /inch			



Fortifiber Building Systems Group®

Protecting Your World from the Elements®



Corporate Headquarters 263 N. Covina Lane City of Industry, CA 91744

Phone: 800.775.2362 | **Fax:** 626.330.7598 www.cemcosteel.com

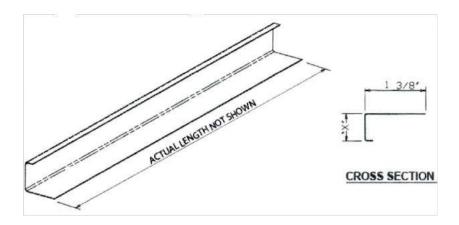
Manufacturing Facilities City of Industry, CA Denver, CO Ft. Worth, TX Pittsburg, CA Structural Engineering/Design 1001-A Pittsburg Antioch Hwy Pittsburg, CA 94565

Phone: 925.473.9340 | Fax: 925.473.9124

Technical Services 263 N. Covina Lane City of Industry, CA 91744

Phone: 800.416.2278 | Fax: 626.249.5005

#66 SHORT-FLANGE CASING BEAD



ASTM's and Code Standards

- ASTM A653
- ASTM A924
- ASTM C1047
- Fed. Spec. QQ-S-775-D
- 2007 CBC
- 2006 IBC

LEED Points and Recycled Content

By using CEMCO metal lath products, your project can contribute to earning LEED points for:

- LEED MR 2.1 and 2.2: Construction Waste Management: Up to 2 points.
- LEED MR 4.1 and 4.2: Recycled Content: Up to 2 points.
- LEED MR 5.1 and 5.2: Regional materials

CEMCO metal lath products contain 30% to 35% recycled steel.

These products are produced from steel consisting of the following contents:

- Total Recycled Content: 35%Post-Consumer Content: 19.8%
- Pre-Consumer Content: 14.4%

CEMCO's #66 Short-Flange Metal Casing Bead has a short 90-degree turn at the plaster surface for a clean and neat finish at the end of a wall or when adjoining dissimilar material. This product is manufactured with a slight arch in the nailing flange to ensure a tight fit. Available with weep holes upon request.

Packaging

Size	Wt./Mlf.	Pcs./Ctn.	Length	Ft. /Ctn.	Wt./Ctn.	Ctn./Pallet
3/8"	172 lbs.	30	10′	300	52 lbs.	30
1/2"	194 lbs	30	10'	300	59 lbs.	30
3/4"	200 lbs.	30	10′	300	60 lbs.	30
7/8"	204 lbs.	30	10′	300	62 lbs.	30
1"	208 lbs.	30	10′	300	64 lbs.	30
1-1/4"	216 lbs.	30	10′	300	68 lbs.	30



Technical Services

For more technical information about this and other CEMCO products, contact Technical Services at 800.416.2278

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Project:	Contact: ————	Contact:
	Phn:FAX:	Phn:FAX:



Corporate Headquarters 263 N. Covina Lane City of Industry, CA 91744 Phone: 800.775.2362 | Fax: 626.330.7598

www.cemcosteel.com

Manufacturing Facilities City of Industry, CA Denver, CO Ft. Worth, TX Pittsburg, CA

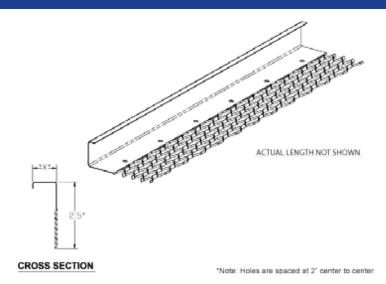
Structural Engineering/Design 1001-A Pittsburg Antioch Hwy Pittsburg, CA 94565

Phone: 925.473.9340 | Fax: 925.473.9124

Technical Services 263 N. Covina Lane

City of Industry, CA 91744 Phone: 800.416.2278 | Fax: 626.249.5005

#66 EXPANDED FLANGE CASING BEAD



ASTM's and Code Standards

- ASTM A653
- ASTM A924
- ASTM B69 (True Zinc)
- ASTM C1047
- Fed. Spec. QQ-S-775-D
- 2007 CBC
- 2006 IBC

LEED Points and Recycled Content

By using CEMCO metal lath products, your project can contribute to earning LEED points for:

- LEED MR 2.1 and 2.2: Construction Waste Management: Up to 2 points.
- LEED MR 4.1 and 4.2: Recycled Content: Up to 2 points.
- LEED MR 5.1 and 5.2: Regional materials

CEMCO metal lath products contain 30% to 35% recycled steel.

These products are produced from steel consisting of the following contents:

■ Total Recycled Content: 35% ■ Post-Consumer Content: 19.8%

■ Pre-Consumer Content: 14.4%

CEMCO's #66 expanded flange casing bead formed to a 90° for applications at inside corners. Absorbs movement due to expansion and contraction of plastered walls. Provided with an expanded flange for proper keying and easy application.

Packaging

Size	Pcs./Ctn.	Length	Ft. /Ctn.	Wt./Ctn.	Ctn./Plt.
1/4"	30	10′	300′	42 lbs.	42
3/8"	30	10′	300′	48 lbs.	42
1/2"	30	10′	300′	55 lbs.	42
3/4"	30	10′	300′	58 lbs.	42
7/8"	30	10′	300′	62 lbs.	42
1"	30	10′	300′	64 lbs.	42
1-1/4"	30	10′	300′	68 lbs.	42



Technical Services

For more technical information about this and other CEMCO products, contact Technical Services at 800.416.2278

Project Information	Contractor Information		chitect Information
Name:	Name:	Nam	me:
Project:	Contact:	Cont	ntact:
	Phn:FAX	: Phn:	n: FAX: ———



Steel Framing and Metal Lath

CALIFORNIA EXPANDED METAL

Corporate Headquarters & Main Manufacturing Facility 263 North Covina Lane, City of Industry, CA 91744

Phone: 800.775.2362 | Fax: 626.330.7598

Northern California Manufacturing Facility 1001-A Pittsburg Antioch Hwy, Pittsburg, CA 94565

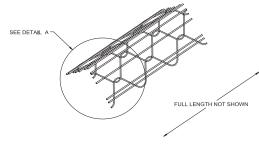
Phone: 925.473.9340 | Fax: 925.473.9341

Denver Colorado Manufacturing Facility 490 Osage Street, Denver, CO 80204

PRODUCTS CO.

Phone: 303.572.3626 | Fax: 303.572.3627

CEMCORNER





DETAIL A

ASTM's and Code Standards

- ASTM A653
- ASTM A924
- ASTM C841
- Fed. Spec. QQ-S-775-D
- 2007 CBC
- 2006 IBC

LEED Points and Recycled Content

By using CEMCO metal lath products, your project can contribute to earning LEED points for:

- LEED MR 2.1 and 2.2: Construction Waste Management: Up to 2 points.
- LEED MR 4.1 and 4.2: Recycled Content: Up to 2 points.
- LEED MR 5.1 & 5.2: Regional Materials

CEMCO cold-formed steel framing products contain 30% to 35% recycled steel.

These products are produced from steel consisting of the following contents:

Total Recycled Content: 35%
Post-Consumer Content: 19.8%
Pre-Consumer Content: 14.4%

CEMCO's CEMCORNER is used as an exterior corner reinforcement that has a nailing strip along both sides for faster installation and straighter corners. CEMCORNER was designed so that it is easier for Portland cement plaster to flow into the nose of the CEMCORNER. CEMCORNER is available in standard straight, straight arch, bullnose, bullnose arch, and a special bullnose-shortflange to accommodate almost every conceivable corner application.

Packaging

Product	Length	Ft. per Carton	Ctns./Pallet
Straight	8'	320	24
Straight	9′	360	24
Straight	10'	400	24
Straight Arch	10'	400	24
Straight Short flange	10'	400	24
Bullnose	8′	320	24
Bullnose	9′	360	24
Bullnose	10'	400	24
Bullnose Arch	10'	400	24
Bullnose Shortflange	10'	400	24



Technical Services

For more technical information about this and other CEMCO products, contact Technical Services at 800.416.2278

Project Information	Contractor Information	Architect Information
Name:	Name:	Name:
Project:	Contact:	Contact:
	Phn:FAX:	Phn:FAX:



Corporate Headquarters

13191 Crossroads Parkway North, Suite 325 City of Industry, CA 91746 Phone: 800.775.2362 Fax: 626.330.7598

Manufacturing Facilities

City of Industry, CA Denver, CO Ft. Worth, TX Pittsburg, CA

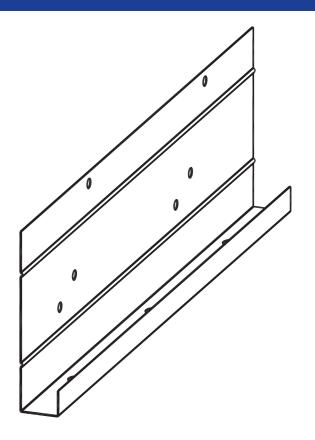
Structural Engineering/Design

1001-A Pittsburgh Antioch Hwy Pittsburg, CA 94565 Phone: 800.775.2362 Fax: 626.330.7598

Technical Services

263 North Covina Lane City of Industry, CA 91744 **Phone:** 800.416.2278 **Fax:** 626.249.5005

"J" METAL

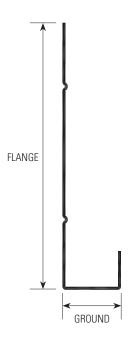


Properties

CEMCO's "J" Metal products are manufactured in various grounds (depths) to be used with a variety of polystyrene or foam insulation boards for exterior purposes. "J" Metal also provides for a workable screed around doors and windows. CEMCO's "J" Metal can also be ordered with holes and be used in some applications as a weep screed. J-Metal is fabricated from 26 gauge galvanized steel in standard G60 coating. G90 coating is available upon request.

Packaging

Gauge	Ground	Flange Size	Wt. / Mlf.	Pieces / Bundle	Bundle / Pallet
26	1-3/8"	1-3/4" L.F.	220 lbs.	10	50
26	3/8"	3-1/2" L.F.	266 lbs.	10	50
26	1/2"	3-1/2" L.F.	275 lbs.	10	50
26	3/4"	3-1/2" L.F.	291 lbs.	10	50
26	7/8"	3-1/2" L.F.	299 lbs.	10	50
26	1-3/8"	3-1/2" L.F.	333 lbs.	10	50
26	1-1/2"	3-1/2" L.F.	339 lbs.	10	50



ASTM & Code Standards:

- ASTM A653/A653M
- ASTM C1047 ■ ASTM C1063
- 2010/2013 CBC ■ 2012/2015 IBC

- ASTM A924/A924M ■ ASTM C84 1
- ASTM A1003/A1003M

LEED v3 for Building and Design Construction

- MR Credit 2: Construction Waste Management.
- MR Credit 4: Recycled Content.

LEED v4 for Building and Design Construction

- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization Environmental Product Declarations, Options 1 & 2.
- MR Credit: Building Product Disclosure and Optimization Material Ingredients, Option 1.
- MR Credit: Building Life-Cycle Impact Reduction, Option 4.

CEMCO cold-formed steel framing products contain 30% to 37% recycled steel.

■ Total Recycled Content: 36.9% ■ Post-Consumer: 19.8%

■ Pre-Consumer: 14.4%



Technical Services: 800.416.2278 Structural Engineering/Design: 925.473.9340 www.cemcosteel.com







2-PCS VCR Mock-up CUSTOMIZED WATER MANAGEMENT ACCESSORIE

M-Slide Expansion Joint™

TERMS:

DATE:	PO#:	CONTACT:
DEALER:		PHONE #:

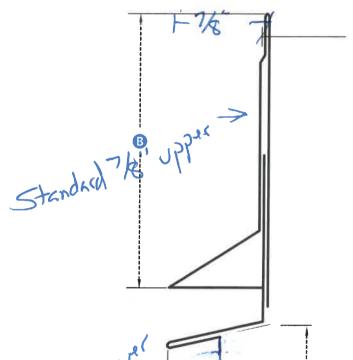
CEMCO CUSTOMER SERVICE REPRESENTATIVE:

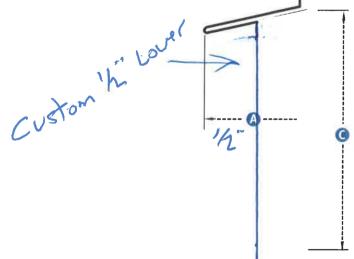
DIMENSIONS (in inches):

Enter dimension for EACH letter.

QUANTITY: ___

Please fax or email the completed order form to your CEMCO CSR. For a full list of CSR contacts log-on to www.cemcosteel.com.









Water Management Products



Corporate Headquarters

13191 Crossroads Parkway North, Suite 325 City of Industry, CA 91746 Phone: 800.775.2362 Fax: 626.330.7598

Manufacturing Facilities

City of Industry, CA Denver, CO Ft. Worth, TX Pittsburg, CA

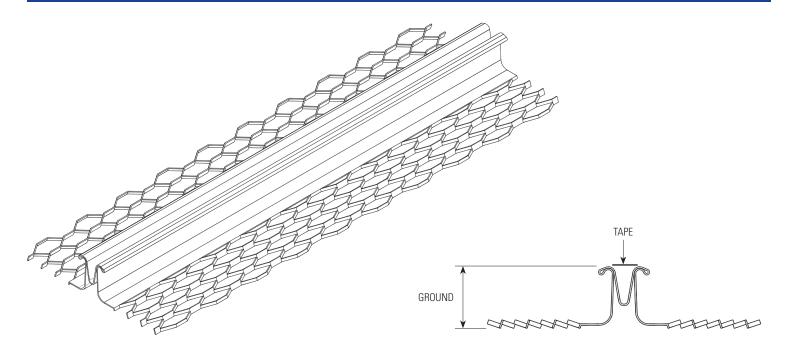
Structural Engineering/Design

1001-A Pittsburgh Antioch Hwy Pittsburg, CA 94565 Phone: 800.775.2362 Fax: 626.330.7598

Technical Services

263 North Covina Lane City of Industry, CA 91744 **Phone:** 800.416.2278 **Fax:** 626.249.5005

DOUBLE "J" CONTROL JOINT (#XJ-15)



Properties

CEMCO's Double "J" (XJ-15) Control joint relieves stresses and strains in large plaster walls and ceilings. This product has expanded flanges for proper keying and easy application. Its unique design permits the plaster to key underneath the rolled edges for added adhesion while the walls expand and contract under typical conditions. The pull tape on the joint itself provides a clean finish when removed after the finish coat. Double "J" Control Joint is fabricated from 26 gauge galvanized steel in standard G60 coating. G90 coating is available upon request. Double J-Control Joint is manufactured by Niles Corporation and distributed by CEMCO.

Packaging

Ground	Pieces / Carton	Length	Feet / Carton	Weight / Carton	Carton / Pallet
1/2"	24	10	240	74 lbs.	40
3/4"	24	10	240	80 lbs.	40
7/8"	24	10	240	84 lbs.	40

Note: 50 bundles per pallet

LEED v3 for Building and Design Construction

- MR Credit 2: Construction Waste Management.
- MR Credit 4: Recycled Content.

LEED v4 for Building and Design Construction

- MR Prerequisite: Construction and Demolition Waste Management Planning.
- MR Credit: Construction and Demolition Waste Management.
- MR Credit: Building Product Disclosure and Optimization Sourcing of Raw Materials, Option 2.
- MR Credit: Building Product Disclosure and Optimization Environmental Product Declarations, Options 1 & 2.
- MR Credit: Building Product Disclosure and Optimization Material Ingredients, Option 1.
- MR Credit: Building Life-Cycle Impact Reduction, Option 4.

CEMCO cold-formed steel framing products contain

30% to 37% recycled steel.

■ Total Recycled Content: 36.9%

■ Post-Consumer: 19.8%

■ Pre-Consumer: 14.4%

ASTM & Code Standards:

■ ASTM A653

■ ASTM C1063

■ ASTM A924

■ 2010/2013 CBC

■ ASTM C841

■ 2012/2015 IBC

Technical Services









121 Dry

Basecoat & Adhesive

TEST	METHOD	CRITERIA	RESULTS	
Accelerated Weathering*	ASTM G153 (ASTM G 23) ASTM G154	No deleterious effects at 2000 hours when viewed under 5x magnification	Pass	
Fungus Resistance	MIL STD 810B		28 days: no growth	
Freeze/Thaw Resistance*	ASTM E2485	No deleterious effects at 10 cycles when viewed under 5x magnification	Pass	
Impact Strength	EIMA 101.86 / ASTM E2486	Standard Impact	Pass with Standard Mesh, Higher Impact Ranges per Mesh	
Mildew Resistance	ASTM D3273	No growth supported during 28 day exposure period	Pass	
Water Penetration	ASTM E331	No water penetration beyond the plane of the Basecoat/EPS board interface after 15 minutes at 6.24 psf (299 Pa)	Pass	
Moisture Resistance	ASTM D2247	No deleterious effects at 14 day exposure	Pass	
Salt Fog Resistance*	ASTM B117	No deleterious effects at 300 hours	Pass: 500 hrs	
Surface Burning Characteristics	ASTM E84	< 25 Flame Spread < 450 Smoke Developed	Flame Spread : 0 Smoke Developed :10	
Tensile Adhesion (psi)	ASTM C297	> 15 psi or no failure of adhesive	Pass: Concrete, Gypsum Sheathing, Dens-Glass Gold, Cement Board	
Water Penetration	ASTM E331	No water penetration beyond the inner-most plane of the wall after 2 hours at 299 Pa (6.24 psf)	2 Pass	
Water Vapor Transmission	ASTM E96 Procedure B	Vapor Permeable	Permeable	
Wind-Driven Rain	F.S. TT-C-555B		24Hrs: No penetration of water	

^{*}Tested with Parex USA Reinforcing mesh and DPR Finish Coat

DESCRIPTION:

- Basecoat for Parex EIFS
- Adhesive to laminate EPS to listed substrates
- Applied without the addition of cement
- Mixed on site with water
- Excellent workability

USES:

- EPS adhesive for the following substrates:
 - Exterior grade gypsum sheathing
 - Glass mat gypsum sheathing
 - Masonry, concrete and cement board
 - EPS
 - Parex USA WeatherSeal Spray & Roll-On and WeatherSeal Trowel-On Water Resistive Barrier Coatings
- Basecoat for Parex NuTech and other architectural coatings and finishes (ACF).
- Leveler and filler for masonry, concrete, stucco surfaces. For this application only, 121 Dry Bascoat & Adhesive can be built up to 1/4 in. (6 mm) thick in a single pass.

COMPOSITION:

- Binder base: Copolymer compatible with portland cement
- Water base: VOC-Compliant
- Color: Light gray

WORKING TIME:

Pot life is 1–2 hours after water has been added. Open time is affected by humidity and temperature.

DRYING TIME:

Full adhesive bond strength is reached after 1–4 days, depending on humidity and temperature. Dries within 24 hours under normal drying conditions [70°F (21°C), 50% RH]. Cold and/or humid weather may extend drying time. Parex USA Accel-Pak may be added to decrease drying time. See Data sheet for more information.

CLEAN-UP:

Water-soluble prior to drying. Clean tools and containers with water before mixture sets.

COVERAGE:

Depending on the condition of the substrate and method of application, approximate coverages per bag are:

- As an adhesive: 5/16 in. (8mm) notched trowel: 130-140 ft² (12-13 m²) 5/8 in. (16mm) notched trowel: 92-100 ft² (8-9 m²)
- 1/2 in. (12.7mm) notched trowel: 113-120 ft² (10.5 - 11.2 m²)
- As a basecoat to embed 355 Parex **USA Standard Mesh:** 75-95 ft² (7-9 m²)
- As a double-layer basecoat to embed 355 Parex USA Standard Mesh and 358.20 Ultra High Impact Mesh: 35-55 ft² (3.3-5.1 sq. m²)
- As a leveler, coverage depends upon the thickness applied.

CONTAINER:

50 lbs. (22.7 kgs) net weight in multiwall moisture-resistant bags.

- Storage: Store off the ground and protect from sun and moisture
- Shelf life: Reference Parex USA **Expiration Date of Products Technical** Bulletin

SURFACE PREPARATION:

- Planar irregularities are limited to 1/4 in. (6mm) or less in a 4 ft. (1.22 m) radius. Surface irregularities are limited to 1/4 in. (6mm) or less for masonry and concrete and 1/8 in. (3mm) or less for sheathing.
- Irregular and uneven surface should be filled with any Parex 121 Basecoat & Adhesive.
- Remove surface contaminants such as dust or dirt without damaging the substrate.
- Painted substrates must have the paint removed with methods that result in no more than 10% of the remaining surface having paint.
- For additional options for surface preparation, contact Parex USA Technical Services Department.

MIXING:

- Use clean equipment for mixing and preparation.
- Add 5-6 quarts (4.7-5.7 L) of cool clean potable water to a 5 gal pail. Add half of the amount of 121 Dry Basecoat & Adhesive and mix to a homogenous consistency using a heavy-duty 1/2 in. (13 mm) drill with a rust-free paddle at 400-500 rpm.

- Then add the remaining half and mix until consistent.
- Small amounts of cool clean potable water may be added to adjust workability.
- Let the mixture stand for five minutes after initial mixing, then stir again, adding small amounts of water for workability once only.
- Parex 121 Dry Basecoat & Adhesive should be used immediately after mixing.
- Half batches may be mixed for convenience.
- Only Parex USA approved additives can be added to this product.

APPLICATION:

- Read the entire label before using this product.
- Adhesive Application: Apply the 121 Dry Basecoat & Adhesive to the entire surface on one face of the insulation board, using a 5/8 in. (16mm) notched trowel for masonry and concrete, or a 1/2-in. notched trowel for the Standard WaterMaster System, or a 5/16 in. (8mm) notched trowel for sheathing. The adhesive ribbons should be of uniform thickness, run vertically when positioned on the wall (parallel to the 2 ft. [61 cm] board dimension), and reach the perimeter of the insulation board. To ensure high initial grab and uniform adhesive contact, apply insulation board to the wall with firm pressure to the entire surface. Apply sufficient pressure to flatten adhesive ridges. Glass mat sheathing requires extra pressure.
- Basecoat Application: Rasp EPS board after 24 hours and when adhesive has fully cured and bonded. Using a stainless steel trowel, apply the 121 Dry Basecoat & Adhesive mixture to the rasped surface of the insulation board to a uniform thickness of 1/16 - 3/32 in. (1.5 - 2.4mm). Embed the Parex USA reinforcing mesh immediately in the wet 121 Dry Basecoat & Adhesive mixture. Smooth the surface of the 121 Dry Basecoat & Adhesive mixture with a trowel until the reinforcing mesh is fully embedded and the basecoat thickness is approximately 1/16 in. (1.5mm). The color of the reinforcing mesh should not be visible at the surface

- of the 121 Dry Basecoat & Adhesive material. A slight pattern of the mesh is acceptable, due to shrinkage of the cementitious Basecoat upon drying.
- As a leveler or filler: Apply Parex 121 Dry Basecoat & Adhesive and trowel to a smooth, uniform surface. Maximum thickness in a single application should be no more than 1/4 in. (6mm).
- When overlapping reinforcing mesh, special care must be taken to ensure the basecoat & mesh is flat, level and free from bumps. Basecoat should be feathered onto either side of the overlap. The mesh overlaps should be reviewed to ensure they are acceptably flat before proceeding. Refer to Technical Bulletin 61 for more information.

LIMITATIONS:

- Ambient and surface temperature must be 40°F (4°C) or higher during application and curing time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound, clean, dry, unpainted (10% or less) and free from any residue which may affect the ability of the 121 Dry Basecoat & Adhesive to bond to the surface.
- Application in direct sunlight in hot weather will significantly reduce open time for embedding Parex reinforcing mesh and smoothing the surface.
- Do not use as a leveler for EPS. Rasp EPS level.

WARNING:

- Read complete warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Safety Data Sheet (SDS). The most current SDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA. Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424









PAREXUSA

Adacryl Admix & Bonder

Admix and Bonding Agent



DESCRIPTION:

- 100% Acrylic emulsion additive for portland cement based products
- Admixture in portland cement based mixes
- High-performance acrylic polymer bonding agent
- Non re-emulsifying bonding agent

USES:

As an admix for stucco base coats:

- Improves workability and handling of stucco bases
- Promotes better hydration and curing of stucco bases
- Improves bond between stucco bases and strong, dense masonry surfaces

As an admix for stucco cement finishes:

- Increases strength of stucco finishes
- Improves bond between stucco finish and base coat surface

As a bonding agent:

- Increases shear bond adhesion
- Portland cement-based products may be applied while Parex USA Adacryl Admix & Bonder Admix and Bonding Agent is tacky within 3 days of drying.
- Suitable for application with a brush, roller, or sprayer

COMPOSITION:

- Single component liquid
- Viscosity: Low
- Color: Milky white liquid
- Water-based VOC compliant

PAREXUSA

COVERAGE:

As an acrylic bonding agent: Approximately 200-300 sq. ft. (19-28 sq. m) per gallon depending on the method of application and the surface to which it is applied.

CONTAINER:

1 quart (1.0 L), 1 gal. (3.8 L) jug and 5 gal. (19 L) pail

- Storage: Protect from direct sunlight and freezing at all times
- Do not stack more than 3 pails high
- Shelf Life: Reference Parex USA **Expiration Date of Products Technical** Bulletin.

DRYING TIME:

As an admix, provide adequate air circulation for drying. In enclosed areas, external ventilation should be used to provide air circulation. Where temporary heated enclosures are used, provide venting of the enclosure to limit humidity build-up. Portland cement based mixes with Adacryl Admix & Bonder should cure 4 days prior to exposure to standing water.

CLEAN-UP:

Water soluble prior to drying. Clean tools and containers with water prior to drying.

SURFACE PREPARATION:

As an admix:

■ Clean surfaces and dampen them. Eliminate any standing water. Concrete with a glossy or glazed surface appearance should be dulled by mechanical treatment.

As an bonding agent:

■ Substrate must be clean. Remove all foreign matter, alkali deposits, oil, dirt, etc.

- Concrete with a glossy or glazed surface appearance should be dulled by chemical or mechanical treatment.
- Portland cement surfaces should be fully cured.
- Do not apply over paint.
- For additional options, contact Parex USA Technical Support.

MIXING:

As an admix:

■ Use up to 1 gal (3.8 L) to 1 bag of any Scratch & Brown or Stucco Base Concentrate. Use up to 1 qt (1 L) per bag of Stucco Base Sanded or Stucco Cement Finishes. After the dry components and the majority of the water has been mixed, add the acrylic admix. Mix no longer than required to provide a uniform mixture. DO NOT OVER-MIX. Over- mixing entrains excessive amounts of air which weaken the material. Do not re-temper mixes over 20 minutes old.

As an bonding agent:

■ Gently shake or stir Adacryl Admix & Bonder before applying. DO NOT DILUTE.

APPLICATION:

As an bonding agent:

- IMPORTANT: Stucco base coats and cement finishes must be applied within 3 days of application of Adacryl Admix & Bonder.
- For best results, apply in the shade at the rate of 250 sq. ft. per gallon using a low-pressure sprayer. May be brush or roller-applied.
- Stucco base coats and cement finishes or other cement products can still be applied after Adacryl Admix & Bonder becomes tacky, but not while wet.

LIMITATIONS:

- Ambient and surface temperature must be 40°F (4.4°C) or higher during application and curing time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound clean, dry, unpainted and free from any residue which may affect the ability of the product to bond with the substrate.
- Avoid application in direct sunlight in hot weather.
- Do not use with air entraining cement or air entraining lime.

WARNING

- Read complete Warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Material Safety Data Sheet (MSDS). The most current MSDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424 **Facilities**

French Camp, CA North Hollywood, CA Riverside, CA San Diego, CA

Colorado Springs, CO Haines City, FL Duluth, GA Redan, GA

Albuquerque, NM Allentown, PA San Antonio, TX













AquaSol™

Architect to confirm DEW383 Cool December

Enhanced Acrylic Finish with Hydrophobic and Photocatalytic Properties

	Method	Criteria	Results	
Abrasion Resistance*	ASTM D968	No cracking or loss of film integrity at 528 quarts (500 L) of sand	Pass @ 1000 Liters	
Accelerated Weathering	ASTM G153 (Formerly ASTM G 23)	No deleterious effects at 5000 hours when viewed under 5x magnification	Pass. No blistering, damage, chalking, cracking, checking, crazing or erosion.	
Color Fastness After Weathering	ASTM G153	After 5000 hrs	\triangle E = 1.1 No Color Fading or Blushing	
Flexibility (Mandrel Bend)	ASTM D522, Method B	No Requirement	1" diameter @ -4°F	
Freeze/Thaw Resistance*	ASTM E 2485	No deleterious effects at 10 cycles when viewed under 5x magnification	Pass @ 60 cycles	
Mildew Resistance*	ASTM D 3273	No growth supported during 28 day exposure period	Pass @ 35 days	
Mildew Resistance*	MIL 810 B 508		No growth 28 days	
Moisture Resistance*	ASTM D2247	No deleterious effects at 14 day exposure	Pass 28 days	
Salt Fog Resistance*	ASTM B117	No deleterious effects at 300 hours	Pass @ 900 hrs	
Scrub Resistance	ASTM D2486	No Requirement	Pass 10,000 Cycles	
Surface Burning Characteristics	ASTM E84	Individual components shall each have a flame spread <25, and smoke developed < 450	Flame Spread: 0 to 15 Smoke Developed: 0 to 15	
Water Vapor Transmission	ASTM E 96 Procedure B	Vapor Permeable	Permeable	
VOC	EPA Reference Test Method 24	US EPA, South Coast AQMD and Greenseal Standard	7.1 g/L	
Dirt Collection	ASTM D3719	61 days	△E = 0.85	
Solar Reflectance	ASTM C1549	no change or improved after 5000 hours of exposure	Improved solar reflectance after 5000 hrs exposure, no blistering, no fading, no chalking.	
Rhodamine B Dye Test		Degradation of Rhodamine by exposure to UV light	60% Increase in *L Value - Up to 60% of pollutants degraded after 48 hours of UV exposure with a positive trend.	

^{*}Tested with Parex Basecoat

DESCRIPTION:

- Available in:
 - AquaSol™ Swirl Fine
 - AquaSol™ Swirl Coarse
 - AquaSol™ Multi-texture
 - AquaSol™ Sand Smooth
 - AquaSol™ Sand Fine
 - AquaSol™ Rio Sand
 - AquaSol™ Sand Coarse
- Excellent water repellency
- Pollution reducing
- Long-term durability
- Self-cleaning
- Heat reflective

USES:

Exterior finish coat over:

- Parex EIFS
- Properly prepared masonry, stucco, and concrete surfaces

COMPOSITION:

- Binder base: 100% Acrylic polymer with surface-hardening property.
- Aggregate: Pure crushed marble, rust-free.
- Water-based: VOC-compliant
- Pigment base: Titanium dioxide.
- Water Repellency Properties
- Color: Parex USA standard colors or tinted to desired custom color. Meets SCAQMD Rule 1113 when using Parex USA Non-VOC Colorants

Note: "The Plus" Advantage can be added to any Parex finish or coating. "The Plus" provides additional protection against mildew and algae growth.

CONTAINER:

65 lb (29.5 kg) net weight in plastic pails.

- Storage: Protect from direct sunlight and freezing at all times.
- Do not stack pails more than 3 pails high.
- Shelf life: Reference Parex USA Expiration Date of Products Technical Bulletin

COVERAGE:

Depending on the condition of the substrate and method of application, approximate coverages per pail are:

AquaSol™ Swirl Fine Aggregate size: 1.5mm 120-135 ft² (11-12.5 m²)

AguaSol™ Swirl Coarse Aggregate size: 3.0mm 70-95 ft² (6.5-9 m²)

AquaSol™ Multi-Texture 60-150 ft² (6-14 m²) Coverage varies due to texture.

AguaSol™ Sand Smooth Aggregate size: 0.5mm 280-300 ft² (26-28 m²)

AquaSol™ Sand Fine Aggregate size: 1.0mm 150-165 ft² (14-15 m²)

AquaSol™ Rio Sand Aggregate size: 1.25mm 120-150 ft² (11-14 m²) AquaSol™ Sand Coarse

Aggregate size: 1.5mm 90-110 ft² (8.4-10.2 m²)

DRYING TIME:

24 hours under normal conditions. High humidity and low temperatures extend drying time.

CLEAN-UP:

Water-soluble prior to drying. Clean tools and containers with water prior to drying.

SURFACE PREPARATION:

- Remove surface contaminants such as dust or dirt without damaging the substrate.
- For previously painted surfaces, all loose and chalking paint must be removed, and glossy surfaces dulled.
- For stucco substrates, Portland Cement Plaster must be clean and cured a minimum of 7 days or in accordance with Parex Armourwall Specifications.
- New concrete and masonry must be clean and cured a minimum of 28 days.
- Check concrete surfaces for alkalinity and treat. Any form-release agents or bond breakers must be removed.
- Uneven concrete or masonry can be leveled with a Parex 121 Basecoat & Adhesive or other suitable, compatible product.
- Parex USA recommends the use of primers to enhance the appearance and

uniformity of the finish, improved coverage, and decrease the chance of efflorescence. This is especially true when using dark colors or finishes with a large aggregate. If specified, prime with Parex USA Primer or Variance VariPrime Sanded, refer to Product Data

■ For additional options, contact Parex USA Technical Services Department.

- Use clean equipment for mixing and preparation.
- Stir to obtain a homogeneous consistency using a heavy-duty 1/2-in. (13 mm) drill with a rust free paddle at 400-500 rpm. Avoid air entrainment.
- Add the amount of water needed to achieve finish texture. To avoid color variations, add the same amount of water to each pail of finish as up to 16 oz (0.5 L).

APPLICATION:

- Read the entire label before using this product.
- Always maintain a wet edge and work to corners or joints. For best color consistency, use finish with the same batch number within a wall section.
- Keep container closed when not in use.
- Use a clean stainless steel trowel and apply a uniform coat the thickness of the largest aggregate size of the finish.
- <u>Texturing Multi-Texture Finish</u>: Use a clean stainless steel trowel and apply a uniform coat the thickness of the largest aggregate size of the finish and allow to completely dry before applying the second coat. Proper drying in between coats is crucial. If the second coat is applied over a wet first coat, the material will dry as a one thick coat and be more prone to cracking. After the first pass has dried (typically 3-4 hours in 75°F, 50% RH) apply a second coat of Multi-Texture, using tools and techniques necessary to obtain the desired texture. The maximum thickness within the applied texture must not exceed 3/16 in. (5mm) with average thickness not more than 1/8 in. (3mm).
- Texturing Swirl, Swirl Coarse, Sand Fine, Sand Coarse and Rio Sand Finishes: Use a clean plastic float or stainless steel trowel. A plastic float will roll the large

- aggregates more than a stainless steel trowel. Continuously dry clean the plastic float or steel trowel while texturing. Use consistent pressure and motion to achieve the desired texture. See Parex application guides.
- Texturing Sand Smooth Finish:
 - Optional: Level stucco brown coats with any Parex 121 Basecoat & Adhesive and let dry prior to finish application.
 - Sand Smooth Finish cannot generally be floated. Texture will be "as trowelled."
 - Sand Smooth Finish can be trowelled smooth to simulate the texture of limestone.
 - For smoothest application, apply in two tight coats. Allow first coat to dry enough that it will not be disturbed during application of the second coat. When second coat is partially dry, trowel to desired smoothness. Light, consistent misting with water during smoothing will increase smoothness. Variations in color tint and smoothness should be expected.
- Spray application: To achieve consistent texture, spray application must use consistent motion, pressure, distance and spray angle. A job-site mock up for spray application is advised.

LIMITATIONS:

- Ambient and surface temperature must be 40°F (4°C) or higher during application and drying time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound, clean, dry, unpainted, and free from any residue that might affect the ability of the finish to bond to the surface.
- Application in direct sunlight in hot weather may adversely affect aesthetics.

WARNING:

- Read complete Warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Safety Data Sheet (SDS). The most current SDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424











Reinforcing Meshes

	DESCRIPTION	USES		
355 Standard Mesh	4.5 oz fiberglass 38 in. (96.5cm) wide mesh. Highly flexible for full walls or details. Alkali-resistant.	Standard reinforcement of Parex USA EIFS walls for impact resistance and used in Parex USA Stucco Krak-Shield assemblies.		
355.48 Long Standard Mesh	4.5 oz fiberglass mesh 48 in. (121.9cm) wide. Highly flexible for details. Alkali-resistant.	Standard reinforcement of Parex USA EIFS walls for impact resistance and used in Parex USA Stucco Krak-Shield assemblies.		
356 Short Detail Mesh	4.5 oz fiberglass mesh 9.5 in. (24cm) wide. Highly flexible for details. Alkali-resistant.	Backwrapping , corners, reveals and trim.		
352 Adhesive Mesh	4.5 oz fiberglass mesh. Self-adhesive, facilitates the wrapping of complex contours. Highly flexible for details. Alkali-resistant.	Complex architectural details only.		
358.10 Intermediate Impact Mesh	12 oz fiberglass 38 in. (96.5cm) wide mesh. Intermediate strength to enhance impact and abuse resistance. Alkali-resistant.	Use with Parex USA EIFS to achieve EIMA/ASTM medium-impact strength classification. Used in Parex USA Stucco Krak-Shield assemblies.		
358.14 High Impact Mesh	15 oz fiberglass 38 in. (96.5cm) wide mesh. High strength to enhance impact and abuse resistance. Alkali resistant.	Use with Parex USA EIFS to achieve EIMA/ASTM high-impact strength classification. 355 Standard Mesh must be used in combination with 358.14 High Impact Mesh for impact resistance.		
358.20 Ultra High Impact Mesh	20 oz fiberglass 38 in. (96.5cm) wide mesh. Ultra high strength to enhance impact and abuse resistance. Alkaliresistant.	Use with Parex USA EIFS to achieve EIMA/ASTM ultra-high impact strength classification. 355 Standard Mesh must be used in combination with 358.20 Ultra- High Impact Mesh for Impact Resistance.		
357 Corner Mesh	7.2 oz fiberglass 9.5 in (24cm) wide mesh. Heavy duty. Factory pre-bent to fold uniformly around corners. Designed to enhance impact and abuse resistance at corners. Alkali-resistant.	Corner reinforcement		
	Parex USA Reinforcing Meshes have been tested within the Parex USA EIFS Systems for compliance to Chapter 26 of the International Building Code.			
	Alkali resistant is defined as 120 pli (21 dN/cm) retained tensile strength per ASTM			

after 28 days soaked in 5% sodium hydroxide solution.

PAREXUSA

	Product	Nominal Weight	Coverage per Roll	Width	Length	Packaging
	355 Standard Mesh	4.5 oz/yd² (153g/m²)	475 ft² (43.6 m²)	38 in (96.5cm)	150'	4 rolls/box
	355.48 Long Standard Mesh	4.5 oz/yd² (153g/m²)	600 ft ² (55.7 m ²)	48 in (122cm)	150'	4 rolls/box
	356 Short Detail Mesh	4.5 oz/yd² (153g/m²)	119 ft² (11 m²)	9.5 in (24cm)	150'	16 rolls/box
	352 Adhesive Mesh	4.5 oz/yd² (153g/m²)	237 ft² (21.7m²)	19 in (48.2cm)	150'	8 rolls/box
Impact	358.10 Intermediate Impact Mesh	12 oz/yd² (407g/m²)	237 ft² (21.7m²)	38 in (96.5cm)	75'	4 rolls/box
	358.14 High Impact Mesh	15 oz/yd² (509g/m²)	237 ft² (21.7m²)	38 in (96.5cm)	75'	2 rolls/box
	358.20 Ultra High Impact Mesh	20 oz/yd² (692g/m²)	237 ft² (21.7m²)	38 in (96.5cm)	75'	2 roll/box
Specialty	357 Corner Mesh	7.2 oz/yd² (244g/m²)	119 ft² (11 m²)	9.5 in (24cm)	150'	4 rolls/box

APPLICATION:

- 355 Standard, 355.48 Long Standard and 356 Short Detail Mesh: The fiberglass mesh must be embedded into a Parex USA basecoat and be smoothed with a trowel until mesh is fully embedded and the basecoat, thickness is approximately 1/16 in. (1.5mm). The color of the reinforcing mesh should not be visible at the surface of the Parex USA basecoat material. A slight pattern of the mesh is acceptable, due to shrinkage of the cementitious basecoat upon drying. Install mesh taking care to avoid wrinkles. The mesh must be continuous at all corners and must be lapped a minimum of 2-1/2 in. (63.5mm) at the mesh seams.
- 352 Adhesive Mesh: 352 Adhesive Mesh is adhered to the EPS board before the basecoat is applied. Apply the basecoat and smooth it with a trowel until the mesh color is not visible. A slight pattern of the mesh is acceptable, due to shrinkage of the cementitious basecoat. The mesh must be continuous at all corners and must be lapped a minimum of 2-1/2 in. (63.5 mm) at the mesh seams.
- 358.10 Intermediate Impact, 358.14 High Impact, and 358.20 Ultra High Impact Mesh: The fiberglass mesh must be embedded into the wet basecoat and be smoothed with a trowel until fully embedded with the mesh color not visible. Tightly butt mesh edges but do not overlap them. Install Parex USA 357 Corner Mesh at all edges. 358.10 Intermediate
- Impact: Where mesh edges butt together, the joint has to be covered with a layer of Standard or Detail mesh with a minimum lap of 4 in. (102mm). For 358.14 High Impact Mesh and 358.20 Ultra High Impact Mesh, a second layer of 355 Standard Mesh must be applied on the whole surface.
- <u>357 Corner Mesh</u>: The fiberglass mesh must be embedded into the wet base coat and be smoothed with a trowel until fully embedded with the mesh color not visible. A slight pattern of the mesh is acceptable, due to shrinkage of the cementitious basecoat. Tightly butt mesh edges but do not overlap them. Install mesh taking care to avoid wrinkles. Where mesh edges butt together, the joint has to be covered with a layer of Standard or Detail mesh with a minimum lap of 6 in. (152mm)
- For all mesh overlaps: When overlapping reinforcing mesh, special care must be taken to ensure the basecoat mesh is flat, level and free from bumps. Basecoat should be feathered onto either side of the overlap. The mesh overlaps should be reviewed to ensure they are acceptably flat before proceeding. Refer to Technical Bulletin 61 for more information.

ASTM E2486 Impact Classification (formerly EIMA 101.86)

- A. Standard Impact Resistance, 25-49 in-lbs (2.8 5.6 J) Impact Range
- B. Medium Impact Resistance, 50-89 in-lbs (5.7-10.1 J) Impact Range
- C. High Impact Resistance, 90-150 in-lbs (10.2-17.0 J) Impact Range
- D. Ultra High Impact Resistance, >150 in-lbs (> 17.0 J) Impact Range

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424







PAREXUSA

Primer



DESCRIPTION:

- 100% Acrylic-based primer
- Reduces the chance of efflorescence which may result from the cement content of various bases
- Enhances the appearance and uniformity of Parex USA Acrylic and Elastomeric Finishes and Coatings.
- Vapor permeable.
- Improves Acrylic and Elastomeric Finishes and Coating coverages
- Color: White or tinted to the color of Parex USA finish or coating

USES:

Exterior and Interior:

- Any surface suitable for Parex USA Acrylic and Elastomeric Finishes and Coatings
- Under dark colors and Swirl Finishes

COMPOSITION:

- Binder base: 100% acrylic
- Water-based: VOC compliant. Meets SCAQMD Rule 1113 when using Parex USA Non-VOC Colorants.
- Pigment base: Titanium dioxide
- Percent Solids
- By Weight: 68.95% - By Volume: 50.95% ■ VOC: 10g/l (0.815 lb/gl)

PAREXUSA

COVERAGE:

Depending on the condition of the substrate and method of application, approximate coverages per pail is:

■ One coat: 1600-2000 ft² $(150-185 \text{ m}^2)$

CONTAINER:

60 lb (27.2 kg) net weight in plastic pails.

- Storage: Protect from sun and freezing at all times.
- Do not stack pails more than 3 pails high.
- Shelf Life: Reference Parex USA **Expiration Date of Products Technical** Bulletin.

DRYING TIME:

Approximately 1/2 to 4 hours under normal conditions. High humidity and low temperatures extend drying time.

CLEAN-UP:

Water soluble prior to drying. Clean tools and containers with water prior to drying.

SURFACE PREPARATION:

- Remove surface contaminants such as dust or dirt without damaging the substrate.
- For previously painted surfaces, all loose and chalking paint must be removed, and glossy surfaces dulled.
- New concrete and masonry must be clean and cured a minimum of 28 days.
- Any form-release agents or bond breakers must be removed.

- Uneven concrete or masonry can be leveled with any Parex USA Basecoat & Adhesive or other suitable, compatible product.
- For interior drywall, prepare as for painting.
- For additional options, contact Parex USA Technical Support.

MIXING.

- Use clean equipment for mixing and preparation
- Mix thoroughly. Up to 1 gallon (3.75L) of cool, clean portable water can be added per pail.
- Stir occasionally as needed to keep uniformly mixed.

APPLICATION:

- Read the entire label before using this product.
- Apply with a roller, brush or suitable spray equipment in a continuous coat.
- When cutting-in with a brush around edges of the system do not allow a buildup of primer. If a buildup is present it will produce a visible and unsightly difference in the finish applied over it.
- Parex USA Primer must be completely dry before any Parex **USA Acrylic and Elastomeric Finishes** and Coatings are applied.
- When using Swirl Texture finishes, the primer should be tinted to the color of the Finish.
- For spray applications, strain the material using a paint strainer.

LIMITATIONS:

- Ambient and surface temperatures must be 40°F (4°C) or higher during application and drying time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound, clean, dry, and free from any residue which may affect the ability of Parex USA Primer to bond to the surface.
- Not to be used under cementitious finishes.
- Application in direct sunlight in hot weather may adversely affect aesthetics.

WARNING:

- Read complete Warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Safety Data Sheet (SDS). The most current SDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424













Fiber-47™ Armourwall Sanded

Scratch & Brown

DESCRIPTION:

- A factory controlled high-quality blend of portland cement, lime, fibers and proprietary additives that conforms to ASTM C926 which is designed as a replacement to job-site mixed scratch and brown basecoats.
- Can be installed up to 1/2 in. (12.7mm) thick in a single pass.
- Color: Gray.

USES:

As a stucco base, apply Parex Fiber-47™ Armourwall Sanded over:

- Metal lath, including an appropriate water resistive barrier.
- Properly prepared masonry and concrete substrates.

COMPOSITION:

- Binder: Portland cement.
- Reinforcement: Polypropylene fibers.
- Aggregate: Conforms to ASTM C926

MATERIAL STANDARDS:

Cement: ASTM C150 Lime: ASTM C206 Fibers: ASTM C1116

PROPERTIES:

Complies with code criteria for exterior portland cement plaster.

COVERAGE:

Approximate Coverage, depending on the condition of substrate and the thickness of application is based on uniform thickness and zero waste factor (adjust accordingly):

- at 3/8 in. (9.5mm): 20-24 ft² (1.8-2.2 m²)
- at 3/4 in. (19mm): 10-12 ft² (0.9-1.1 m²)
- Coverage may vary due to ambient temperature, surface temperature, surface porosity, mixing methods, application methods, amount of water, wall type and metal lath type. Coverage must be verified in the field using the same procedures and conditions that will be present at the project.

CONTAINER:

80 lbs. (36 kg) net weight in a multi-wall moisture-resistant bag.

- Storage: Store off ground and protect from rain and moisture.
- Shelf Life: Reference Parex USA Expiration Date of Products Technical Bulletin.

WORKING TIME:

Sets in 30-45 minutes after mixing, depending on conditions.

SURFACE PREPARATION:

- On masonry and concrete, apply only to surfaces that are sound, clean, dry, unpainted, and free of any residue which may affect the ability of Parex Fiber-47™ Armourwall Sanded to bond to the surface.
- Solid bases shall have sufficient suction (ability to absorb water) or surface roughness or both to ensure an adequate bond for Parex Fiber-47™ Armourwall Sanded.
- On lathed construction, apply to lathing installed in accordance with ASTM C1063.
- Parex Fiber-47TM Armourwall Sanded requires water-resistive barrier installed and flashed in accordance with the building code and to form a water-shedding surface. Stucco is not a water-resistive barrier.
- Install Water Resistive barrier (type and method of application) per Parex USA Stucco Application Guide or Specifications.
- Do not apply to substrates which are frozen or contain frost or ice.
- Apply to surface prepared for portland cement plaster. Mix and install scratch and brown coats in accordance with ASTM C926.
- For additional surface preparation options contact Parex USA Technical Support.

MIXING:

- Use clean equipment for mixing and preparation.
- Add to plaster mixer 11/2-2 gallons (5.6-7.6L) of water for each 80-pound (36 kg) bag of Parex Fiber-47TM
 Armourwall Sanded to be mixed in a batch. Mixing water shall be cool potable at a uniform temperature above 40°F/5°C. Maintain same water parameters for all batches.
- Add Parex Fiber-47[™] Armourwall Sanded to the mixer.
- Use cool, clean, potable water; let hose run to clear it of hot water.
 Adjust water for workability.
- Mix at low speed for a minimum of 3 minutes, until the mixture is smooth. Do not overmix; never mix more than 5 minutes.

- Mix each batch for the same amount of time.
- Mix same size batches using the same amount of water, to ensure consistency.
- For hand applications, stop mixer and allow mix to slake for 8 minutes.
- Briefly re-mix before using (approximately 2 minutes).
- Use immediately after mixing.
- Do not retemper.
- Parex USA Adacryl Acrylic Admix & Bonder as an admix: Use up to 1 qt (1L) per bag of Parex Fiber-47TM Armourwall Sanded. After the dry components and the majority of the water has been mixed, add the acrylic admix in place of 1 qt (1L) of water. Mix no longer than required to provide a uniform mixture. DO NOT OVER-MIX. Over- mixing entrains excessive amounts of air which weaken the material. Do not re-temper mixes over 20 minutes old.
- Only Parex USA approved additives can be added to this product.

NOTE: If Parex USA Adacryl is mixed into Parex Fiber-47™ Armourwall Sanded and a portland cement finish coat is used, then Parex USA Adacryl must be used in the portland cement finish coat also. No unapproved additives are allowed.

APPLICATION:

- Read the entire label before using this product. NOTE: All materials are to be installed in compliance with local building code requirements, ASTM C926 and the current manufacturer's specifications. For more complete installation instructions, see the Parex USA Stucco Application Guide.
- Thoroughly dampen concrete and masonry substrate if necessary before applying Parex Fiber-47[™] Armourwall Sanded.
- Apply by hand trowel or plaster gun to a minimum thickness approximately 3/8 in. (9.5mm) thickness per coat. On lathed construction the total thickness of both coats together shall be 3/4-7/8 inch (19-22mm).
- Surface of the first or scratch coat shall be scored or horizontally or in one direction on ceilings to form a mechanical key for succeeding second or brown coat. Moist cure the scratch coat for 48 hours in accordance with the building code.

- For hand trowel applications dampen the surface of the dry Parex Fiber-47™ Armourwall Sanded as necessary prior to application of second coat. Darby, then rod the brown (second) coat to a true and even plane or specified tolerances. Float the brown coat uniformly to provide a surface receptive to the application of the finish coat.
- Interrupt Parex Fiber-47™ Armourwall Sanded application only at junctions of wall planes, openings or control joints to avoid cold joints and abrupt changes in the uniform appearance of succeeding coats.
- Parex Fiber-47[™] Armourwall Sanded must be moist cured for the first 48 hours after it has set. Moist curing must be increased in dry weather and may be reduced in damp weather. There should be no visible water on the surface when a succeeding coat is
- After moist curing, allow Parex Fiber-47™ Armourwall Sanded to dry thoroughly before applying acrylic primers or finishes.
- Allow Parex Fiber-47[™] Armourwall Sanded to dry an additional 3 days if applying a Parex USA acrylic primer or additional 5 days if applying a Parex USA acrylic or portland cement finish.

- For portland cement-based stucco finish, lightly moisten the Parex Fiber-47™ Armourwall Sanded surface before application. NOTE: When a portland cement finish coat is to be applied the surface must be open (not smooth) by floating.
- The double back method is allowed per ASTM C926, the IBC and IRC.

LIMITATIONS:

- Ambient and surface temperature must be 40°F (4°C) or higher during application and drying time. Protect from freezing for a period of not less than 48 hours after set has occurred. Provide supplemental heat and protection from precipitation as needed.
- Ambient and surface temperatures must not exceed 120°F (49°C) during and 24 hours after application.
- Avoid application in direct sunlight in hot weather.
- For application to very dense or smooth concrete, contact Parex USA **Technical Support for additional** information.
- See package for handling precautions.
- Always wear proper safety equipment, including particle mask, eye protection and gloves when mixing and/or applying this product.

This information is designed to guide you and has been conscientiously compiled according to the latest state of our technology. Parex USA, Inc. assumes no liability, expressed or implied, in connection with the use of the product because of the great variety of applications and working conditions.

WARNING:

- Read complete warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Material Safety Data Sheet (MSDS). The most current MSDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424 **Facilities** French Camp, CA North Hollywood, CA Riverside, CA San Diego, CA

Colorado Springs, CO Haines City, FL Duluth, GA Redan, GA

Albuguergue, NM Allentown, PA San Antonio, TX











WeatherDry

Water-Resistive Barrier Basecoat & Adhesive



DESCRIPTION:

- Waterproofing Basecoat
- Acrylic co-polymer base
- Requires the addition of portland cement
- Color: Gray

USES:

- EPS adhesive for EIFS
- Basecoat to protect vertical and sloped surfaces in Parex USA EIFS
- Water resistive barrier over CMU and concrete under the EIFS WM system.
- Water resistive barrier for use over CMU and concrete in Parex USA stucco assemblies

COMPOSITION:

- Binder base: Acrylic co-polymers, compatible with portland cement
- Water based: VOC compliant

PROPERTIES:

- Vapor Permeability (ASTM E 96): 2.5 Perms
- Water penetration resistance: Withstands hydrostatic pressure
- Freeze-thaw resistance (ASTM E2485): 60 cycle; pass
- Flexibility: Pass 1/8 in. (3mm) mandrel bend

COVERAGE:

Depending on the condition of the substrate and method of application, approximate coverages) per pail are:

- As an adhesive, using a stainless steel trowel:
 - 80-100 ft² (7.5-9.3 m²)
- As a waterproof Basecoat to embed Parex USA 355 Standard Mesh: 90-110 ft² (8.4-10.3 m²

CONTAINER:

50 lb (22.7 kg) net weight in 5 gallon plastic pails.

- Storage: Protect from direct sunlight and freezing at all times
- Do not stack more than 3 pails high
- Shelf Life: Reference Parex USA **Expiration Date of Products Technical** Bulletin.

WORKING TIME:

Sets up in 1-3 hours after cement has been added. Pot life is affected by humidity and temperature.

DRYING TIME:

Full adhesive bond strength is reached after 1-4 days, depending on humidity and temperature.

CLEAN-UP:

Water soluble prior to drying. Clean tools and containers with water prior to drying.

SURFACE PREPARATION:

- Planar irregularities are limited to 1/4 in. (6 mm) in a 4 ft. (1.2m) radius. Surface irregularities are limited to 1/4 in. (6 mm) or less for masonry and concrete and 1/8 in. (3 mm) or less for sheathing.
- Irregular and uneven surface should be filled with any Parex USA Basecoat & Adhesive
- Remove surface contaminants such as dust or dirt without damaging the substrate
- Painted substrates must have the paint removed by methods which result in no more than 10 percent of the remaining surface having paint.
- For additional options for surface preparation, contact Parex USA Technical Support.

MIXING:

- Use clean equipment for mixing and preparation.
- Stir WeatherDry Basecoat & Adhesive to a uniform consistency. Split evenly into two buckets.
- Premeasure 25 lb (11.7 kg) of Type I or Type II portland cement.
- Add half of the portland cement to each bucket as described below.
- While stirring the WeatherDry Basecoat & Adhesive, add small amounts of portland cement in increments to obtain a final ratio of 2:1 by weight, WeatherDry Basecoat & Adhesive to portland cement.
- Small amounts of clean cool potable water may be added to adjust workability.
- Let the mixture stand for five minutes after initial mixing, then stir again, adding small amounts of water once only as needed for workability.
- WeatherDry Basecoat & Adhesive should be used immediately after tempering.
- Half batches may be mixed for convenience.
- Only Parex USA approved additives can be added to this product.

APPLICATION:

- Read the entire label before using this product.
- As an adhesive: Apply a continuous layer of WeatherDry Basecoat & Adhesive at least 1/8 in. (3mm) thick to the substrate. To ensure high initial grab and uniform adhesive contact, apply insulation board to wall with firm pressure to entire
- As a waterproof Basecoat: Apply WeatherDry Basecoat & Adhesive with a stainless steel trowel to the rasped surface of the insulation board to a uniform thickness of 1/16-3/32 in. (1.5 - 2.4mm). Embed Parex USA 355 Standard Mesh immediately in the wet WeatherDry Basecoat & Adhesive. Smooth the surface of the WeatherDry Basecoat & Adhesive with a trowel until the reinforcing mesh is fully embedded. The color of the mesh should not be visible beneath the surface of the WeatherDry Basecoat & Adhesive.

- A slight pattern of the mesh is acceptable, due to the shrinkage of the Basecoat upon drying.
- The Basecoat must be dry and hard prior to applying additional coatings.

LIMITATIONS:

- Ambient and surface temperature must be 40°F (4.4°C) or higher during application and curing time. Provide supplemental heat and protection from precipitation as needed.
- Use only on surfaces that are sound, clean, dry, unpainted, and free from any residue which may affect the ability of WeatherDry Basecoat & Adhesive to bond to the surface.
- Application in direct sunlight in hot weather will significantly reduce open time for embedding reinforcing mesh and smoothing the surface.
- Application to sloped surfaces should be limited to minimum pitch of 4/12 with the run of the slope no more than 12 in. (30.5 cm). For other applications, contact Parex USA Technical Support.
- Do not use as a leveler for EPS. Rasp EPS level

WARNING:

- Read complete Warning information printed on product container prior to use. For medical emergency information, call 1-800-424-9300.
- For more information on handling this product refer to its Safety Data Sheet (SDS). The most current SDS and Product Data Sheet (PDS) can be found on our website.
- This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about the guidelines for the proper use and application of the covered product(s) under normal environmental and working conditions. Because each project is different, Parex USA, Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

Parex USA, Inc. 4125 E. La Palma Ave., Suite 250 Anaheim, CA 92807 (866) 516-0061 Tech Support: (800) 226-2424 **Facilities**

French Camp, CA North Hollywood, CA Riverside, CA San Diego, CA

Colorado Springs, CO Haines City, FL Duluth, GA Redan, GA

Albuquerque, NM Allentown, PA San Antonio, TX









Air Barrier Assembly

ITEM #1

Dow Corning® DefendAir 200 Silicone Liquid Applied Air and Weather Barrier

The only water-based silicone air barrier complemented by a fully compatible system



Features/Benefits

ABAA evaluated

- Airtight performance exceeding industry standards
- Long-term UV resistance
- Passes NFPA 285 assembly testing
- Complete offering of compatible accessory materials
- Vapor-permeable and breathable
- One-coat spray application;
 may also be roller applied
- Water-based, low-VOC formulation ideal for green constructions
- Can be applied at temperatures as low as 20°F (-7°C)
- Primerless adhesion to most construction substrates

Uncontrolled air leakage can be a significant contributor to increased heating and cooling costs. *Dow Corning*® DefendAir 200 helps reduce energy consumption, providing fast, easy and effective protection from air infiltration and water penetration.

Dow Corning® DefendAir 200 is a 100% silicone liquid-applied air and water barrier. Long-term UV resistance means no performance issues from extended sun exposure – whether due to unanticipated construction delays prior to cladding installation or to normal exposure in rainscreen applications.

The vapor-permeable, one-component, water-based coating dries to form a flexible membrane that is impervious to water but has the ability to "breathe," allowing water vapor to escape from inside the substrate.



Dow Corning® DefendAir 200 is a key component of a building weather protection system to prevent air and water infiltration.



Typical Properties(1)

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative or your Global Dow Corning Connection before writing specifications on this product.

Test ⁽²⁾	Property	Unit	Result
ASTM E2178	Air permeance	cfm/ft ²	<0.0003 at 1.57 psf
		L/(s-m²)	<0.0016 at 75 Pa
CAN/ULC S741		L/(s-m²)	<0.0019 at 75 Pa before and after conditioning (Pass)
ASTM E2357	Assembly air leakage	cfm/ft ²	<0.000007 at 1.57 psf
		L/(s-m²)	<0.00003 at 75 Pa
CAN/ULC S742			Class 1A
ASTM E96	Water vapor permeance	US Perms	
	Desiccant (Method A)	(ng/(m²-Pa-s))	10.1 (578)
	Water (Method B)		26.6 (1,521)
ASTM E84	Flame spread		5
	Smoke developed		115
			NFPA Class A, UBC Class 1
ASTM D4541	Pull adhesion	psi	
	Concrete		>120
	Fiberglass mat gypsum sheathing		>40 (substrate failure)
ASTM D412	Tensile strength	psi (MPa)	>200 (1.38)
ASTM D412	Elongation	%	650
UV Exposure/Resistance	5,000 hour exposure: 8 hour UV at 60°C – 4 hour water at 50°C, UVA 340 bulbs		No change
ASTM D2243	Freeze-thaw resistance		No change

⁽¹⁾ Values are based on 15 mil dry-film thickness.

Contact us

Dow Corning is collaborating with industry professionals around the world to develop solutions to improve the energy efficiency of buildings, reduce the eco-footprint of construction materials, and improve the health and safety of building occupants. Learn more about Dow Corning® DefendAir 200 and our full range of Building and Construction Solutions, including service and support, at **BuildaBetterBarrier.com**.

Dow Corning has sales offices, manufacturing sites, and science and technology laboratories around the globe. Find local contact information at dowcorning.com/ContactUs.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

****Trademark of The Dow Chemical Company.

Dow Corning is a registered trademark of Dow Corning Corporation. The Corning portion of the Dow Corning trademark is a trademark of Corning Incorporated, used under license. Build a Better Barrier is a trademark of Dow Corning Corporation.

©2013, 2014, 2015, 2017 Dow Corning Corporation, a wholly owned subsidiary of The Dow Chemical Company, All rights reserved.

Form No. 62-1715D-01 30023975





⁽²⁾ ASTM: American Society of Testing and Materials.

Product Information Building and Construction



Dow Corning® DefendAir 200

FEATURES & BENEFITS

- UV Resistant long term resistance
- Provides long-term air and water protection properties even when exposed to sunlight, rain, snow, or temperature extremes
- Excellent Weatherability temperature extremes of -15°F to 300°F
- Meets National Fire Protection Association (NFPA) Class A Fire Rating
- NFPA 285 Pass¹
- Ease of Installation one coat installation
- Air Tight exceeds industry requirements
- Primerless adhesion on most substrates
- Solventless
- Elastomeric accommodates building movement
- Seamless cured membrane is continuous and does not form seams or laps
- Nail sealability
- Low VOC
- Compatibility compatible with Dow Corning® brand sealants, Dow Corning® 123 Silicone Seal, Dow Corning® Transition Strips, and Dow Corning® Molded Corners

Silicone Liquid Applied Air and Weather Barrier

APPLICATIONS

 Permeable air barrier used for new construction and renovation applications on many substrates including concrete, OSB, exterior sheathing, preformed panels, plywood, wood or steel stud walls.

DESCRIPTION

Dow Corning® DefendAir 200 is a 100% silicone liquid applied Air and Weather Barrier designed to protect against air infiltration and water penetration. The vapor permeable, one component, water-based coating cures to form a flexible membrane that is impervious to water but has the ability to "breathe," allowing water vapor to escape from inside the substrate.

The coating provides long-term protection from air and water infiltration; normal movement imposed by seasonal thermal contraction and expansion; ultraviolet radiation; and the elements. The coating maintains its water protection properties even when exposed to sunlight, rain, snow, or temperature extremes. There is not a limit on exposure time before being covered by the exterior cladding.

Dow Corning DefendAir 200 can be applied between -6°C (20°F) and 38°C (100°F) to a clean, dry surface.

HOW TO USE

When properly applied and cured, *Dow Corning* DefendAir 200 provides a fast, easy, and effective method of providing protection from air and water infiltration. This product may settle during prolonged storage, therefore, it is recommended to mix well before using. Do not dilute.

Surface Preparation

All surfaces to be coated with *Dow Corning* DefendAir 200 must be prepared as described in the most recent *Dow Corning Air and Weather Barrier Application Guide* (Form No 62-1723). The following is a short reference guide for surface preparations.

All surfaces must be clean and free of dirt, frost, dust, oil, grease, mold, fungus, efflorescence, laitance, peeling coating, chalking coating, and any other foreign material. Green concrete must be allowed to cure 28 days before application of *Dow Corning* DefendAir 200 (see "Limitations"). Repair cracks larger than 1/16 inch (1.6 mm) with a material that is compatible with the substrate and Dow Corning DefendAir 200. Dow Corning® 790 Silicone Building Sealant, Dow Corning® 795 Silicone Building Sealant, Dow Corning® 791 Silicone Perimeter Sealant, Dow Corning® 756 SMS Building Sealant, and Dow Corning® 758 Silicone Weather Barrier Sealant can be used for crack repairs.

All joints between exterior grade sheathing which are greater than 1/16 inch (1.6 mm) must be sealed using one of the above silicone sealants and struck flush prior to installing the coating. In addition, any unused nail holes or screws that missed the stud must be sealed.

¹NFPA 285, Standard Test Method for Evaluation of Fire Propagation Characteristics of Exterior Non-Loading Bearing Wall Assemblies Containing Combustible Components, 2012 Edition – Passed in assembly tested. Please contact Dow Corning for more details.

TYPICAL PROPERTIES

Values are based on 15 mil dry film thickness. Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative or your Global Dow Corning Connection before writing specifications on this product.

Test ¹	Property	Unit	Result
ASTM E2178	Air Permeance	cfm/ft ²	< 0.0003 at 1.57 psf
		$L/(s-m^2)$	< 0.0016 at 75 Pa
CAN/ULC- S741	Air Permeance L/(s-m ²)		<0.0019 at 75 Pa after UV Exposure and conditioning (Pass)
ASTM E2357	Assembly Air Leakage	cfm/ft ²	< 0.000007 at 1.57 psf
CAN/ULC- S742		$L/(s-m^2)$	< 0.00003 at 75 Pa Class 1A
ASTM E283	Assembly Air Infiltration	cfm/ft ²	< 0.01 at 1.57 psf
ASTM E331	Assembly Water Infiltration	Tested to 15 PSF	Pass - No leakage
ASTM E330	Assembly Structural Loading	Tested to 30 PSF and 45 PSF	Pass - No damage to air barrier
ASTM E96 Water Vapor Pe	rmeance		
	Desiccant (Method A)	US Perms (ng/(m²-Pa-s))	10.1 (578)
	Water (Method B)	US Perms (ng/(m²-Pa-s))	26.6 (1521)
ASTM D1970, Section 8.9	Nail Sealability (Head of Water Test)		Pass
ASTM 1970, Section 8.6	Low Temperature Flexibility		Pass
ASTM E 84	Flame Spread		5
ASTM E 84	Smoke Develop		115
			NFPA Class A, UBC Class 1
ASTM C1305	Crack Bridging		Pass
ASTM D 2369	Solids Content	% by volume	50
		% by weight	59
EPA Method 24	Volatile Organic Content (VOC)	(g/L)	< 19
ASTM D4541 Pull Adhesion	n		
	Concrete	psi	> 120
	Fiberglass mat gypsum sheathing	psi	> 40 (substrate failure)
ASTM D 412	Tensile Strength	psi (MPa)	> 200 (1.38)
ASTM D 412	Elongation	%	650
ASTM D2243	Freeze-Thaw Resistance		No change
	UV Exposure/Resistance 5000 hour exposure: 8 hour UV at 60°C – 4 hour water at 50°C, UVA 340 bulbs		No change
	Color		White

¹ASTM: American Society of Testing and Materials CAN/ULC: Canadian/Unlimited Liability Corporation

EPA: Environmental Protection Agency

Coating

Apply the coating in a 30–32 mils (0.76–0.81 mm) wet thickness (a jobspecific mockup is recommended to determine actual usage which will result in the required 15-mil (0.38-mm) dry coating thickness. On occasion, a second coat may be necessary on porous or rough surfaces to achieve the minimum dry film thickness.

Apply using a ¾ to 1½ inch (19- to 38-mm) nap, polyester, or 50/50 polyester/wool blend roller cover, nylon bristle brush, or airless sprayer. When applying the coating with a roller, apply it in a fan pattern to achieve uniform thickness. When applying the coating with a sprayer, a minimum 0.019 inch tip must be used. Sufficient pump pressure should be used to obtain an even spray pattern. Back rolling is not required.

Allow the coating to dry (typically 2 to 4 hours) before applying additional coats if needed. After the additional coat has been applied, the average drying time is 4 to 12 hours, depending upon temperature, humidity, and wind conditions. If the temperature drops below -6°C (20°F) after the air barrier is applied, the average drying time will increase. Dow Corning DefendAir 200 requires temperatures higher than -6°C (20°F) for a cumulative total of 24 hours to dry. Dow Corning DefendAir 200 will attain full adhesion and physical properties in 7 to 14 days.

Dow Corning DefendAir 200 was developed to obtain good adhesion to the substrate without the need of a primer. Refer to the Dow Corning Air and Weather Barrier Application Guide to determine if adhesion testing or a primer is required for your specific substrate.

Low Temperature Application

If temperatures drop below 20°F, the coating will freeze on the surface until the temperature increases. This will not affect the cured properties of the air barrier but will extend the drying time.

Roller application of the air barrier at low temperature will require 2 coats. The air barrier should dry to touch, not simply freeze, between coats. Application equipment such as rollers and the tips of spraying equipment should be kept above 0°C (32°F) when not in use.

Allow the air barrier to fully dry prior to adhering other materials to the surface of the air barrier. For more information on cold temperature application, refer to the *Dow Corning Air and Weather Barrier Application Guide*.

HANDLING PRECAUTIONS PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND **HEALTH HAZARD** INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM. OR FROM YOUR DOW CORNING SALES DEVELOPMENT PROFESSIONAL, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

Protect *Dow Corning* DefendAir 200 and *Dow Corning*® DefendAir 200 Primer from freezing. Store in a cool, dry place out of the weather. When properly stored in its original, unopened container above below 32°C (90°F), *Dow Corning* DefendAir 200 and *Dow Corning* DefendAir 200 Primer have shelf lives from date of manufacture of 6 months and 18 months, respectively. Refer to product packaging for Use by Date.

If *Dow Corning* DefendAir 200 is stored at temperatures below -6°C (20°F) for longer than 8 hours, the air barrier will start to freeze. Allow the *Dow Corning* DefendAir 200 to sit at temperatures greater than 20°F for at least 8 hours or until the material thaws before application.

PACKAGING INFORMATION

Dow Corning DefendAir is available in 4.5 gal (16.9 L) pails (44 lb [20 kg]) and 51.5 gal (195 L) drums (507 lb [230 kg]).

LIMITATIONS

Dow Corning DefendAir 200 should not be applied:

- When there is a threat of rain within the next 8 hours or the relative humidity is in excess of 90 percent (because conditions would not permit complete surface drying)
- On below-grade applications
- On newly applied or green cementitious materials; Industry guidelines recommend at least 28 days cure before painting or coating the substrates (see SSPC, 2010 Painting Manual, Chapter 3.1. Concrete Surface Preparation)

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Dow Corning offers a project-specific 10-Year Limited Air Barrier Warranty when *Dow Corning* DefendAir 200 is applied in accordance with Dow Corning's published application guidelines. Contact your local Dow Corning representative for details or to apply for a project-specific warranty.

Under this Limited Warranty, for a period of ten years from the date of purchase, Dow Corning will be responsible for the cost of replacement coating for any areas in which *Dow Corning* DefendAir 200 fails to perform to specifications.

Dow Corning's warranty is subject to certain restrictions and does not cover faults attributable to workmanship or the appearance of the coating.

NOTE: *Dow Corning* DefendAir 200 is NOT warranted for use on single-family residential dwellings.

We help you invent the future. TM

dowcorning.com

ITEM #2

DOW CORNING

Product Information Silicone Sealants

Dow Corning® 791 SiliconeWeatherproofing Sealant

FEATURES & BENEFITS

- Ideal for expansion, connection, perimeter and other movement joints
- Neutral cure suitable for use on coated glass, galvanized steel, masonry and other porous and nonporous substrates
- Extension/compression movement capability of up to ±50 percent of the original joint width
- Excellent weatherability, virtually unaffected by sunlight, rain, snow, ozone
- Excellent unprimed adhesion to a wide variety of construction materials and building components
- Ease of application ready to use as supplied
- Excellent rheology, low string upon gunning

COMPOSITION

One-part, neutral-cure, RTV silicone sealant

Neutral, one-part silicone sealant

APPLICATIONS

• *Dow Corning*® 791 Silicone Weatherproofing Sealant is a specified, premium performance weather sealing product specifically designed for general glazing and weather sealing in curtain wall and building facades.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test ¹	Property	Unit	Result
Uncured - As T	Cested at 50% RH and 23°C (73°F)		
ASTM C639	Flow (sag or slump)	inches (mm)	0
ASTM C603	Extrusion Rate	g/minute	140
	Working Time	minutes	20
ASTM C679	Tack-free Time, 77°F, 50% RH	minutes	40
	Curing Time at 77°F (25°C) and 50% RH	days	7-14
	VOC Content ²	g/L	31
As Cured – Aft	er 21 days at 50% RH and 77°F (25°C)		
ASTM D2240	Durometer Hardness, Shore A	points	34
ASTM C794	Peel Strength	lb/in (kg/cm)	30 (5.4)
ASTM C719	Joint Movement Capability	percent	±50
ASTM C1135	Tensile Adhesion Strength		
	At 25% extension	Psi (MPa)	40 (0.276)
	At 50% extension	Psi (MPa)	60 (0.414)

¹ASTM – American Society for Testing and Materials.

DESCRIPTION

Dow Corning 791 Silicone
Weatherproofing Sealant is a one-part,
neutral- cure, architectural grade
sealant. It easily extrudes in any
weather and cures at ambient
temperature by reaction with moisture
in the air to form a durable, flexible
silicone rubber seal.

HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-the-art application methods and joint design. Please contact your local Dow Corning Sales Application Engineer for specific advice.

²Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please send your request to product.inquiry@dowcorning.com.

Preparation

Clean all joints removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.



Application Method

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but maybe necessary for optimal sealant of certain porous surfaces. A test placement is always recommended. Apply Dow Corning 791 Silicone Weatherproofing Sealant in a continuous operation using a positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment. Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against backing material and the joint surfaces. Remove masking tape as soon as the bead is tooled.

APPROVALS/ SPECIFICATIONS

Meets the requirements of:

 ASTM C920 Type S, Grade NS, Class 50, Use NT, M, G, A

COLORS

This product is available in 7 colors: black, gray, bronze, limestone, camel, precast white and white. Custom colors may be ordered to match virtually any substrate.

HANDLING PRECAUTIONS PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR. OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 30°C (86°F) in the original unopened containers, *Dow Corning* 791 Silicone Weatherproofing Sealant has a usable life of 12 months from the date of manufacture. Refer to product packaging for "Use By" date.

PACKAGING INFORMATION

Dow Corning 791 Silicone Weather proofing Sealant is available in 10.3-fl oz (305-mL) disposable plastic cartridges that fit ordinary caulking guns, 20-fl oz (590-mL) sausages.

LIMITATIONS

Dow Corning 791 Silicone Weatherproofing Sealant is not approved for use as a structural sealant.

Dow Corning 791 Silicone Weatherproofing Sealant should not be used:

- In below-grade applications
- When surface temperatures exceed 50°C (122°F)

- On surfaces that are continuously immersed in water
- On building materials that bleed oils, plasticizers or solvents, green or partially vulcanized rubber gaskets or tapes
- On frost-laden or wet surfaces
- In totally confined joints (the sealant requires atmospheric moisture for cure)
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants)
- To surfaces in direct contact with food or other food-grade applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

A 20-year Weatherseal Limited Warranty is available. Some testing may be required. Consult your Dow Corning Sales Application Engineer for details.

We help you invent the future.™

dowcorning.com

ITEM #3

DOW CORNING

Product Information Silicone Sealants

Dow Corning® 778 Liquid Flashing

FEATURES & BENEFITS

- Compatible with Dow Corning[®] Air Barriers
- Compatible with other weather barrier types including self adhering and liquid applied membranes
- Long tooling time to facilitate workflow of prepping a whole window opening
- High durometer for abrasion resistance
- Durable, flexible silicone chemistry

COMPOSITION

One part neutral cure silicone sealant

Single component silicone sealant for weatherproofing at window and door openings and other building transitions.

APPLICATIONS

Extended tooling time, primer typically not required over cut sheathing
edges, and rugged cured properties make this an ideal choice for window and
door flashing applications as well as general purpose sealing requirements for
transition details behind the exterior facade.

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test*	Property	Unit	Result
ASTM C661	Durometer Hardness, Shore A	points	40
CTM 98	Working Time	minutes	30
ASTM D412	Tensile Strength, Ultimate	psi	210
ASTM D412	Elongation	%	250
ASTM C794	Peel Strength	pli	> 15
ASTM C719	Joint Movement Capability	%	25
ASTM D4541	Adhesion to gypsum based sheathing, plywood, OSB, metals	psi	> 16
ASTM D 2202	Flow, Sag or Slump		nil

^{*}ASTM: American Society for Testing and Materials CTM: Corporate Test Method, copies of CTM's are available on request.

DESCRIPTION

Dow Corning® 778 Liquid Flashing provides a solution for sealing rough opening details and other building transitions. Dow Corning 778 Liquid Flashing utilizes silicone chemistry to offer a compatible transition and detailing sealant for use with Dow Corning® brand barriers and other air barriers. Dow Corning 778 Liquid Flashing has aggressive adhesion to a wide variety of construction substrates including different types/brands of sheathing;

cut edges of sheathing; concrete; brick; concrete masonry unit; and metals. It has also been uniquely formulated to offer a long tooling time for ease of workability when sealing large window or door openings, or long lengths of a transition joint. It is the ideal sealant for flashing window or door openings or when needing to seal difficult transitions between materials, behind the exterior façade.

<u>Figure 1</u>: Application of *Dow Corning* 778 Liquid Flashing.



AV 22611

HOW TO USE

Dow Corning 778 Liquid Flashing is applied using a standard construction sausage gun designed for 20 fl-oz sausages. Substrates should be free of surface dust but do not require solvent cleaning. The flashing can be applied in ribbons of the sealant using a standard conical nozzle; or using a fan nozzle and laying down a wide bead. The flashing should then be tooled to a 20–50 mil thickness.

HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND **HEALTH HAZARD** INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR. OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 90°F (32°C), *Dow Corning* 778 Liquid Flashing has a shelf life of 12 months from date of manufacture. Refer to the product packaging for "Use By" date.

PACKAGING INFORMATION

Dow Corning 778 Liquid Flashing is packaged in 20 fl-oz (590-mL) E-Z Pak foil sausages.

LIMITATIONS

Dow Corning 778 Liquid Flashing should not be applied:

- In structural applications
- To surfaces that are continuously immersed in water
- In totally confined spaces because the sealant requires moisture to cure
- To surfaces in direct or indirect contact with food

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment. *Dow Corning* 778 Liquid Flashing may also be warranted for up to 15 years as part of the *Dow Corning*® Air Barrier System.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.™

dowcorning.com

Reinforced Waterproofing Assembly

p: 410-392-2300 f: 410-392-2324

e: info@aquafin.net w: www.aquafin.net





Technical Datasheet

VAPORTIGHT COAT®-SG3

100% Solids, Moisture mitigation and pH barrier coating

CSI Div. 07 + 09

07 26 00 VAPOR RETARDERS 09 96 56 EPOXY COATINGS

LEED Points

IEQ Credit 4.2, Low-Emitting Materials, Paints & Coatings: 1 Point Using this AQUAFIN product can help contribute to LEED certification of projects in the categories shown above.

Product Description:

VAPORTIGHT COAT®-SG3 is a unique 2-component, moisture tolerant, low viscosity, solvent free, chemically enhanced epoxy based product which reduces the passage of water vapor and moisture through slabs on, below and above grade as well as split slabs, thus eliminating delamination of adhesives, floor coverings and coatings. SG3 meets or exceeds the requirements of ASTM F3010-13 Standard Practice for Two-Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings.

Typical Applications:

- Indoor and outdoor, new and existing concrete slabs: on grade, above grade, below grade and split slabs, old cementitious underlayment (no gypsum) and ceramic tiles with missing or damaged under-slab vapor barriers.
- Industrial/retail facilities, office buildings, supermarkets, food processing plants, airplane hangars, hospitals, schools, etc.
- Use VAPORTIGHT COAT-SG2 for capillary infiltration of oil or other chemicals from the ground or to treat oil-contaminated slabs or radon infiltration.

Advantages:

- One coat system No sand broadcast
- Low viscosity, solvent free, no VOC's
- For slabs with MVER up to 25 lbs and RH up to 100%
- ASTM E 96 perm rating ≤0.10
- Flooring system installed next day
- Can be applied to damp & green concrete (min. 5 days old)
- High alkalinity barrier (pH 14)
- Compatible with most flooring systems
- Does not support mold growth
- Great for indoor applications: low odor and non-flammable.
- SG3 passed Indoor Air Quality Material Emissions Test as per DIN EN ISO 16000 (Report CT-10-06-22-01:250005/2-3)

Testing Concrete Slabs for Contaminants:

Aquafin recommends testing slabs with unknown history, as well as slabs with previously failed flooring systems, for contaminants (i.e. hydrocarbons, other organic compounds, un-reacted water soluble silicates, chlorides, ASR, Sulfurous compounds, etc.) to determine suitability of SG3. Provide Ion Chromatography and IR

Physical and Technical D	Pata
Material	2-component, clear epoxy
Density:	\sim 9.08 lbs/gal (1.09 ± 0.02 kg/L)
VOC:	0 g/L
Volume Solids	100 %
Flash Point: Part A Part B	>212°F (>100°C) 170°F (77°C)
Mixing Ratio	100:50 (by weight)
Viscosity	600±80 cps (mPa*s) @ 77°F (25°C)
Pot Life @ 73°F (23°C)	~35 Minutes
Open to Foot Traffic	after 12 hrs at 73°F (23°C)
Recoat Time at 73°F (23°C)	minimum 12 hrs max. 5 days, observe dew point!
Application Temperature	min. 45°F (8°C) – max. 95°F (35°C)
Curing Temperature	min. 45°F (8°C)
Full Strength	after 7 days at 73°F (23°C)
Compressive Strength:	>11,000 psi (>80 MPa)
Adhesion to Concrete (ASTM D7234)	>480 psi (3.3 MPa) Failure in substrate
pH 14 Resistance	Pass 14 day test. (ASTM D-1308)
Water Vapor Transmission (ASTM E 96)	0.100 grains/h-ft²-in.Hg
Average Critical Radiant Flux (CRF)	1.00 W/cm² - Passed = nonflam- mable (ASTM E 648-03)
Methane Permeability (ISO 15105-2)	2.20 [cm³ / (m²*d*bar)] at 36 mils (0.90 mm) thickness
Indoor Air Quality Control (DIN EN ISO 16000)	Passed: VOC (0 mg/m³) & Formal- dehyde emissions (<0.01 ppm)

All data are average values obtained under laboratory conditions. In practical use temperature, humidity and absorbance of the substrate may influence the above given values.

Spectroscopy data to Aquafin before commencing application. A separation screed may be required.

Moisture Vapor Emission Testing:

Aquafin recommends testing to determine moisture vapor emission rate (MVER) including "Anhydrous Calcium Chloride" testing as per ASTM F 1869-11 on slabs to be treated, to determine the MVER in lb/1000 ft²•24 hrs (grams/m²•hr) and to determine RH content (%) as per ASTM F 2170. This testing can be used to determine application rate of material required to obtain AQUAFIN warranty.

VAPORTIGHT COAT®-SG3

Substrate Preparation:

- Concrete must be a minimum 5 days old or have reached a minimum 2,500 psi (17 MPa) compressive strength, to be treated with SG3. Concrete must be clean, sound and have an "open"/absorptive surface ("tooth and suction"). All slabs must be mechanically prepared (i.e. Shot blast) to a concrete surface profile (CSP) 3 5 per the International Concrete Repair Institute (ICRI) Guideline No. 301-2R-2013. Acid etching is not allowed, broom finish on new slabs is not acceptable. Burn off any reinforcing fibers and vacuum remains.
- Remove glaze from "quarry tiles".
- After surface preparation, check slab surface with the water drop method. Pour a drop of water about the size of a dime in several places. If the water beads, the surface is not absorptive and requires additional preparation or core extraction and testing. If the water "wets out" or penetrates the concrete within 30 60 seconds the surface is ready to receive the SG3 treatment. Note: This method does not replace pre-testing of concrete cores. A test application is highly recommended on existing slabs to determine adhesion (i.e. Elcometer, etc.).
- Treat saw cut and expansion joints as per drawings on page 3.

Separation Screed:

Concrete floors which contain water soluble, unreacted sodium and/or potassium silicates or chlorides can not be coated when certain thresholds of these compounds are exceeded. If these soluble mediums have deeper penetration into the substrate than standard steel shot blasting will remove, it will be required to remove 3/8'' - 1/2'' (10 mm - 13 mm)of the concrete surface and replace it with a separation screed, such as MORTAR-Screed to prevent substrate failure when trapped rising moisture activates these mediums. SG3 will then be applied over the separation screed. All separation screed surfaces must be mechanically prepared like a concrete surface (CSP 3 - 5) as indicated above.

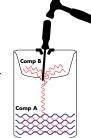
Water-Vapor Transmission Treatment:

- Remove existing floor coverings, coatings, adhesives, curing compounds, efflorescence, dust, grease, laitance, etc. down to bare concrete with steel shot blasting, scarifying or grinding using a diamond cup blade (run with low RPM and assure that surface is profiled).
- 2. Repair cracks with a suitable patching mortar or SG3 mixed with 5 parts by volume of oven-dried sand.
- Install cementitious underlayment's or leveling mortars on top of SG3.

Mixing:

SG3 is supplied in the appropriate mixing ratio (Comp-A = resin, Comp-B = hardener). Always mix full units.

- Use chemical resistant gloves and goggles when mixing or applying SG3.
- Material should be minimum 60°F (15°C) at time of mixing.
- 1. For 2.4 & 0.24 gal kits only (7.3 gal kit packaged seperate A&B containers!): Pierce a hole through the rubber membrane in the lid and continue through the bottom of "lid well". Assure Part B completely drains into Part A.
- 2. Stir mixture for approx. 5 minutes to a homogenous, streak free consistency, using a slow speed drill (~300 rpm) with a PS Jiffy blade. Avoid entrapping air. Ensure that the



- material at the bottom and sides are scraped and thoroughly mixed
- 3. Pour mixed material from the mixing container into another, clean container and carefully mix for additional 30 seconds.

Application:

- Substrate and ambient temperatures must be between 45°F (8°C) and 95°F (35°C).
- All exterior applications must be protected from strong sun light, wind and rain until fully cured.
- All interior applications must be protected from drafts to avoid "skinning over".
- SG3 surface must be protected from bond inhibiting contaminants, i.e. dirt, dust and debris.
- Application equipment needed: Clean mixing containers, softedge squeegee, non-shed synthetic roller.
- All surfaces must be saturated surface dry (SSD) with no standing water.
- 2. Pour SG3 in sufficient quantity over the area to be treated and uniformly distribute with a notched squeegee.
- 3. Follow with a non-shed roller, back rolling at right angle (90 degrees) to the squeegee application to achieve uniform coverage and let product cure for minimum 12 hours.

NOTE: Where sand broadcast is desired use SG2 in lieu of SG3.

- Re-treat "outgasing channels" and pin-holes by sanding surface, and cleaning with hot water. Make sure surface is dry and reapply SG3.
- 5. Immediately clean all equipment and tools with mineral spirits.

Maximum recoat time:

- Interior Applications: Top coatings (i.e. epoxy, terrazzo, urethane) and flooring systems (i.e. VCT, sheet vinyl, carpet, wood) must be applied within 12 hrs - 5 days.
- Exterior Applications: Top coatings such as epoxy, urethane traffic membranes, must be applied within 24 hrs - 36 hrs.
- If recoat time is missed, SG3 surface must be sanded, cleaned with hot water, and allowed to dry, before application of flooring systems or top coatings.

Flooring

- Water or solvent based adhesives may require a cementitious underlayment (see Aquafin LEVEL-Ultra TDS) of a minimum 1/8" (3 mm) thickness to absorb excess moisture/solvent (check with adhesive manufacturer).
- Pressure sensitive adhesives installed directly over SG3 require a longer "tack" time than listed on manufacturer's literature to prevent adhesive moisture or solvent entrapment.
- Many flooring systems require a more level or smooth surface. In such cases an application of a self-leveling cementitious underlayment (minimum 1/8" (3 mm) thickness) is required to provide a proper substrate for the floor covering and the adhesive (See Aquafin LEVEL-Ultra TDS).
- Do not apply flooring system if SG3 surface is wet due to dew point or other causes.

Underlayment's and Patching:

If cement based toppings, such as underlayments, screeds, "flash" patching, repair mortars are to be used, the manufacturer's recommended primer or Aquafin SLU-PRIMER must be applied over SG3.

VAPORTIGHT COAT®-SG3

Packaging and Shelf Life:

Shelf life is 2 years in closed, original packaging, stored in a dry, cool place.

- 0.24 gal/2.2 lb (0.9 L/1.0 kg) kit. (special order only)
- 2.4 gal/22 lb (9.2 L/10 kg) kit.

A-Comp: 1.5 gal/14.48 lb (5.8 L/6.58 kg) B-Comp: 0.9 gal/7.52 lb (3.4 L/3.42 kg).

• 7.3 gal/66 lb (27.5 L/30 kg) kit.

A-Comp: 4.6 gal/43.43 lb (17.3 L/19.74 kg) B-Comp: 2.7 gal/22.57 lb (10.2 L/10.26 kg).

Limitations:

- Do not spray apply SG3.
- Post-cracking of the concrete, slab warping or warping relaxation at joints or cracks after installation of the SG3 may cause a breach in the coating and void warranty.
- Do not apply over gypsum based substrates.
- Do not alter mixing ratios, thin or mix with Cab-O-Sil.
- Call Aquafin Technical Department for slabs with floor heating systems or installation recommendations for any substrates and conditions not listed.

Note:

Installer is responsible for proper product application. Site visits by Aguafin personnel or representatives are solely for the purpose of making technical recommendations, not for providing supervision or quality control. This product is not sold to the Do-it-Yourself market. For Professional Use Only.

Safety: Refer to SDS.

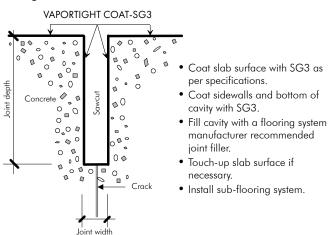
Part A - irritant; sensitizer - contains epoxy resins. Part B - corrosive; sensitizer - contains amines.

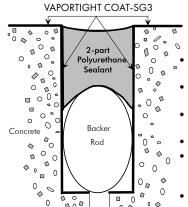
Sealing of Expansion Joints in Concrete Slabs:

KEEP OUT OF REACH OF CHILDREN.

Spills: Ventilate area. Contain and collect spillage with noncombustible, absorbent materials (i.e. sand, vermiculite, universal binders, sawdust, etc.) and place in container for disposal. Emergency procedures are not required. Dispose of in accordance with current local, state and federal regulations. VOC limit: This product is well below the allowable EPA limits as stated in 40 CFR Part 59.

Sealing Saw Cut Joints in Concrete Slabs:





Coat slab surface with SG3 as per specifications.

- Coat sidewalls and bottom of cavity with SG3.
- Allow SG3 to cure for min. 12 hrs at 73°F (23°C).
- Install backer rod.
- Fill cavity with a suitable polyurethane sealant or as specified by the A/E.
- · Install sub-flooring system.

• Install sub-flooring system.

SG3 Application Rates per ASTM F-1869 (CaCl) & F-2170 or ASTM F-2420 (RH - Relative Humidity):										
Moisture vapor emission rate (MVER): listed by lbs/1000 ft² * 24hrs	RH: listed by percentage (%)	No. of coats	Applica	ition rate	~Thi	ickness mm	~ Yield: (9. ft²	2.4 gal 2L) m ²	~Yield: (27. ft²	•
up to 10 lbs	<85%	1	155	0.29	10	0.25	370	33.4	1,130	105
10 - 15 lbs	85 - 90%	1	130	0.35	12	0.30	310	28.8	950	88
15 - 25	90 - 100%	1	100	0.45	16	0.40	240	22.3	730	67
Stand-alone coating on slabs		1	90	0.50	18	0.45	215	20.0	655	61
New concrete (min. 5 days old)		1	100	0.45	16	0.40	240	22.3	730	67

Walls: contact our technical dept. Note: all values theoretical. Application thicknesses are approximate. Some variations may apply due to porosity and absorption of substrate.

Sample Water Vo	apor Transmission Reduction	Test	: ASTM E 96
Test carried out by independent laboratory (Wet method)			
Water Vapor Transmission: • lbs/1000 ft² * 24 hrs	24.08	Sample A, No.1 0.18 (Mactec, 3/17/06)	reduction 99%
Vapor Permeance: 3.17 grains/hour/ft²/in.Hg		0.10 @ 16 mils (Nelson Testing, 01/08/14)	ASTM F3010-13

VAPORTIGHT COAT®-SG3

LIMITED WARRANTY: AQUAFIN, INC. warrants its products to be manufactured free of defects for one year and to be consistent with its standard high quality. We will replace or, at our election, refund the purchase price of, any product which is proven to be defective, provided that the product was properly applied. Our product recommendations are based on Industry Standards and testing procedures. We assume no warranties either written, expressed or implied as to any specific methods of application or use of the product. AQUAFIN, INC. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. AQUAFIN, INC. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay. Contact Aquafin for information on extended warranty's.



ALSAN RS Is lust Ceroller



SOPREMA ALSAN RS

A COMPLETE RANGE OF SYSTEM APPLICATIONS

The SOPREMA ALSAN RS System offers a complete range of products utilizing PMMA (polymethyl methacrylate) technology. It is an ultra-high performance, flexible, seamless, polyester reinforced cold liquid-applied roofing and waterproofing membrane system. All **ALSAN** RS Systems feature dramatically fast cure times that can accomodate tight construction schedules and provide durable applications that may be warranted for up to 20 years (contact Soprema for details). Systems include roofing, waterproofing, balconies, terraces, parking decks / ramp applications and many more.

ALSAN RS SYSTEM PRODUCT COMPONENTS:

PRIMER RESINS:

- ALSAN RS 276 primer for concrete and wood surfaces
- ▲ ALSAN RS 222 primer for asphaltic surfaces

MEMBRANE RESINS:

- * ALSAN RS 230 FIELD horizontal/field grade resin reinforced with ALSAN RS Fleece to form waterproofing membrane
- ALSAN RS 230 FLASH vertical/flashing grade resin reinforced with ALSAN RS Fleece to form waterproofing membrane
- ALSAN RS 260 LO FIELD low-odor horizontal/field grade resin reinforced with ALSAN RS Fleece to form waterproofing membrane
- ALSAN RS 260 LO FLASH low-odor vertical/flashing grade resin reinforced with ALSAN RS Fleece to form waterproofing membrane

WEARING/SURFACING LAYER RESINS FOR PEDESTRIAN OR VEHICULAR TRAFFIC:

- ALSAN RS 233 SELF LEVELING MORTAR wearing layer; (ALSAN RS 210 resin mixed with ALSAN RS 223 Powder filler)
- ALSAN RS 263 LO SELF-LEVELING MORTAR low-odor wearing layer; (ALSAN RS 240 LO resin mixed with ALSAN RS 223 Powder filler)
- ALSAN RS 210 base resin mixed with ALSAN RS 223 Powder filler used in wearing layer applications
- ALSAN RS 240 LO low-odor base resin mixed with ALSAN RS 233 Powder filler used in wearing layer applications
- ALSAN RS 223 POWDER proprietary blended filler-component mixed with base resin used in wearing layer applications

FINISH / SEALER TOP COAT RESINS:

- ALSAN RS 288 FINISH pigmented sealer resin
- ALSAN RS 281 FINISH translucent sealer resin

COMPLEMENTARY RESINS & PRODUCTS:

- ALSAN RS PASTE patching mortar used in surface repairs
- ALSAN RS DETAILER sealing resin combined with micro-fiber fleece reinforcement
- ALSAN RS TEXTURED COATING ramp surface texturized slip-resistant coating with #2 size pre-mixed additive
- * ALSAN RS 290 TEXTURED FINISH parking deck and balcony waterproofing slip resistant coating with a premixed additive
- ALSAN RS CATALYST curing agent used to induce curing process with all regular ALSAN RS resins
- · ALSAN RS LO CATALYST curing agent used to induce curing process with all low-odor ALSAN RS resins
- ALSAN RS FLEECE polyester based reinforcement used with all membrane resins (various sizes available)
- ALSAN RS DECO CHIPS used as decorative broadcast medium with finish resin
- · ALSAN RS SURFACING AGGREGATE used as a slip-resistant/protective and decorative broadcast medium with finish resin
- * ALSAN RS REPAIR MORTAR high density, quick setting, resin based surface repair mortar

For additional products for special applications, please contact your local SOPREMA sales representative.

SYSTEMS

BALCONY



Fully and partially reinforced systems developed for cantilevered balcony spaces



Fully and partially

reinforced systems capable of withstanding heavy vehicular traffic



WATERPROOFING



Fully and partially reinforced systems constructed for waterproofing protection



GREASE PROTECTION



Fully reinforced systems designed to protect surfaces from exposure to harmful contaminants



FLASHING



Fully reinforced systems developed for flashings, walls, penetrations, curbs, drains, and difficult details





Fully reinforced systems designed to extend the life of existing roof installations, limiting the need for tearoff



TRAFFICABLE



Fully and partially reinforced systems constructed to withstand consistent pedestrian traffic



OVERBURDEN



Fully reinforced systems designed for garden roofs, IRMA, paver and water feature installations



COOL ROOF



Fully and partially reinforced systems designed to meet industry standards for reflectivity and emmissivity





ALSAN RS liquid applied applications offer the widest range of system possibilities in the industry today. **ALSAN** RS offers versatile solutions for all of your roofing and waterproofing needs.

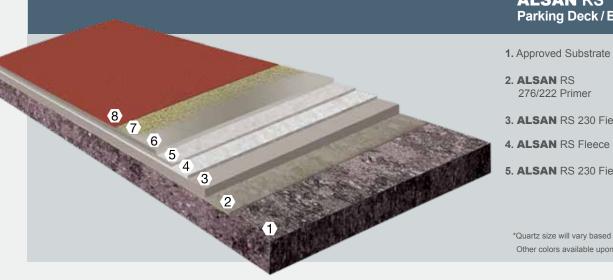
SOPREMA ALSAN RS

AVAILABLE SYSTEMS

 \cdots

ALSAN RS Roofing/Waterproofing Reinforced System 1. Approved Substrate 2. ALSAN RS 276/222 Primer 3. ALSAN RS 230 Field 4. ALSAN RS Fleece 5. ALSAN RS 230 Field PARTIAL REINFORCED - ALSAN RS FLEECE ONLY USED AT CHANGE OF **PLANS**

ALSAN RS Parking Deck / Balcony / Terrace System

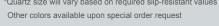


- 6. ALSAN RS 233 Self Leveling Mortar
- 7. **ALSAN** RS Quartz
- 3. ALSAN RS 230 Field 8. **ALSAN** RS 288 Color Finish
- 5. ALSAN RS 230 Field

1. Approved Substrate

2. ALSAN RS 276/222 Primer

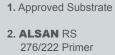
*Quartz size will vary based on required slip-resistant values





ALSAN RS

Parking Deck / Balcony / Terrace System



3. ALSAN RS 230 Field

4. ALSAN RS Fleece

5. ALSAN RS 230 Field

6. ALSAN RS 233 Self Leveling Mortar

7. ALSAN RS Color Quartz

8. **ALSAN** RS 281 Clear Finish

*Quartz size will vary based on required slip-resistant values and Other colors available upon special order request

ALSAN RS Parking Deck / Balcony / Terrace System 1. Approved Substrate 6. ALSAN RS 233 Self

- 2. ALSAN RS 276/222 Primer
- 3. ALSAN RS 230 Field
- I. ALSAN RS Fleece
- . ALSAN RS 230 Field
- Leveling Mortar
- **7. ALSAN** RS 288 Color Finish
- 8. ALSAN RS Decorative Chips

- **ALSAN** RS Parking Deck/Balcony/Terrace/Road **Coating Protective Non-Reinforced System**
- 1. Approved Substrate
- 2. ALSAN RS 276/222 Primer
- 3. **ALSAN** RS 290 Textured Finish



SOPREMA ALSAN RS

FLATIRON BUILDING

NEW YORK CITY







The world famous Flatiron Building in New York City is protected by Soprema. In the dead of winter, with temperatures below freezing, **ALSAN** RS created an impenetrable liquid waterproofing membrane guaranteed for 20 years. Soprema's state of the art polymethyl methacrylate liquid waterproofing technology was used to completely waterproof the 8,500 square foot main roof and 21st floor set back of the building. The work was completed in difficult circumstances, with below freezing (25° F) temperatures and windy conditions. The main roof was a recovery application, which saved Newmart Knight Frank, the building's owner, the costly process of tearing off the aged granulated SBS membrane. **ALSAN** RS was applied directly over the existing membrane, creating a watertight surface. Of special interest were the numerous skylights and other difficult flashing challenges, including time-consuming penetrations, bulkheads and chimneys, many with peculiar angles due to the building's unique architecture.

KNOW HOW

PRACTICAL TRAINING FOR ALL APPLICATIONS

WORLDWIDE NETWORK OF APPROVED AND CERTIFIED APPLICATORS

To maintain the highest level of quality, SOPREMA **ALSAN** RS Systems are installed by fully certified and trained applicators. Each contractor must meet and maintain the high assessment criteria required by SOPREMA. Additionally, SOPREMA provides field technical assistance for certified applicators, architects, specifiers and property owners to ensure the highest quality standards and expertise. SOPREMA offers contractors highly specialized training courses at our Wadsworth, Ohio training center location. Seminars include both theoretical courses as well as hands-on training. Our reputation has been built on a high level of technical support before, during and after the installation. Our expertise lies in recommending the proper system that will exceed the performance requirements of any proposed project while working within the client's budgetary constraints.

SOPREMA SYSTEMS: TIME PROVEN AND FULLY GUARANTEED.

Whether a parking deck, a balcony or a flat roof, **ALSAN** RS Systems perfectly and fully seal the surface while providing long-term cost effective protection against moisture infiltration and other damage. SOPREMA developed this unique system based on fluid plastics and PMMA resins: **ALSAN** RS is a modern, highly reliable product that offers compelling advantages to the most demanding end users.







LIQUID APPLIED WATERPROOFING

The SOPREMA LIQUID GROUP offers cutting edge liquid applied waterproofing solutions for every situation. Today's commercial and industrial building industry is an ever changing landscape where the efficient thrive and the slow die. The SOPREMA LIQUID GROUP is a dynamic organization comprised of an industry leading team capable of constant innovation and quick action to capitalize on rapidly evolving market conditions.

With five product lines, including the state-of-the-art, third generation **ALSAN** RS line of PMMA (polymethyl methacrylate) technology, the SOPREMA LIQUID GROUP is recognized as a leader in the liquid applied waterproofing industry. When planning a liquid applied waterproofing project with SOPREMA, you are receiving a world of support. For over 100 years, SOPREMA has been known for its utilization of advanced research and development capabilities that do not follow trends, but set the mark for the competition to follow.





SOPREMA, Inc. 310 Quadral Drive Wadsworth, OH 44281 www.soprema.us

1.800.356.3521



PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 276 Primer is a rapid-setting, proprietary formulation polymethyl methacrylate (PMMA) primer. ALSAN RS 276 Primer is utilized to promote adhesion over concrete, masonry, and other substrates prior to application of ALSAN RS roofing, waterproofing and flashing systems.



Always store closed containers in cool, ventilated and dry locations away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored, sealed and unmixed.



ALSAN RS 276 Primer is applied via brush or roller. Prior to application, refer to published specifications, guidelines and recommendations for complete application instructions. The applicator is responsible for ensuring conditions are appropriate to proceed with application.







BRUSH

ROLLER

S	
<u> </u>	
E3	
-55	
4	
≥	
9	
a	
8	
\Rightarrow	
O	

UNIT SIZE (kg)	AMBIENT TEMP (F°)	SUBSTRATE TEMP (F°)	RESIIN TEMP (F°)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (min)	FULLY CURED (hour)
10 (9.6 L)	32-95 (0 to 35°C)	32-122 (0 to 50°C)	37-86 (3 to 30°C)	15 at 68°F (20°C)	30 at 68°F (20°C)	30 at 68°F (20°C)	2 at 68°F (20°C)





TECHNICAL INFORMATION & TESTING

APPROXIMATE COVERAGE RATES						
SUBSTRATE PROFILE MINIMUM TOTAL CONSUMPTION kg/ft² (kg/m²) TOTAL THICKNESS mils(mm)						
Smooth (CSP3)	0.037 (0.4)	15 (0.38)				
Medium (CSP4)	0.046 (0.5)	19 (0.47)				
Rough (CSP5)	0.075 (0.8)	30 (0.75)				

	CATALYST MIXING CHART						
CATALYST REQUIRED 6% Catalyst 32°F (0°C) to 50°F (10°C) 4% Catalyst 50°F (10°C) to 68°F (20°C)				0°C) to		atalyst :0°C) to (35°C)	
10 kg can	0 kg can 0.1 kg packets		4 0.1 kg packets		2 0.1 kg packets		
1 kg	TBSP	kg	TBSP	kg	TBSP	kg	
(~ 1 liter)	6	0.06	4	0.04	2	0.02	

PHYSICAL PROPERTIES					
PROPERTY TEST METHOD					
Liquid density @ 73.4°F (23°C), lb/gal (g/ml)	ASTM D51475				
Viscosity, stormer type @ 77°F (25°C), KU (cps)	69 (510)	ASTM D562 (Method A)			
Indention hardness @ 73.4°F (23°C), Shore A	87	ASTM D2240			

^{*} All data is represented by averages, unless noted otherwise.

TESTING & APPROVALS













ALSAN® RS 260 LO FLASH PRODUCT # L-RS052S (pebble grey) L-RS054S (traffic white)

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 260 LO Flash is a high performance, low odor, rapid-setting, polymethacrylate (PMA) liquid resin for use in flashing applications. ALSAN RS 260 LO Flash is catalyzed with ALSAN RS catalyst powder and combined with ALSAN RS Fleece reinforcing fabric to form a flexible, monolithic, reinforced membrane.



STORAGE

Always store closed containers in cool, ventilated and dry location away from heat and oxidizing agent. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored, sealed and unmixed.

APPLICATION

Apply ALSAN RS 260 LO Flash with a brush or roller. Prior to application, refer to published specifications and approved details for complete application instructions. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application method.







BRUSH

ROLLER

UNIT SIZE (kg)	AMBIENT TEMP (°F)	SUBSTRATE TEMP (°F)	RESIN TEMP (°F)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (min)	FULLY CURED (hour)
12.5 (19.7 L)	37-95 (3 to 35°C)	37-122 (3 to 50°C)	37-86 (3 to 30°C)	15-20 at 68°F (30°C)	45-60 at 68°F (30°C)	1-2 at 68°F (30°C)	5 at 68°F (30°C)





TECHNICAL INFORMATION & TESTING

	APPROXIMATE COVERAGE RATES								
SUBSTRATE PROFILE	MINIMUM TOTAL CONSUMPTION kg/ft² (kg/m²)	BASE COMPONENT CONSUMPTION kg/ft² (kg/m²)	TOP COAT CONSUMPTION kg/ft² (kg/m²)	TOTAL THICKNESS mils(mm)	BASE COAT mils (mm)	TOP COAT mils (mm)			
Smooth	0.28 (3.0)	0.19 (2.0)		98 (2.5)	65 (1.6)				
Typical	0.31 (3.3)	0.21 (2.3)	0.04 (4.0)	107 (2.7)	74 (1.9)	32 (0.8)			
Granulated	0.36 (3.8)	0.26 (2.8)	0.01 (1.0)	124 (3.1)	90 (2.3)				
Rough	0.40 (4.3)	0.30 (3.3)		140 (3.5)	108 (2.7)				

	CATALYST MIXING CHART												
0.1741.707		SUN	MER FO	RMULAT	ION				WII	NTER FO	RMULAT	ON	
CATALYST REQUIRED		atalyst 3°C) to 10°C)	4% C a 50°F (1 68°F	0°C) to		atalyst :0°C) to (35°C)			atalyst 0°C) to (3°C)	4% Ca 37°F (3 50°F (3°C) to	2% Ca 50°F (1 68°F (0°C) to
12 kg can	. 0.1 kg إ	7 oackets	0.1 kg	5 oackets	2.5 0.1 kg packets			0.1 kg į	7 oackets	5 0.1 kg packets		2.5 0.1 kg packets	
410	TBSP	kg	TBSP	kg	TBSP	kg		TBSP	kg	TBSP	kg	TBSP	kg
1 kg	6	0.06	4	0.04	2	0.02		6	0.06	4	0.04	2	0.02
1 liter (~1.3 kg)	8	0.08	5	0.05	2.5	0.03		8	0.08	5	0.05	2.5	0.03

PI	HYSICAL PROPERTIES	S	
PROPERTY	MD	XMD	TEST METHOD
Peak load @ 73.4°F (23°C) control, lbf/in (kN/m)	70 (12.3)	60 (10.5)	ASTM D5147
Elongation @ 73.4°F (23°C) control, %	55	75	ASTM D5147
Peak load @ 73.4°F (23°C) post heat aging, lbf/in (kN/m)	80 (14.0)	80 (14.0)	ASTM D5147
Elongation @ 73.4°F (23°C) post heat aging, %	50	65	ASTM D5147
Peak load @ 73.4°F (23°C) post acc. weathering, lbf/in (kN/m)	70 (12.3)	75 (13.1)	ASTM D5147
Elongation @ 73.4°F (23°C) post acc. weathering, %	55	65	ASTM D5147
Peak load @ 0°F (-18°C), lbf/in (kN/m)	175 (30.6)	150 (26.3)	ASTM D5147
Elongation @ 0°F (-18°C), %	60	70	ASTM D5147
Tear resistance, lbf (N)	80 (356)	75 (334)	ASTM D5147
Dimensional stability, %	0.1	ASTM D5147	
Static puncture resistance, lbf (N)	Pass 5	66 (249)	ASTM D5602
Shore A hardness, durometer	7	'3	ASTM D2240
Water absorption, %	0	.7	ASTM D570 (@ 212°F)
Water vapor permeance, perms	0	.2	ASTM E96
Low temperature flexibility, °F (°C)	Pass -33 (-36.1)	Pass - 33 (-36.1)	ASTM D7264
Low temperature crack bridging	No c	racks	ASTM C1305
Self-ignition, °F (°C)	770	(410)	ASTM D1929
Smoke density index	30	00	ASTM E84
Rate of burning, in/min (m/hr)	0.8	(1.2)	ASTM C635

TECHNICAL INFORMATION & TESTING





FLORIDA BUILDING CODE

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 260 LO Field is a high performance, low odor, rapid-setting, polymethacrylate (PMA) liquid resin. ALSAN RS 260 LO Field is catalyzed with ALSAN RS catalyst powder and combined with ALSAN RS Fleece to form a flexible, monolithic, reinforced membrane.

STORAGE

Always store closed containers in a cool, ventilated and dry location away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored, sealed and unmixed.

ALSAN RS 750LOFIELD WINDERSON ALSAN RS 750LOFIELD ALSAN RS 750LOFIELD

APPLICATION

Apply ALSAN RS 260 LO Field with a brush or roller. Prior to application, refer to published specifications and approved details for complete application instructions. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods.









ROLLER

	COOL ROOF RATING							
PRODUCT	PRODUCT SOLAR REFLECTANCE			RMAL TANCE	S	RI		
ALSAN RS 260 LO Field (White)	0.84 initial	pending 3 year	0.86 initial	pending 3 year	105 initial	pending 3 year		

L	
FA	
CK	
5	

UNIT SIZE (kg)	AMBIENT TEMP (°F)	SUBSTRATE TEMP (°F)	RESIN TEMP (°F)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (min)	FULLY CURED (hour)
25 (19.7 L)	37-95 (3 to 35°C)	37-122 (3 to 50°C)	37-86 (3 to 30°C)	15-20 at 68°F (30°C)	45-60 at 68°F (30°C)	1-2 at 68°F (30°C)	5 at 68°F (30°C)





TECHNICAL INFORMATION & TESTING

	APPROXIMATE COVERAGE RATES								
SUBSTRATE PROFILE	MINIMUM TOTAL CONSUMPTION kg/ft² (kg/m²)	BASE COMPONENT CONSUMPTION kg/ft² (kg/m²)	TOP COAT CONSUMPTION kg/ft² (kg/m²)	TOTAL THICKNESS mils(mm)	BASE COAT mils (mm)	TOP COAT mils (mm)			
Smooth	0.28 (3.0)	0.19 (2.0)		98 (2.5)	65 (1.6)				
Typical	0.31 (3.3)	0.21 (2.3)	0.01 (1.0)	107 (2.7)	74 (1.9)	32 (0.8)			
Granulated	0.36 (3.8)	0.26 (2.8)	0.01 (1.0)	124 (3.1)	90 (2.3)				
Rough	h 0.40 (4.3) 0.30 (3.3)		140 (3.5)	108 (2.7)					

	CATALYST MIXING CHART													
		SUN	MER FO	RMULAT	ION			WINTER FORMULATION						
CATALYST REQUIRED		atalyst 3°C) to 10°C)	4% C a 50°F (1 68°F (0°C) to	2% C a 68°F (2 95°F (0°C) to		6% Ca 32°F (0 37°F		37°F (Catalyst : F (3°C) to : S : S : S : S : S : S : S : S : S :	2% C a 50°F (1 68°F (0°C) to	
25 kg can		5 packets	1 0.1 kg ;	0 packets	5 0.1 kg packets				15 packets 0.1		10 0.1 kg packets		5 0.1 kg packets	
4 1	TBSP	kg	TBSP	kg	TBSP	kg		TBSP	kg	TBSP	kg	TBSP	kg	
1 kg	6	0.06	4	0.04	2	0.02		6	0.06	4	0.04	2	0.02	
1 liter (~1.3 kg)	8	0.08	5	0.05	2.5	0.03		8	0.08	5	0.05	2.5	0.03	

PI	PHYSICAL PROPERTIES							
PROPERTY	MD	XMD	TEST METHOD					
Peak load @ 73.4°F (23°C) control, lbf/in (kN/m)	70 (12.3)	65 (11.4)	ASTM D5147					
Elongation @ 73.4°F (23°C) control, %	55	85	ASTM D5147					
Peak load @ 73.4°F (23°C) post heat aging, lbf/in (kN/m)	75 (13.1)	80 (14.0)	ASTM D5147					
Elongation @ 73.4°F (23°C) post heat aging, %	55	60	ASTM D5147					
Peak load @ 73.4°F (23°C) post acc. weathering, lbf/in (kN/m)	75 (13.1)	75 (13.1)	ASTM D5147					
Elongation @ 73.4°F (23°C) post acc. weathering, %	50	55	ASTM D5147					
Peak load @ 0°F (-18°C), lbf/in (kN/m)	170 (29.8)	145 (25.4)	ASTM D5147					
Elongation @ 0°F (-18°C), %	60	70	ASTM D5147					
Tear resistance, lbf (N)	70 (311)	70 (311) 60 (267)						
Dimensional stability, %	0.1	ASTM D5147						
Static puncture resistance, lbf (N)	Pass 5	66 (249)	ASTM D5602					
Shore A hardness, durometer	8	34	ASTM D2240					
Water absorption, %	0	.5	ASTM D570 (@ 212°F)					
Water vapor permeance, perms	0	.2	ASTM E96					
Low temperature flexibility, °F (°C)	Pass -33 (-36.1)	Pass - 33 (-36.1)	ASTM D7264					
Low temperature crack bridging	No c	racks	ASTM C1305					
Self-ignition, °F (°C)	770	(410)	ASTM D1929					
Smoke density index	38	50	ASTM E84					
Rate of burning, in/min (m/hr)	0.8	(1.2)	ASTM C635					

TECHNICAL INFORMATION & TESTING









FLORIDA BUILDING CODE



ALSAN RS FLEECE

1.800.356.3521 www.soprema.us

ORDER NO.:

L-RS027 (41 in width)

L-RS023 (21 in width)

L-RS024 (13 in width)

TECHNICAL DATA SHEET

ROLL LENGTH (ff) ROLL WEIGHT THICKNESS (mils) 164 110 (50 m) g/m²

30 - 40(0.8 - 1 mm)

DESCRIPTION

Alsan RS Fleece is a proprietary weave polyester reinforcement used in Alsan RS liquid membrane applications.

APPLICATION

Mix and apply Alsan RS products in strict accordance with published instructions. Apply mixed resin liberally to the prepared surface with a brush, roller or notched squeegee. Roll out Alsan RS Fleece into the liquid resin, making sure that the roll is unrolling smooth and without any wrinkles or fish mouths. Alsan RS Fleece will begin to saturate into the liquid resin. Using a roller, wet the fleece with resin, applying light pressure. Roll the fleece with a nap roller to eliminate any air bubbles, wrinkles, etc. Apply additional liquid resin mix on top of Alsan RS Fleece until fully saturated and the layer of resin is fully and evenly applied. The coat should be uniform.

See published specifications and approved details.

PACKAGING

Alsan RS Fleece is available in rolls 164 feet (50 meters) in length and varying widths. See fleece dimensions chart on next page.

STORAGE

Always store in a dry location protected against the elements. Store on end to avoid deforming rolls and creasing fabric.





1.800.356.3521 www.soprema.us

TECHNICAL DATA SHEET

FLEECE DIMENSIONS							
FLEECE WIDTH	FLEECE LENGTH	GROSS COVERAGE	NET COVERAGE				
41.3 in (105 cm)	164 ft (50 m)	584 ft²	535 ft ²				
20.7 in (53 cm)	164 ft (50 m)	283 ft²	255 ft²				
13.8 in (35 cm)	164 ft (50 m)	188 ft²	160 ft ²				
10.3 in (26 cm)	164 ft (50 m)	140 ft²	126 ft²				

Allow a minimum of 2 in (5 cm) overlap at field and flashing side laps, 4 in (10 cm) overlap at the end laps, and a minimum 4 in (10 cm) overlap at the base of the wall and all penetration flashings. Minimum of 5% should be considered for waste.

PHYSICAL PROPERTIES					
Property	Value				
Thickness (average)	30 - 40 mils (0.8 - 1.0 mm)				
Weight	110 g/m ²				
Tensile strength at break, MD/XD (average)	≥ 130 / 150				
Elongation	≥ 50 / 70				
Tear resistance	20 > daN				
Puncture resistance	24 > daN				
Water absorption	< 1%				

ALSAN® RS 263 SELF-LEVELING MORTAR

PRODUCT COMPONENTS: ALSAN RS 240 LO - L-RS015S ALSAN RS 223 POWDER - L-RS223

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 263 LO Self-Leveling Mortar is created by combining ALSAN RS 240 LO and ALSAN RS 223 Mixing Powder. ALSAN RS 263 LO Self-Leveling Mortar is a trowel applied low odor resin-mortar used as a thick coating system for interior and exterior uncreinforced waterproofing and surfacing applications. ALSAN RS 263 LO Self-Leveling Mortar is also used as a traffic surfacing applied over ALSAN RS reinforced waterproofing membranes.

STORAGE

Always store closed containers in cool, ventilated and dry locations away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored sealed and unmixed.



Thoroughly mix the entire drum of ALSAN RS 240 LO and ALSAN RS 223 Mixing Powder before pouring off, batch mixing or catalyzing. Apply ALSAN RS 233 Self-Leveling Mortar using a notched trowel and pin roller. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods.

Refer to ALSAN RS 240 LO and ALSAN RS 223 Mixing Powder product data sheets for additional information.









ROLLER

TROWEL

UNIT SIZE (kg)	AMBIENT TEMP (°F)	SUBSTRATE TEMP (°F)	RESIN TEMP (°F)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (min)	FULLY CURED (hour)
33 (17.8 L)	37-95 (3-35°C)	37-122 (3-50°C)	37-86 (3-30°C)	20 at 68°F (20°C)	45-60 at 68°F (20°C)	120 at 68°F (20°C)	5 at 68°F (20°C)





TECHNICAL INFORMATION & TESTING

ALSAN RS 263 LO Self-Leveling Mortar requires combining one drum of ALSAN RS 240 LO (10 kg) with one bag of ALSAN RS 223 Mixing Powder (23 kg) creating a 33 kg work pack. The mixing ratio is 1 to 2.3 resin to powder respectively.

APPROXIMATE COVERAGE RATES				
SUBSTRATE Profile	MINIMUM TOTAL CONSUMPTION kg/ft² (kg/m²)	TOTAL THICKNESS mils(mm)		
Smooth to CSP-3	0.37 (4.0)	88 (2.2)		

CATALYST MIXING CHART							
CATALYST REQUIRED	6% Catalyst 32°F (0°C) to 50°F(10°C)		4% Catalyst 50°F (10°C) to 68°F (20°C)		2% Catalyst 68°F (20°C) to 95°F (35°C)		
33 kg work pack	6 0.1 kg packets		4 0.1 kg packets		2 0.1 kg packets		
1 kg (ALSAN RS 263 LO SELF LEVELING MORTAR)	TBSP	kg	TBSP	kg	TBSP	kg	
	2	0.18	1	0.01	0.5	0.006	
1 liter (~1.85 kg) (ALSAN RS 263 LO SELF LEVELING MORTAR)	3	0.33	2	0.02	1	0.01	

PHYSICAL PROPERTIES					
PROPERTY	TEST METHOD				
Mix density @ 73.4°F (23°C), lb/gal (g/ml)	15.4 (1.85)	ASTM D51475			
Viscosity, stormer type @ 77°F (25°C), KU (cps)	90 (1100)	ASTM D562 (Method A)			
Indention hardness @ 73.4°F (23°C), Shore A	85	ASTM D2240			
Abrasion resistance, 4" disc, lb (mg)	0.00043 (194)	ASTM D4060			

^{*} All data is represented by averages, unless noted otherwise.





ALSAN RS 263 LO SELF-LEVELING MORTAR

ALSAN RS 263 LO (low odor) SELF-LEVELING MORTAR IS A SITE-PRODUCED MIXTURE OF ALSAN RS 240 LO AND ALSAN RS 223 MIXING POWDER. PLEASE REFER TO THEIR RESPECTIVE MATERIAL SAFETY DATA SHEETS FOR ADDITIONAL INFORMATION.



PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 240 LO is a high performance, low odor, rapid-setting, polymethacrylate (PMA) resin. ALSAN RS 240 is utilized in conjunction with ALSAN RS 223 Mixing Powder to create ALSAN RS 263 LO Self-Leveling Mortar.

STORAGE

Always store closed containers in a cool, ventilated and dry location away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from the date of manufacture when properly stored, sealed and unmixed.



ALSAN RS 240 LO is mixed with ALSAN RS 223 Mixing Powder to make ALSAN RS 263 LO Self-Leveling Mortar and applied using a via a notched trowel or pin roller. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application method.

Refer to the ALSAN RS 263 LO Self-Leveling Mortar product data sheet for more information regarding mixing and application.











PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 223 Mixing Powder is utilized in conjunction with ALSAN RS 210 to create ALSAN RS 233 Self-Leveling Mortar. It may also be used with ALSAN RS 240 LO to create ALSAN RS 263 LO Self-Leveling Mortar.

STORAGE

Always store closed containers in cool, ventilated and dry locations away from heat and oxidizing agents. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored sealed and unmixed.

APPLICATION

ALSAN RS 233 Self-Leveling Mortar and ALSAN RS 263 LO Self-Leveling Mortar is applied using a notched trowel or masonry float. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application methods. ALSAN RS 223 Mixing Powder is mixed with ALSAN RS 210 or ALSAN RS 240 LO to make ALSAN RS 233 Self-Leveling Mortar or ALSAN RS 263 LO Self-Leveling Mortar respectively.

Refer to ALSAN RS 210 product data sheet, ALSAN RS 233 Self-Leveling Mortar product data sheet, ALSAN RS 240 LO product data sheet and ALSAN RS 263 LO Self-Leveling Mortar product data sheet for additional mixing and application information.









PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ALSAN RS 287 Color Finish Base is a rapid-setting proprietary formulation polymethyl methacrylate (PMMA) liquid resin. ALSAN RS 287 Color Finish Base is an un-pigmented resin that must be mixed with a pre-measured and packaged ALSAN RS Color Additive.

STORAGE

Always store closed containers in cool, ventilated and dry location away from heat and oxidizing agent. Do not store in direct sunlight or in temperatures below 32°F (0°C) or above 77°F (25°C). Approximate shelf life is twelve months from date of manufacture when properly stored, sealed and unmixed.



ALSAN RS 287 Color Finish Base is mixed with one ALSAN RS Color Additive and applied with a roller, brush, notched or flat blade squeegee. Prior to application, refer to published specifications, guidelines, and recommendations for complete application instructions. For applications o slopes and vertical surfaces, ALSAN RS 287 Color Finish Base should be pre-mixed with ALSAN RS Liquid Thixo. The applicator is responsible for ensuring conditions are appropriate to proceed with proper application method.











ROLLER

BRUSH

SQUEEGEE

BASE UNIT SIZE* (kg)	AMBIENT TEMP (F°)	SUBSTRATE TEMP (F°)	RESIIN TEMP (F°)	POT LIFE (min)	RAIN PROOF (min)	NEXT LAYER (min)	FULLY CURED (hour)
8.5 (8.3 L)	32-95 (0-35°C)	32-122 (0-50°C)	37-86 (3 to 30°C)	15 at 68°F (20°C)	30-45 at 68°F (20°C)	45-60 at 68°F (20°C)	3 at 68°F (20°C)

*ALSAN RS 287 Color Finish mixed with ALSAN RS Color Additive is 10 kg.





TECHNICAL INFORMATION & TESTING

APPROXIMATE COVERAGE RATES					
SUBSTRATE PROFILE	MINIMUM TOTAL CONSUMPTION kg/ft² (kg/m²)	TOTAL THICKNESS mils(mm)			
Aggregate #1 (0.7-1.2 mm)	0.07 (0.8)	30 (0.78)			
Aggregate #0 (0.4-0.8 mm)	0.06 (0.7)	26 (0.67)			
Smooth	0.05 (0.6)	23 (0.58)			

	CATALYST MIXING CHART							
CATALYST REQUIRED	32°F (atalyst 0°C) to (10°C)	4% Catalyst 50°F (10°C) to 68°F (20°C)		2% Catalyst 68°F (20°C) to 95°F (35°C)			
10 kg can	6 0.1 kg packets		4 0.1 kg packets		2 0.1 kg packets			
1 kg	TBSP	kg	TBSP	kg	TBSP	kg		
(~ 1 liter)	6	0.06	4	0.04	2	0.02		

PHYSICAL PROPERTIES					
PROPERTY TEST METHOD					
Liquid density @ 73.4°F (23°C), lb/gal (g/ml)	8.5 (1.02)	ASTM D51475			
Viscosity, stormer type @ 77°F (25°C), KU (cps)	63 (370)	ASTM D562 (Method A)			
Indention hardness @ 73.4°F (23°C), Shore A	96	ASTM D2240			
Abrasion resistance, 4" disc, lb (mg)	0.00029 (133)	ASTM D4060			

^{*} All data is represented by averages, unless noted otherwise.



Hot Fluid Applied Rubberized Asphalt Waterproofing Assembly





PRODUCT DATA SHEET

DESCRIPTION & FEATURES

COLPHENE H is a hot applied, rubberized asphalt composed of a select blend of refined asphalts, recycled rubber and inert extenders. COLPHENE H is used in horizontal and vertical waterproofing of plazas, podiums, decks, planters, tunnels, underground vaults, bridges, foundation walls, garden roofs and parking garages. COLPHENE H is also used in IRMA configurations.

STORAGE

Store on end and maintain in an upright position to prevent damage. Store product in a well-ventilated location away from all sources of heat and ignition, and cover as necessary to protect from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of COLPHENE H.

APPLICATION

Bring COLPHENE H to a consistent temperature of 350°F to 400°F (176.6°C to 204.4°C), paying close attention to not overheat. COLPHENE H is then applied to approved, compatible substrates using a notched squeegee. Refer to SOPREMA's specifications and installation instructions for additional application guidelines.



HOT ASPHALT

COVERAGE	COVERAGE	COVERAGE	COVERAGE	WEIGHT
(mils)	(mils)	(mils)	(lb)	(lb)
90	125	180	1.5	30 (13.6 kg)
base layer	top layer	non-reinforced	per square foot	

^{*} Coverage rate as reported assumes installation using side and end lap recommendations.





TECHNICAL INFORMATION & TESTING

COVERAGE RATES				
Fully reinforced application, mils (mm) @ 0.6 lb/ft2 (4.4 kg/m2)	90 (4.5)			
One layer of SOPRAFLASH R, mils (mm) @ 0.9 lb/ft2 (2.9 kg/m2)	125 (3.1)			
Non-reinforced application, mils (mm) @ 1.2 lb/ft2 (5.8 kg/m2)	180 (4.5)			

PHYSICAL PROPERTIES				
PROPERTY	VALUE	TEST METHOD		
Recommended application temperature, °F (°C)	380-400 (193-204)	CGSB 37.50-M89		
Flow, mm @ 140°F (60°C)	3	CGSB 37.50-M89		
Solids content, %	100	ASTM D1353		
Cone penetration, 77°F (25°C) (maximum)	110	CGSB 37.50-M89		
Cone penetration, 122°F (50°C) (maximum)	200	CGSB 37.50-M89		
Toughness, joule min	5.5 joule	CGSB 37.50-M89		
Toughness ratio, min	0.04	CGSB 37.50-M89		
Adhesion, min	1	CGSB 37.50-M89		
Water vapor permeance, perms (ng/Pa•m2•s)	0.027 (1.7)	ASTM E96		
Water absorption, g	0.35 max gain or 0.18 max loss	CGSB 37.50-M89		
Low temperature flexibility, -13°F (-25°C)	Pass	CGSB 37.50-M89		
Crack bridging, -13°F (-25°C)	Pass, 10 cycles	CGSB 37.50-M89		
Heat stability, 5 hours	Pass	CGSB 37.50-M89		
Viscosity at application temperature	2 - 15 sec	CGSB 37.50-M89		
Flash point, C.O.C., °F (°C)	500 (260) min. or 45 (25) min. above recommended application temperature	ASTM D92		

^{*} Data is represented by average values, unless noted otherwise.

TESTING & APPROVALS



FLORIDA BUILDING CODE





PRODUCT DATA SHEET

DESCRIPTION & FEATURES

ELASTOCOL 350 is a zero VOC, water based primer for use in approved multi-ply membrane and flashing assemblies. ELASTOCOL 350 is a proprietary polymer emulsion zero VOC primer used to increase adhesion when using heat welding, cold adhesive or hot asphalt application methods.

STORAGE

Store in pail and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect pails from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of ELASTOCOL 350.



Mix prior to application. ELASTOCOL 350 is applied to the approved area via brush, roller or spray equipment. ELASTOCOL 350 is applied at a rate of 0.5 to 0.8 gallons per 100 square feet over non porous substrates. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.



رن
-
0
₹
ш.
\leq
0
=
\supset
$\boldsymbol{\sigma}$

CONTAINER (gal)	COVERAGE RATE (gal/100ft²)
5.0 (18.9 L)	0.5-0.8 (0.2-0.3 L/m²)

PRODUCT INFORMATION				
Description Proprietary polymer emulsion primer				
Installation	Spray, brush or roller			
Packaging	5 gallon (18.9 L) pail			

TESTING & APPROVALS

FLORIDA BUILDING CODE





SOPRA-FLASH UN

USED AT CHANGE OF PLANS AND PENETRATIONS

1.800.356.3521 www.soprema.us

TECHNICAL DATA SHEET

ORDER NO.:

*Contact customer service for order number and availability

100 60
(30.5 m) (1.5 mm)

DESCRIPTION

Sopra-Flash UN is an uncured neoprene flashing material. Sopra-Flash UN is used in conjunction with Colphene H and Colphene H-EV hot rubberized asphalt systems at expansion joints and exposed flashing membranes, including vertical walls, penetrations and drains.

APPLICATION

Install Sopra-Flash UN in a solid coat of Colphene H or Colphene H-EV in accordance with recommended flashing details. Press Sopra-Flash UN into the bitumen while it is hot, taking care not to stretch the membrane or leave air pockets. Overlap successive layers three (3) inches (76 mm).

See published specifications and approved details.

PACKAGING

Sopra-Flash UN is available in rolls 100 feet (30.5 meters) in length and six (6), 12, 18 and 24 inch widths.

STORAGE

Always store in a dry location protected against the elements. Store on end to avoid deforming rolls and creasing fabric.

SOPRA-FLASH UN



1.800.356.3521 www.soprema.us

TECHNICAL DATA SHEET

PHYSICAL PROPERTIES					
Property	Value	test method			
Tensile strength (average)	1887 psi	ASTM D 412 (Die C)			
Ultimate elongation (average)	305%	ASTM D 412 (Die C)			
Tear resistance (average)	136 lbf•in	ASTM D 824 (Die C)			
Brittleness point @ -40°F	No breaks	ASTM D 2137			
Ozone resistance - condition after 100 pphm Ozone for 100 hrs @104°F (under 20% strain)	No cracks @ 7x magnification	ASTM D 1149			
Resistance to water change in mass, maximum, after 7 days immersion @ 158°F	8.5%	ASTM D 471			

Termination Bars

PRODUCT DATA SPECIFICATIONS

PRODUCT DESCRIPTION

OMG Termination Bar is designed to terminate single-ply membrane at parapet walls and other penetrations. Use the OMG Heavy Duty Fastener or Masonry Anchor to secure the termination bar.

OMG Termination Bar is made of extruded aluminum (6063 T6 alloy) with a mill finish, or Series #304 stainless steel alloy. Oval holes that measure $\frac{1}{4}$ -in. $\frac{3}{6}$ -in (6 x 10mm) are punched into each bar, with standard 6-in.,

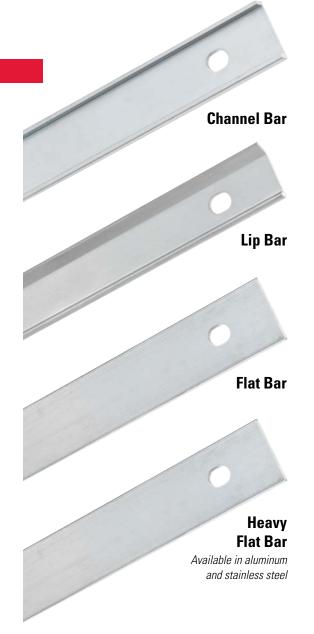
8-in. or 12-in. (150, 200 or 300mm) on center (o.c.) spacing. OMG Termination Bar can be made to order with special hole spacing.

PACKAGING

All OMG termination bars come in 10-ft. (3.05m) lengths. **Aluminum bar** is packaged in tubes of 50 (500-ft. [152.5m] total). Stainess steel bar is packaged in tubes of 10 (100-ft.\[31m] total). There are 10 tubes per pallet.

PHYSICAL DATA* & ORDERING INFORMATION

CAT. NO.	WIDTH	THICKNESS	SPACING IN (MM)	LEG/LIP IN (MM)	WEIGHT LBS (KG)
CHANB06			6" (150) o.c.	14" (6) high top	
CHANB08	•		8" (200) o.c.	& bottom leg	76 lbs. (34.50)
CHANB12	(2311111)	(2.511111)	12" (300) o.c.	90° angle	(04.50)
LIPTB06	a/#		6" (150) o.c.	³/16" (5)	
LIPTB08	, .		8" (200) o.c.	wide lip	57 lbs. (25.88)
LIPTB12	(1311111)	(2.311111)	12" (300) o.c.	45° angle	(23.00)
FLATB06			6" (150) o.c.		
FLATB08	•		8" (200) o.c.	N/A	57 lbs. (25.88)
FLATB12	(2311111)	(2.311111)	12" (300) o.c.		(23.00)
FLATB06-18			6" (150) o.c.		
FLATB08-18	•		8" (200) o.c.	N/A	74 lbs. (33.60)
FLATB12-18	, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	(0:ZIIIII)	124 (300) o.c.	m	100:00)
FLATB06SS	1" (25mm)	.125" (3.2mm)	6" (150) o.c.	N/A	45 lbs. (20.43)
	CHANB06 CHANB12 LIPTB06 LIPTB08 LIPTB12 FLATB06 FLATB12 FLATB06-18 FLATB08-18 FLATB12-18	CHANB06 CHANB08 CHANB12 LIPTB06 LIPTB08 LIPTB12 FLATB06 FLATB08 FLATB12 FLATB06-18 FLATB08-18	CHANB06 CHANB08 (25mm) CHANB12 LIPTB06 LIPTB08 LIPTB12 FLATB06 FLATB08 FLATB12 FLATB06-18 FLATB08-18 FLATB08-1	CHANB06 CHANB08 CHANB12 LIPTB06 LIPTB08 LIPTB12 FLATB06 FLATB08 FLATB06-18 FLATB08-18 FLATB06-18 FL	CHANB06 CHANB08 (25mm) CHANB12 LIPTB06 LIPTB08 LIPTB12 FLATB06 FLATB08 FLATB06-18 FLATB08-18 FLATB06-18 FLATB0





MASONRY ANCHORS

The OMG Masonry Anchor is designed to attach termination bar to concrete or masonry walls. This fastener has a zinc plated steel pin and is available in two diameters, ¼-in. and ¾16-in. (6 and 4mm). Lengths range from %-in. to 2-in. (22 to 50mm).

CAT. NO.	PIN DIAMETER	PIN LENGTH	PKG	WEIGHT
MA316	³/16" (4mm)	⁷ /8" (22mm)	1000	10 lbs. (4.5kg)
MA034	1⁄4" (6mm)	¾" (19mm)	1000	15 lbs. (6.75kg)
MA001	1⁄4" (6mm)	1" (25mm)	1000	20 lbs. (9kg)
MA114	1⁄4" (6mm)	1¼" (31mm)	1000	22 lbs. (9.9kg)
MA112	1⁄4" (6mm)	1½" (38mm)	1000	25 lbs. (11.25kg)
MA002	1⁄4" (6mm)	2" (50mm)	1000	31 lbs. (13.95kg)

^{*}All sizes are nominal.



153 BOWLES ROAD, AGAWAM, MA 01001 USA 800-633-3800 413-789-0252 OMGROOFING.COM

Copyright © 2015 OMG, Inc. All rights reserved.

Superior productivity. Superior performance.











3.3.14 Metal Hit Anchor

3.3.14.1	Product Description
3.3.14.2	Material Specifications
3.3.14.3	Technical Data
3.3.14.4	Installation Instructions
3.3.14.5	Ordering Information



3.3.14.1 Product Description

The Hilti Metal Hit Anchor is a drive-in type expansion anchor consisting of a zinc plated or stainless steel drive pin and an alloy expanding body for light duty fastenings in concrete and masonry.

Product Features

- Quick and easy fastening for maximum speed and installation
- Low profile mushroom head style provides a clean, tamper proof fastening
- Anchor design allows easy through-type fastenings even in bottomless holes
- Consistent load values provide light duty fastenings in concrete and masonry
- Choice of stainless steel or carbon steel finish allows outdoor or indoor use

3.3.14.2 Material Specifications

Body material: Aluminum/Zinc Alloy

Drive Pin: Zinc plated carbon steel conforming to AISI 1018. Type 304 Stainless Steel (Stainless Steel Version)

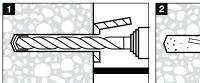
3.3.14.3 Technical Data

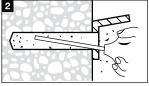
Metal Hit Allowable Loads in Normal Weight Concrete

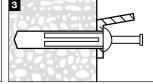
Anahar	Eml	200			Con	crete		Hollow		Hollow Concrete block		Red Clay blo		y bloc	k		
Anchor Size in.	De	pth mm)			sion (kN)			ear (kN)	Tension							Sh	
_ ""			200	0psi	400	0psi	200	0psi	יטו	(KIN)	ID (KIV)				י טו	(KIN)	
3/16	5/8	(16)		-	-	-	-	-	180	(8.0)	180	(8.0)		-	-	_	
1/4	3/4	(19)	135	(0.6)	210	(0.9)	280	(1.2)	255	(1.1)	320	(1.4)	180	(8.0)	280	(1.2)	
1/4	1	(25)	160	(0.7)	240	(1.1)	315	(1.4)	310	(1.4)	320	(1.4)	245	(1.1)	290	(1.3)	

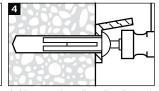
For overhead application reduce the allowable load values by a factor of 2.

3.3.14.4 Installation Instructions









1. Drill hole at least 1/4" deeper 2. Clean hole. than anchor.

n hole. 3. Install anchor t

 Install anchor through fixture.
 Hammer in nail until nail head is flush with anchor body. Do not overdrive.

3.3.14.5 Ordering Information

	<u> </u>	.		
Description	Carbon Item No.	Stainless Item No.	Bolt Diameter ¹ In.	Box Qty
Metal Hit 3/16" x 7/8"	66137	N/A	3/16	100
Metal Hit 1/4" x 3/4"	15538	N/A	1/4	100
Metal Hit 1/4" x 1"	66138	230567	1/4	100
Metal Hit 1/4" x 1-1/4"	66139	230568	1/4	100
Metal Hit 1/4" x 1-1/2"	66140	230569	1/4	100
Metal Hit 1/4" x 2"	45453	230570	1/4	100 }
		سسس	$\omega\omega\omega\omega$	حتتتت

SOPRAMASTIC® SP1

PRODUCT DATA SHEET

DESCRIPTION & FEATURES

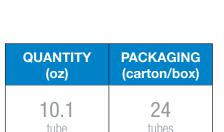
SOPRAMASTIC SP1 is a moisture cured polyether sealant for use in approved multi-ply membrane and flashing assemblies. SOPRAMASTIC SP1 is composed of a polyether designed to be highly elastic to accommodate dynamic movement. SOPRAMASTIC SP1 used as a general purpose adhesive and sealant for various applications.

STORAGE

Store in box and maintain in an upright position to prevent damage. Store in a clean dry location and cover as necessary to protect box from environmental damage such as extreme cold, heat, or moisture. Monitor varying environmental conditions during storage, handling and application of SOPRAMASTIC SP1.

APPLICATION

SOPRAMASTIC SP1 is applied to the approved area via a pneumatic cartridge applicator. Refer to the SOPREMA SBS Roofing Manual for additional application guidelines.









TECHNICAL INFORMATION

PHYSICAL PROPERTIES						
PROPERTY	UNIT	TEST METHOD				
Gun grade	Zero slump	ASTM C679				
Viscosity (cp)	750,000 ± 150,000	Brookfield RVF TF Spindle, 4 RPM, 73°F (23°C)				
Density (lb per gallon)	11.0 ± 0.2	ASTM D 1475				
Elongation at break (%)	750 - 800	ASTM D 412				
Peel strength (psi)	25 -30	ASTM C794				
Tensile strength (psi)	250 - 300	ASTM D412				
Hardness Shore A	17 - 23	ASTM C661				
Lap shear strength (psi)	150 - 175	ASTM D1002				
Low temperature flex (-10°F (-23°C) 1/4 inch mandrel)	Pass	ASTM D816				
Shrinkage	No visible shrinkage after 14 days	-				
Service temperature °F (°C)	-40 to 200 (-40 to 93)	-				
Weathering	No cracking or chalking, slight matte finish after 2000 hours QUV "A" bulb. Durometer gain of 5 points	-				

^{*} Data is represented by average values, unless noted otherwise.





SOPRA-FLASH R

1.800.356.3521 www.soprema.us

ORDER NO.:

*Contact customer service for order number and availability

TECHNICAL DATA SHEET

ROLL LENGTH (ff)	ROLL WIDTH (in)	COVERAGE (ff²)	THICKNESS (mils)	WEIGHT (lb)
180	36	508.5	16	8.25
(54.9 m)	(0.9 m)	(47.2 m²)	(0.4 mm)	(3.7 kg)

DESCRIPTION

Sopra-Flash R is a lightweight, thermally bonded spunlaid polyester/nylon composite mat. Sopra-Flash R is used as a reinforcement in Colphene H and Colphene H-EV hot rubberized asphalt liquid membrane systems.

APPLICATION

When assembling a Colphene H membrane system, Sopra-Flash R is installed into the base coat of the hot fluid applied Colphene H bitumen when it is hot and sticky. Standing off to the side of the sheet, use a broom or squeegee to press the reinforcement into the hot bitumen using care not to create wrinkles or fishmouths. If the Sopra-Flash R falls out of alignment, cut the mat, apply COLPHENE H to the six (6") inch (152 mm) overlap area, and restart installation. A top coat of COLPHENE H is applied over the Sopra-Flash R. Side laps are two (2") inches (51 mm).

See published specifications and approved details.

PACKAGING

Alsan PolyFleece is available in rolls 180 feet (54.9 meters) in length and 36 inch widths.

STORAGE

Always store in a dry location protected against the elements. Store on end to avoid deforming rolls and creasing fabric.

SOPRA-FLASH R



1.800.356.3521 www.soprema.us

TECHNICAL DATA SHEET

COVERAGE RATE

90 mils (4.5 mm) @ 0.6 lb/ft² (4.4 kg/m²)

One layer of Sopra-Flash R

125 mils (3.1 mm) @ 0.9 lb/ft² (2.9 kg/m²)

PHYSICAL PROPERTIES						
Property	Value	test method				
Mat weight	2.2 oz/ sq yd	-				
Thickness	16 mils (0.4 mm)	ASTM D 1777				
Tensile strength, MD	78 lbf•in (0.009 N)	ASTM D 5034				
Elongation at break, MD	58%	ASTM D 5034				
Tear strength, MD	23.8 lb	ASTM D 1117				
Puncture resistance	31 lb	ASTM D 4930				

PRODUCT DATA SHEET



PDS-175 Rev 04/11

SBS ELASTIC CEMENT

SBS ELASTIC CEMENT (11)

Order No. D35635

DESCRIPTION

SBS ELASTIC CEMENT is a ready to use, elastomeric bitumen based mastic which contains a bituminous binder with sticking agents/solvents and is used on flat or ½": 12" or less horizontal slopes for setting drain leads, penetration pockets, pipe flanges, metal gravel stops, etc. This product meets ASTM D 4586, Type I, Class II.

SBS ELASTIC CEMENT may be used as an approved accessory for Soprema waterproofing systems.

COVERAGE & PACKAGING

Product/ Property	SBS ELASTIC CEMENT
Description	elastomeric bitumen general adhesive
Installation	special extrusion gun or patch
Packaging	5 gallon pail (18.9 L)
Application	70 to 140 ft²/gal. (0.28 to 0.57 L/m²), depending on surface

WARRANTY

These products meet Soprema's manufacturing specification requirements.

PRODUCT DATA SHEET



PDS-210 Rev 04/10

SOPRABOARD

SOPRABOARD (82)

Order No. *

* See chart on Page 2 or contact your Customer Service or Sales Representative

DESCRIPTION

SOPRABOARD is designed for use with Soprema's SBS modified bitumen membrane roof assemblies. Additionally, SOPRABOARD can be used as a protection board in Soprema's waterproofing systems and assemblies. The R-Values for one-eight (1/8") inch thick (3.2 mm) and (1/4") inch thick (6.4 mm) Sopraboard are 0.11 and 0.17 respectively. Sopraboard meets ASTM D 3273 (resistance to mold) requirements.

SOPRABOARD is secured to an acceptable substrate by mechanical fastening, hot asphalt or approved cold adhesive. SOPRABOARD is an acceptable replacement for cover boards over most insulation substrates. The roof membranes are either hot mopped, heat welded, self-adhered or bonded to the SOPRABOARD using Approved cold adhesives. REMOVE PLASTIC FILM SEPARATOR FOR ALL ASSEMBLIES.

COMPOSITION

SOPRABOARD is a multi-ply, semi-rigid asphaltic roofing substrate board composed of a mineral fortified asphaltic core formed between two asphaltic saturated fiberglass liners. Sopraboard must be stored flat -- NO DOUBLE-STACKING OF PALLETS.

SURFACE PREPARATION

Apply to approved, clean and dry substrate following SOPREMA Aproved Requirements, Approved Details and acceptable roofing practices. Not designed for permanent exposure. Ensure deck is suitable for installation of specified roof assembly. On recover projects, remove gravel, dirt, prime surface and bond SOPRABOARD using approx. 60 lbs (27 kg) per 100 ft² (9.29 m²) hot asphalt or approved coverage rate using insulation adhesive. When SOPRABOARD is mechanically fastened, the existing substrate does not need priming.

Soprema Approved SA Primer is applied to the top surface of SOPRABOARD when a self-adhered base ply is used. Install self-adhesive membrane ONLY when rolls have been stored in 70° F. (21° C.) conditions and ambient temperature is 50° F. (10° C.) and rising. During cool, cloudy, windy periods (less than 70° F [21° C]) with high humidity (early morning or late afternoon especially) use external heating of the Sopraboard with slight heat on the self-adhesive membrane roll to activiate the self-adhesive so as to ensure full adhesion to the board. Install Sopraboard using good roofing practices which include warming Sopraboard during cold weather application to allow Sopraboard to lay flat.



SOPRABOARD PAGE 2

PDS-210 Rev 04/10

SOPRABOARD PHYSICAL PROPERTIES

	Board	Compressive	Tensile	Water	Moisture	Flexibility	Peel]
	Thickness	strength @	strength	absorption,	content	(2" mandrel)	strength	
	inch (mm)	15% ASTM	ASTM	2h % max.	ASTM	ASTM D 644		
\sim	m	~D 545 psi~	-D412 psi	ASTM C 209	~D 644~	mm	m	4
٤.	1/8" (3.2)*	630	1050	<1.0	0.2%	pass @ 40 F	2.5 - 20.0 lb/in***]. {
•	3/16" (4.7)	470	700	<1.0	0.2%	pass @ 40 F	2.5 - 20.0 lb/in***	$\prod_{i=1}^{n}$
	1/4" (6.4)**	440	450	<1.0	0.2%	pass @ 40 F	2.5 - 20.0 lb/in***	

^{*} Meets ASTM D 6506, Class B, Type 2

APPROVALS

See Underwriters Laboratories, Inc. File No. R11436, FMG Approvals, ICC/ES, Miami-Dade County or Florida Building Code Product Approval Listings for currrent Approved Roof Assembly combinations. Soprema is 9001:2008 Certified. Sopraboard meets ASTM D 3273 (resistance to mold) requirements.

WARRANTY

SOPREMA offers several warranty options dependent upon membrane combinations, system assembly, and environmental conditions. Contact your local SOPREMA representative for project warranty offerings.

PACKAGING*

SOPRABOARD					
SIZES	THICKNESS	WEIGHTS**	SHEETS/PALLET	ORDER NO.	
4' X 4' (1.2 X 1.2 m)	1/8" (3.2 mm)	14.4 lbs / sheet (6.5 kg)	100	D 08412	
4' X 4' (1.2 X 1.2 m)	3/16" (4.7 mm)	21 lbs / sheet (9.5 kg)	55	D 08414	
4' X 4' (1.2 X 1.2 m)	1/4" (6.4 mm)	27 lbs / sheet (12 kg)	60	D 08416	
4' X 5' (1.2 X 1.5 m)	1/8" (3.2 mm)	18 lbs / sheet (8 kg)	100	D 08410	
4' X 5' (1.2 X 1.5 m)	3/16" (4.7 mm)	27 lbs / sheet (12 kg)	60	D 08425	
4' X 5' (1.2 X 1.5 m)	1/4" (6.4 mm)	33 lbs / sheet (15 kg)	60	D 08411	
4' X 8' (1.2 X 2.5 m)	1/8" (3.2 mm)	29 lbs / sheet (13 kg)	100	D 08415	
4' X 8' (1.2 X 2.5 m)	3/16" (3.2 mm)	43.5 lbs / sheet (20 kg)	55	D 08413	
4' X 8' (1.2 X 2.5 m)	1/4" (3.2 mm)	55 lbs / sheet (25 kg)	40	D 08423	

^{*} DO NOT DOUBLE STACK PALLETS

^{**} Meets ASTM D 6506, Class B, Type 3

^{***} Depending upon primer and substrate used.

^{**} Approximate Sheet Weight - All values are nominal per manufacturing tolerances.

^{***} Contact Customer Service or your Sales Representative

PRODUCT DATA SHEET



PDS-573 Rev 11/10

SOPRADRAIN ECO-VENT

Sopradrain Eco-Vent

Order No.*

*Contact Customer Service for Order Number and Availability

DESCRIPTION

SOPRADRAIN ECO-VENT is one of a new generation of environmentally conscious Soprema products. This drainage composite consists of a post-industrial recycled polypropylene drainage core of fused, entangled filaments and a geocomposite fabric bonded to one side. The entangled filaments are molded into a square waffle pattern that maintains the flexible design. This product, because it exceeds 40% post-industrial recycled content, can help contribute up to 2 LEED points when used in conjunction with other recycled content products. **SOPRADRAIN ECO-VENT** can contribute towards additional LEED points when used with a green roof by reducing storm water runoff, heat islands and energy consumption.

Features and Benefits

- Excellent durability
- Protects waterproofing during and after installation of overburden/backfill
- Conforms to irregular surfaces and corners
- Waffle design creates open flow path even during backfill
- Provides continuous flow even under high loads
- Long rolls reduce installation costs by reducing butt seams and eliminating interlocking
- Recycled content polymer contributes towards LEED points
- Increased flow rates over same thickness nylon and HDPE drains
- 3" fabric overlap flap on both sides

RECOMMENDED APPLICATIONS

- Foundation walls
- Green roofs
- Plaza decks
- Retaining walls

- Beneath slabs
- Earth sheltered homes
- Underground parking
- Exterior planters

PACKAGING

PRODUCT PROPERTIES	ENGLISH UNITS	METRIC UNITS
Core Width	39.0 in	99.1 cm
Length	100.0 ft	30.5 m
Area	36.0 yd²	30.1 m ²
Area	324.0 ft ²	30.1 m²
Roll Diameter	27.0 in	68.6 cm
Gross Roll Weight	57.0 lbs	25.8 kg



SOPRADRAIN ECO-VENT PDS-573 PAGE 2

Rev 11/10

TECHNICAL DATA

PHYSICAL PROPERTIES	TEST METHOD	ENGLISH UNITS	METRIC UNITS
Core Properties			
Material		Polypropylene	
Thickness		0.45 in	11.43 mm
-Core-Weight	······	~~~~160z/yd²~~~~	~~~~5426~g/m²~~~
Compressive Stregnth*	ASTM D 1621	>30,000 psf	1436 kPa
Fabric Properties			
Material		Polypropylene	
Color		Black	
Weight	ASTM D 5261	4.5 oz/yd ²	152.6 g/m ²
Grab Strength	ASTM D 4632	120.0 lbs	0.54 kN
Grab Elongation	ASTM D 4632	50%	50%
Trapeziodal Tear	ASTM D 4533	50.0 lbs	0.22 kN
Puncture Strength	ASTM D 4833	70.0 lbs	0.31 kN
Apparent Opening Size	ASTM D 4751	70 US Sieve	0.212 mm
Flow Rate	ASTM D 4491	120.0 gal/min/ft ²	4887 l/sec/m ²
Permittivity	ASTM D 4491	1.8 sec ⁻¹	1.8 sec ⁻¹

(All values are nominal)

^{*}Failure defined as reaching yield point or no continued measurable flow under stated load.

FLOW RATES			
Pressure	1.0 Gradient	0.5 Gradient	0.2 Gradient
250 psf	22.5 gal/min/ft	15.5 gal/min/ft	9.2 gal/min/ft
500 psf	22.0 gal/min/ft	15.2 gal/min/ft	8.7 gal/min/ft
1000 psf	20.7 gal/min/ft	14.3 gal/min/ft	8.4 gal/min/ft
2000 psf	19.0 gal/min/ft	13.1 gal/min/ft	8.3 gal/min/ft
3000 psf	16.0 gal/min/ft	11.0 gal/min/ft	6.4 gal/min/ft
3600 psf	13.0 gal/min/ft	8.7 gal/min/ft	5.4 gal/min/ft
5000 psf	8.05 gal/min/ft	5.4 gal/min/ft	3.1 gal/min/ft
8000 psf	3.2 gal/min/ft	2.0 gal/min/ft	1.1 gal/min/ft

Typical flow vs. pressure for vertical applications (ASTM D 4716) Sample configuration: Plate/SOPRADRAIN ECO-VENT/ Plate (Values are average of machine direction and cross machine direction test results.)

^{*}Tested per ASTM D 1621 modified and ASTM D 4716.

Transition Sealant

DOW CORNING

Product Information Silicone Sealants

Dow Corning® 758 Silicone Weather Barrier Sealant

FEATURES & BENEFITS

- Excellent adhesion to a wide range of building materials, including polymeric surfaces that are traditionally difficult to adhere to, such as peel and stick weather resistant barriers
- Priming not required on most surfaces
- Usable over wide temperature range
- Excellent adhesion to extruded and formed silicone sheet materials
- Adheres to many polyethylene film based weather resistant barriers
- Adheres to many spun-bonded polyolefin and fibrous or woven air barriers
- Adheres to many other sealing elements such as flashing or elastomeric liquid applied weather barriers
- Adheres to many common fenestration element materials such as anodized aluminum, vinyl, PVC, powder coat, paint and fluoropolymer coatings
- Contributes to improved air tightness of window installations
- UV resistant
- Excellent durability, does not become brittle or crack
- Movement capability of +/- 25% in a properly designed joint

COMPOSITION

• One part RTV, neutral-cure silicone sealant

Neutral one part silicone sealant, designed for adhering to low energy surfaces common in sheet or peel and stick weather resistant barriers.

APPLICATIONS

- Interior air sealing between a sheet or liquid applied weather resistant barrier and fenestration element
- Edge lap seal for weather resistant barriers
- Sealing penetrations in weather resistant barriers such as plumbing or ductwork
- Sealing other difficult to adhere surfaces such as mill finishes and plastics

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Property	Unit	Result
As Supplied			
CTM ¹ 0098	Working Time 25°C and 50% RH	min	15
ASTM¹ C639	Flow, Sag or Slump	inches	0.06
EPA Method 24	VOC Content	g/L	25
As cured – 21 day	vs at 25°C (77°F)and 50% RH		
C661	Durometer Hardness, Type A		30
ASTM D412	Ultimate Tensile Strength	psi	200
ASTM D412	Ultimate Elongation	%	800
ASTM C794 Peel	Strength:		
	Unprimed to HDPE Sheet	ppi	> 20
	Unprimed to anodized aluminum	ppi	> 40
	Unprimed to vinyl	ppi	> 40
	Unprimed to powder coated aluminum	ppi	> 40
	Unprimed to Kynar® coated aluminum	ppi	> 40
	Primed to Concrete	ppi	> 20
ASTM C719	Joint Movement Capability	%	+/- 25

¹CTMs (Corporate Test Methods) correspond to standard ASTM (American Society of Testing and Materials) tests in most instances. Copies are available upon request.

²Measured in accordance with EPA Method 24 and reported exclusive per South Coast Air Quality Management District Rule 1168 guidelines.

TYPICAL PROPERTIES (continued)

Test	Property	Unit	Result
As Cured – After 21 days at 25°C (77°F) and 50% RH followed by 10,000 hours in a QUV weatherometer, ASTM G 53			
ASTM D412	Ultimate Tensile Strength	psi	200
ASTM C794	Peel Strength ³		unchanged

³Uprimed to glass.

DESCRIPTION

Dow Corning® 758 Silicone Weather Barrier Sealant is a one part, neutral cure silicone available in white. It easily extrudes and cures at room temperature by reaction with moisture in the air to form a durable, flexible rubber seal.

This medium modulus sealant is specially designed for the weathersealing of weather resistant barriers where low movement is anticipated, such as window and door frames and wall penetrations.

APPROVALS/ SPECIFICATIONS

- ASTM C920 Type S, Grade NS, Class 25
- ASTM C719 +/-25% movement



HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-the-art application methods and joint design. Please contact your

local Dow Corning Sales Application Engineer for specific advice.

Surface Preparation

The application surface must be clean, dry, sound and frost-free. Mask adjacent surfaces and apply primer if required. Laboratory testing or field adhesion testing may be used to demonstrate primer requirements. Please contact your local Dow Corning Sales Application Engineer for specific advice.

Application

Install sealant according to Dow Corning published guidelines. Ensure the surfaces to be sealed are free of dust, dirt, debris and contaminants. Apply primer as needed and allow to dry as needed. Install backer material for any joint moving more than 15%. Lap joints will not require backer material. Apply and tool the sealant. *Dow Corning* 758 Weather Barrier Sealant should be tooled prior to it skinning over. Standard caulking tools, materials, and methods may be used.

JOINT DESIGN

The sealant joint should be designed so that the maximum expected sealant movement, including thermal, settlement and live load, does not exceed 25% in order to achieve a sufficient durability of the seal. Dow Corning recommends consulting with the flashing manufacturer for details on the movement capability of flashing materials as used in your joint configuration.

When detailing the sealant joints using *Dow Corning* 758 Weather Barrier Sealant, the following should be considered:

- Dow Corning 758 Weather Barrier Sealant may be used to seal lap joints between two pieces of flashing or other materials. Please ensure a 1/4" (6 mm) sealant to substrate contact ("bite") on each side of the lap joint and minimum 1/8" (3 mm) sealant depth.
- The minimum width of a perimeter joint, or "hourglass" joint should be ¼". For joints between ¼" to ½" (6–12 mm) wide a minimum seal depth of ¼" (6 mm) is required.
- For joints above ½" (12 mm wide), a width to depth ratio of 2:1 should be used up to a maximum depth of ½" (12 mm).
- Joints in excess of 1" (25 mm) wide are possible but sealant depth should not exceed ½" (12 mm). It is recommended that specific recommendations be obtained from Dow Corning for any joints in excess of 3" (75 mm).
- In applications where fillet type joints are to be used, a minimum of ¹/₄" (6 mm) sealant bite is recommended for each substrate.

HANDLING
PRECAUTIONS
PRODUCT SAFETY
INFORMATION REQUIRED FOR
SAFE USE IS NOT INCLUDED IN
THIS DOCUMENT. BEFORE
HANDLING, READ PRODUCT
AND SAFETY DATA SHEETS
AND CONTAINER LABELS FOR

SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOW CORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 27°C (80°F), *Dow Corning* 758 Weather Barrier Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use by Date."

PACKAGING INFORMATION

Dow Corning 758 Weather Barrier Sealant is available in 20 oz (591 ml) sausages.

LIMITATIONS

Dow Corning 758 Weather Barrier Sealant should not be used:

- As an aesthetic weatherseal
- In below grade applications
- In structural application
- In continuous water immersion applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.TM

dowcorning.com

Window Sealant

Product Information Silicone Sealants

Dow Corning® 795 Silicone **Building Sealant**

FEATURES & BENEFITS

- Suitable for most new construction and remedial sealing applications
- Versatile high performance structural glazing and weather sealing from a single product
- Available in 16 standard colors; custom colors also available
- Excellent weatherability virtually unaffected by sunlight, rain, snow, ozone and temperature extremes of -40° F (-40° C) to 300° F (149° C)
- Excellent unprimed adhesion to a wide variety of construction materials and building components, including anodized, alodined, most coated and many Kynar^{®1}-painted aluminums²
- Ease of application ready to use as supplied
- Ease of use all-temperature gunnability, easy tooling and lowodor cure byproduct
- Meets global standards (Americas, Asia and Europe)

COMPOSITION

One-part, neutral-cure, RTV silicone sealant

Neutral, one-part silicone sealant

APPLICATIONS

- Structural and nonstructural glazing
- Structural attachment of many panel systems
- Panel stiffener applications
- Weather sealing of most common construction materials including glass, aluminum, steel, painted metal, EIFS, granite and other stone, concrete, brick and plastics

TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Property	Unit	Result
As Supplied			
ASTM C 679	Tack-Free Time, 50% RH	hours	3
	Curing Time at 25°C (77°F) and 50% RH	days	7–14
	Full Adhesion	days	14–21
ASTM C 639	Flow, Sag or Slump	Inches (mm)	0.1 (2.54)
	Working Time	minutes	20-30
	VOC Content	g/L	28
As Cured-Aft	er 21 days at 25°C (77°F) and 50% RH		
ASTM D 2240	Durometer Hardness, Shore A	points	35
ASTM C 794	Peel Strength	lb/in (kg/cm)	32 (5.7)
ASTM C 1135	Tension Adhesion Strength		
	At 25% extension	psi (MPa)	45 (0.310)
	At 50% extension	psi (MPa)	60 (0.414)
ASTM C 719	Joint Movement Capability	percent	± 50
ASTM C 1248	Staining (granite, marble, lime- Stone, brick and concrete)		None
	er 21 days at 25°C (77°F) and 50% RH cometer, ASTM G 53	followed by 10,0	00 hours in a
ASTM C 1135	Tensile Adhesion Strength		
	At 25% extension	psi (MPa)	35 (0.241)
	At 50% extension	psi (MPa)	50 (0.345)

¹Based on South Coast Air Quality Management District of California. Maximum VOC is listed both inclusive and exclusive of water and exempt compounds. For a VOC data sheet for a specific sealant color, please send your request to product.inquiry@dowcorning.com.

¹Kynar is a trademark of Atofina Chemicals Inc. ²Contact your local Dow Corning Sales Application Engineer for specifics.

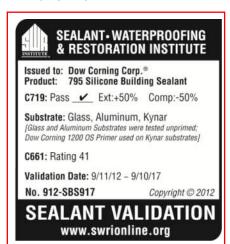
DESCRIPTION

Dow Corning® 795 Silicone Building Sealant is a one-part, neutral-cure, architectural-grade sealant that easily extrudes in any weather and cures quickly at room temperature. This cold-applied, non-sagging silicone material cures to a medium- modulus silicone rubber upon exposure to atmospheric moisture. The cured sealant is durable and flexible enough to accommodate ±50 percent movement of original joint dimension when installed in a properly designed weather seal joint. In a properly designed structurally glazed joint, the sealant is strong enough to support glass and other panel materials under high wind load.

APPROVALS/ SPECIFICATIONS

Dow Corning 795 Silicone Building Sealant meets the requirements of:

- Federal Specification TT-S 001 543A (COM-NBS) Class A for silicone building sealants
- Federal Specification TT-S-00230C (COM-NBS) Class A for one- component building sealants
- ASTM Specification C 920 Type S, Grade NS, Class 50, Use NT, G, A and O
- ASTM Specification C 1184 for structural silicone sealants
- Canadian Specification CAN2-19.13- M82



COLORS

Dow Corning 795 Silicone Building Sealant is available in 16 colors: white, limestone, champagne, natural stone, gray, black, bronze, sandstone, adobe tan, dusty rose, rustic brick, blue spruce, anodized aluminum, and charcoal. Custom colors may be ordered to match virtually any substrate.

HOW TO USE

Please consult the *Dow Corning Americas Technical Manual*, Form No. 62-1112, for detailed information on state-of-the- art application methods and joint design. Please contact your local Dow Corning Sales Application Engineer for specific advice.

Preparation

Clean all joints, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings.

Application Method

Install backing material or joint filler, setting blocks, spacer shims and tapes. Mask areas adjacent to joints to ensure neat sealant lines. Primer is generally not required on non-porous surfaces, but may be necessary for optimal sealing of certain porous surfaces. A test placement is always recommended. Apply Dow Corning 795 Silicone Building Sealant in a continuous operation using positive pressure. (The sealant can be applied using many types of air-operated guns and most types of bulk dispensing equipment.) Before a skin forms (typically within 15 minutes), tool the sealant with light pressure to spread the sealant against the backing material and joint surfaces. Remove masking tape as soon as the bead is tooled.

HANDLING

PRECAUTIONS PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING **DOW CORNING CUSTOMER** SERVICE.

USABLE LIFE AND STORAGE

When stored at or below 27°C (80°F), *Dow Corning* 795 Silicone Building Sealant has a shelf life of 12 months from the date of manufacture. Refer to product packaging for "Use By Date."

PACKAGING INFORMATION

Dow Corning 795 Silicone Building Sealant is supplied in 10.3-fl oz (305-mL) disposable plastic cartridges that fit ordinary caulking guns, 20-fl oz (590- mL) sausages and 2- and 4.5-gal (7.5- and 17-L) bulk containers.

LIMITATIONS

Dow Corning 795 Silicone Building Sealant should not be used:

- In structural applications without prior review and approval by your local Dow Corning Sales Application Engineer
- In below-grade applications
- When surface temperatures exceed 50°C (122°F) during installation
- On surfaces that are continuously immersed in water
- On building materials that bleed oils, plasticizers or solvents that may affect adhesion

- On frost-laden or wet surfaces
- In totally confined joints (the sealant requires atmospheric moisture for cure)
- If the sealant is intended to be painted (paints do not typically adhere to most silicone sealants)
- To surfaces in direct contact with food or other food-grade applications

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION

To support customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, dowcorning.com or consult your local Dow Corning representative.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.™

dowcorning.com

Below Grade Waterproofing Assembly

650 MEMBRANE

Sheet Waterproofing Membrane

PRODUCT NAME 650 Membrane

MANUFACTURER

Polyguard Products, Inc. Ennis, TX 75119 (214) 515-5000 www.polyguard.com

PRODUCT DESCRIPTION BASIC USES

650 Membrane is used on concrete foundation walls, mud slabs, sills and spandrel beams, tunnels, plaza decks, parking garages and related applications where waterproofing is critical. Polyguard 650 Membrane may also be used on wood, concrete masonry (CMU) structures and Insulated Concrete Forms (ICF).

Balconies: Please consult Polyguard Balconyguard $^{\text{TM}}$ Data Sheet and details for description and installation instructions.

PRODUCT FEATURES

- Factory bonding assures 60-mil uniform thickness
- Wide membrane width allows for fast and easy application, with reduced seams on continuous flat surfaces
- Detail Tape available for trim corners, construction joints, and other applications.
- Release film does not tear like paper release
- Extended selvage edge provides asphalt-to-asphalt adhesion at the seam
- White color to help reflect heat

650 Membrane conforms to the following specifications:

- Corps of Engineers CEGS-0711
- AIA MasterSpec Section 07111
- Federal Construction Guide FCGS 07111
- General Service Administration PBS (PCD) 07111
- Department of the Navy NAV FAC TS 07111
- Veterans Administration 14-08-1 Section 07311
- American Railway Engineering Association (AREA) 29-2

COMPOSTITION & MATERIALS

650 Membrane is a strong, pliable, self-adhesive sheet consisting of a 4 mil cross-laminated, high-density polyethylene (HDPE) backing, bonded to 56 mils of rubberized asphalt waterproofing compound.

650 Membrane is produced in both summer- and wintergrade formulations; use 650 Membrane for ambient and substrate surface temperatures of 40°F (4°C) and rising, use 650 Membrane Winter for ambient and substrate surface temperatures of 25°F (-4°C) to 65°F (18°C).

TECHNICAL DATA

See physical properties table.

Product Data Sheet

INSTALLATION SURFACE PREPARATION

- Prior to starting work, check that all horizontal surfaces to be waterproofed slope towards drainage or refer to balcony details for zero-slope applications. This material is not designed to be applied in areas where water will pond.
- A smooth monolithic concrete surface is required. Provide a Concrete Surface Profile (CSP) 1 thru 3. Broom surfaces are not recommended.
- Concrete should be dry, frost free and cured a minimum of seven days prior to application of Polyguard membrane and Liquid Adhesive.
- Surface must be free of voids, spalled areas, sharp projections, loose aggregate and form release agents.
- Do not use concrete curing compounds containing oil, wax or pigments.
- Form release agents must be the self-dissipating type which will not transfer to the membrane.
- Surface defects; such as cracks, holes, or cavities; should be filled and finished flush with a Portland cement grout or concrete.
- Finish below-grade (except footings) and the top of projecting ledge surfaces to a beveled or rounded edge.
- Concrete masonry walls or brick require a welladhered parge coat before application of membrane. Striking off joints flush with surface is also required.
- Clean all surfaces to remove debris, dust and loose stones before application begins. DO NOT apply system to frozen concrete.

Penetration/Inside Corner/Fillet/Detail Liquid Membrane

LM-95 LIQUID MEMBRANE: Two-component pail DETAIL SEALANT PW™: Single-component tube or pail.

- Apply fillets formed by Detail Sealant PW, LM-95 Liquid Membrane, latex modified cement mortar or epoxy mortar at the base of foundation walls, footings, and inside corners. Provide a 3/4" fillet face.
- DO NOT use wood or fiber cant strips.
- DO NOT prime underneath Detail Sealant PW or LM-95 Liquid Membrane when applied to concrete.
- Cover all inside corners and the base of the foundation wall to footing joint using a 12-inch wide strip of Detail Tape centered along the axis. Press or roll firmly to achieve a complete seal. Detail Sealant PW or LM-95 Liquid Membrane may be substituted for the initial 12-inch wide strip of Detail Tape on inside corners by applying a minimum of 90 mils, 3/4" fillet (cant) 6" vertically and horizontally away from the fillet (cant).
- At penetrations, posts, or projections, seal with Polyguard® Detail Sealant PW™ or Polyguard® LM-95 Liquid Membrane 6 inches onto concrete and 3-inches onto penetrating item; then apply a second flashing sheet over the penetration extending a minimum of 6 inches from the detail. The seal the cut edges of all terminations must be sealed with Polyguard® Detail Sealant PW™ or Polyguard® LM-95 Liquid Membrane.

- Treat drains and projections with a second ply of 650 Membrane for a distance of 6" away from drain or projection. Seal all terminations with Detail Sealant PW or LM-95 Liquid Membrane.
- Complete detail work prior to mixing LM-95 Liquid Membrane. Pot life of this product is approximately 60 minutes after mixing at 70°F (21°C). Detail Sealant PW™ can also be used, allowing a minimum 2 hours to cure prior to waterproofing membrane application.

Priming

Stir Liquid Adhesive before use.

- 650 LT Liquid Adhesive, California Sealant or Shur-Tac Liquid Adhesive provides a tacky adhesive surface.
- 650 LT Liquid Adhesive, California Sealant or Shur-Tac Liquid Adhesive should be applied over the entire surface at a rate of 250-300 square feet per gallon.
- Re-prime if membrane is not applied to the Liquid Adhesive within the same working day.
- Use brush or sort nap lamb's wool roller for Liquid Adhesive application.
- Liquid Adhesive must be tacky to touch, but not wet, prior to application of 650 Membrane.
- Metal surfaces may require Liquid Adhesive to obtain bond of membrane to substrate.
- Field test to determine adhesion to substrate(s) prior to 650 membrane application.
- Tack or cure for these products is totally dependent on relative humidity, ambient temperature, and substrate surface temperature.

Sheet Membrane

Apply Polyguard 650 Membrane in any width up to 48-inches. Side laps must be a minimum of 2-1/2 inches. Staggered end laps should be minimum 6 inches.

When applying Polyguard 650 Membrane on vertical walls, a determined effort must be made to assure complete adhesion of membrane to the primed surface. Use heavy hand pressure while smoothing out the membrane surface as it is applied. Roll installed membrane with a hand roller to ensure complete bond.

On horizontal surfaces, apply membrane from low to high pitch for maximum drainage. Use a minimum 75 lb. linoleum roller to roll membrane immediately after application, with special attention at overlaps and "T-Joints". Seal all end laps with Detail Sealant PW™ or LM-95 Liquid Membrane.

When vertical walls that are more than 8-feet high, which are to be waterproofed, apply 650 Membrane in sections no longer than 8-feet, starting from the lower foundation base and rising to the top with the 6-inches overlap, shingling down on each ply of membrane. Apply Polyguard 650 Membrane on the horizontal footing and terminated with Detail Sealant PW or LM-95 Liquid Membrane. If the footing is smooth and otherwise properly prepared, it is acceptable to extend the 650 Membrane down the exterior face of the footing and terminate with Detail Sealant PW or LM-95 Liquid Membrane. Follow these measures for membrane termination when bottom of interior floor height is:

 Even to 6": Apply 650 Membrane across the top of footer and terminate on vertical face of footer, sealing

- terminal edge with Detail Sealant PW or LM-95 Liquid Membrane. For a poured-in-place footer, terminate the membrane within 3" of outer edge and finish with a termination (term) bar. Seal term bar, fasteners and terminal edge of membrane with Detail Sealant PW™ or LM-95 Liquid Membrane.
- 6" 12": Terminate 650 Membrane on top of footer a minimum of 12 inches, and seal with Detail Sealant PW or LM-95 Liquid Membrane. Vertical face terminations are preferred.
- 12-inches or higher: Terminate 650 Membrane at vertical-to-horizontal juncture and seal with Detail Sealant PW or LM-95 Liquid Membrane.

Complete the upper terminating edge of Polyguard 650 Membrane applied to a vertical wall over the top of the wall. If terminated on the vertical surface, use a reglet, counter flashing or termination bar. Firmly press the terminated edge with a hand roller, and protect with a troweled bead of Detail Sealant PW or LM-95 Liquid Membrane.

Properly seal static cracks more than 1/16-inch wide on horizontal or vertical surfaces in accordance with the sealant manufacturer's instruction, apply a 12-inch wide strip of 650 Membrane.

Seal cold joints, T-Joints, and evident working cracks, with joint fillers, water-stop or sealant. Place a 12-inch strip of 650 Membrane centered directly over and along the crack. Overlay the 12-inch strip with the 650 Membrane field application, providing double strength at the area of movement.

650 Membrane does not function as an expansion joint material, only as a waterproofing cover for expansion joint materials. All expansion joints should be properly sealed with joint fillers or an expansion joint as primary waterproofing. Then apply an 8" inverted piece of 650 Membrane centered over and across the joint, followed by a 12" strip adhered directly over joint. Full width 650 Membrane should follow. Construction joints, control joints, and cold joints should be sealed with joint fillers and Detail Tape, then apply 650 Membrane over the joint.

INSPECTION AND REPAIRS

Visually inspect membrane for tears, punctures, air blisters and "fishmouths," prior to water tests, placement of protection board and backfilling. Make repairs by removing all damaged membrane so only well-bonded 650 Membrane remains. Re-prime any exposed concrete. After Liquid Adhesive is dry, apply a new sheet of membrane over the concrete, extending 6-inches onto previously-applied 650 Membrane. Care should be taken to obtain good adhesion between membrane used for repairs and originally-applied 650 Membrane. Seal edges with Detail Sealant PW™ or 650 Mastic.

Slit all "fishmouths," overlap the pieces, place patch over area and roll in place. Puncture air blisters, expel the air, prime and cover with patch. Extend the patch material minimum 6 inches in all directions beyond the repair area, then seal the patch edges with Detail Sealant PW or 650 Mastic.

MEMBRANE TERMINATION

Apply Detail Sealant PW or LM-95 Liquid Membrane at all terminations at the end of each day's work. Never apply 650 Mastic underneath the Polyguard membrane. Detail Sealant PW should be allowed to cure 2 hours when used under the 650 Membrane.

MEMBRANE PROTECTION/DRAINAGE BOARDS

Protection board is required over 650 Membrane. Extruded polystyrene is acceptable for vertical applications. Lowflow™ and Polyflow® 15, 15P, 10 or 10P drainage boards can be used in place of protection board. Use 1/8-inch Asphalt Protection Board to protect membrane on horizontal surfaces subject to normal construction traffic. Use 1/4-inch Asphalt Protection Board to protect the membrane on horizontal surfaces subject to heavy construction traffic. Apply protection board systems according to the manufacturer's application and guide specifications.

Membrane surfaces should be free of stones and dirt prior to protection board installation. When adhering protection board systems to Polyguard 650 Membrane, use a Polyguard approved adhesive system.

Drainage Board

For Vertical surfaces, use Polyflow® 15, 15P, 10, 10P, or Lowflow Protection/Drainage Board. For horizontal surfaces, use Polyflow 18. Consult Polyguard for specific recommendations.

Drainage Systems

Perimeter drainage system should be Totalflow^{T} with appropriate connectors/outlets.

Backfill Requirements

No waiting is required before backfilling. Backfill material should be select fill:

- free of large dirt clods, rock, tree roots and debris.
- a type readily compactable upon deposit.
- be compacted per project specifications in 12-inch lifts.
- installed in lifts.
- not have a high water content that would cause the soil to shrink upon drying.

Use mechanical compaction in horizontal layers to achieve these results.

Topping Systems Requirements

On horizontal areas Polyguard recommends a flood test or appropriate leak detection methods.

STORAGE AND HANDLING

Material Handling

Membrane and accessories should be unloaded and stored carefully. Protect cartons and containers from weather,

sparks, flames, excessive heat, cold and lack of ventilation. DO NOT stack membrane material higher than 5-feet vertically, nor double stack pallets. Store cartons on pallets and cover to prevent water damage. For best results, store membrane above $50^{\circ}F$ ($10^{\circ}C$) prior to application.

PRECAUTIONS

- The Liquid Adhesive is an industrial coating and would be harmful or fatal if swallowed. It is marked as red label from the stand-point of flash point.
- Prohibit flames, sparks, welding and smoking during application.
- Refer to product label for handling, using and storage precautions.
- Solvents could be irritating to the eyes; flush with water and contact physician.
- Avoid prolonged contact with skin and breathing of vapor or spray mist from liquid adhesive. In confined areas, use adequate forced ventilation, fresh air masks, explosion-proof equipment and clean clothing.
- Avoid solvent contact with light bulbs or other high temperature surfaces.

Ultraviolet Protection

650 Membrane is adversely affected by ultraviolet light. Cover the waterproofing system as soon as possible; DO NOT leave exposed to sunlight for over 30 days.

SAFETY

SDS documents for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace, at no charge, proven defective product within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

P.O. Box 755, Ennis, TX 75120-0755

Sales: (615) 217-6061•Tech Support: (214) 515-5000•Fax: (615) 691-5500

Email: archtech@polyguard.com
Website: www.polyguard.com

Submitted 70732060SSelf f Addition in Strong Stro

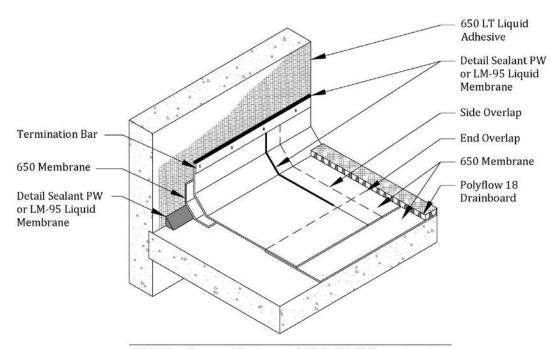
PROPERTY	TEST METHOD	TYPICAL VALUE
FILM COLOR		Black/White
MEMBRANE THICKNESS	ASTM D 1000	60 mils
TENSILE STRENGTH - MEMBRANE	ASTM D 412 Modified Die C	370 PSI
ELONGATION - ULTIMATE FAILURE OF RUBBERIZED ASPHALT	ASTM D 412	600%
TENSILE STRENGTH - FILM	ASTM D 882	7294 PSI
PERMEANCE	ASTM E 96 Method B	0.022 Perms
CRACK CYCLING	ASTM C 836 Tested @-15°F (-26°C)	No effect
PEEL ADHESION	ASTM D 903	17 lbs./in. width
LAP PEEL ADHESION	ASTM D 1876	8.0 lbs./in. width
LOW TEMPERATURE FLEXIBILITY (-15°F)	ASTM D 1970 Modified	Pass
PLIABILITY	ASTM D 146 180° bend over 1" mandrel at -25°F (-32°C)	No effect
PUNCTURE RESISTANCE - MEMBRANE	ASTM E 154	69 lbs.
RESISTANCE TO HYDROSTATIC HEAD	ASTM D 5385	231 ft.
EXPOSURE TO FUNGI IN SOIL	GSA-PBS 07115 (16 weeks)	No effect
WATER ABSORPTION	ASTM D 570	0.1%

PACKAGING	PART NUMBER	UNIT SIZE
Polyguard 650 MEMBRANE (Also available in Winter Grade)	650L48	48" x 50' roll
Polyguard 650 MEMBRANE METRIC (Also available in Winter Grade)	650L1M	39.36" x 61' roll
Required Accessories:		
DETAIL TAPE	650L12	12" x 50' rolls (4/ctn)
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 5 GA	5 gallon pail
650 LT LIQUID ADHESIVE	650-5 LIQ ADH 1 GA	4 – 1 gal pails/ctn
CALIFORNIA SEALANT	CALSEAL5	5 gallon pail
SHUR-TAC LIQUID ADHESIVE	SHUR-TAC5	5 gallon pail
SHUR-TAC LIQUID ADHESIVE	SHUR-TAC1	4 – 1 gal pails/ctn
LM-85 SL	LM85-5	5 gallon pail
LM-95	LM952	2 gallon pail
DETAIL SEALANT PW™	DETAIL SEALANT PW - SAU 20 OZ	20 sausages/ctn
DETAIL SEALANT PW™	DETAIL SEALANT PW - 3 GAL	3 gallon pail
Possible Accessories:		
650 MASTIC a topping material, not for use under a membrane sheet	650-5-MASTIC	5 gallon pail
650 MASTIC a topping material, not for use under a membrane sheet	650-QTUBES-MASTIC	12/30 oz. tubes
Drainage Accessories:		
LOWFLOW™	LOWF	4' x 200' roll
POLYFLOW® 10	POLYFLOW10	4' x 50' roll
POLYFLOW® 10P	POLYFLOW10P	4' x 50' roll
POLYFLOW® 15	POLYFLOW15	4' x 50' roll
POLYFLOW® 15P	POLYFLOW15P	4' x 50' roll
POLYFLOW® 18	POLYFLOW18	4' x 50' roll
TOTALFLOW™	TOTAL FLOW	24" x 50' roll
TOTALFLOW™ END OUTLET (4")	OUTLET4-UNIV	sold each
TOTALFLOW™ TEE OUTLET (4")	TEE4-UNIV	sold each
QUICK GRIP SPRAY ADHESIVE	QGADH30	30# canister

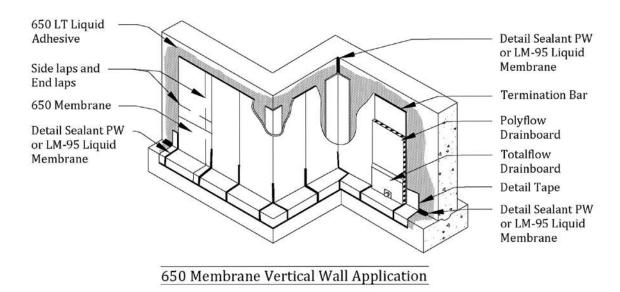


Common Polyguard® 650 Membrane Applications

These diagrams are not intended to be application instructions, simply illustrations



650 Membrane Horizontal Slab Wall Termination



<u>Please Note</u>: Not intended to be full details. For full application detail on these configurations, see Polyguard details WP3 and WP7, or contact Polyguard Products.



CALIFORNIA SEALANT

Adhesive/Sealant

PRODUCT NAME California Sealant

MANUFACTURER

Polyguard Products, Inc. Ennis, TX 75119 (214) 515-5000 www.polyguard.com

PRODUCT DESCRIPTION BASIC USES

California Sealant is an integral part of Polyguard Membrane systems and sufficient liquid sealant must be used on dry surfaces to condition them to be dust free so that the substrate is suitable for the application of Polyguard Membranes.

California Sealant is used to seal overlap areas of Underseal® Underslab and Underseal® Blindside where geotextile fabric comes in contact with polyethylene backing. The function of the sealant is to seal all porous portions of the geotextile surface.

PRODUCT FEATURES

- Used to prime all structural concrete, masonry, or wood surfaces on which Polyguard Membranes will be applied.
- Designed to be used on applications down to 25°F (-4°C).
- Used on all concrete block and brick wall conditions.

COMPOSITION & MATERIALS

California Sealant is a rubber-based sealant which is specifically formulated to provide excellent adhesion.

The VOC (Volatile Organic Compound) content meets the South Coast Air Quality Management District regulations established under the February 1, 1991 version of Rule 1168 ©) (2) Adhesion and Sealant Applications. California Sealant is classified as an Architectural Sealant Primer Porous, with VOC of 527 g/L. Current SCAQMD regulations for this type sealant primer are 775 g/L.

California Sealant will be orange color in appearance.

TECHNICAL DATA

Polyguard Products, Inc. provides design data and installation instructions to architects, engineers, specifiers, and contractors.

INSTALLATION

California Sealant may be applied with roller or brush. A roller with a heavy nap should be used to carry sufficient material to the area being coated.

Apply California Sealant to a clean, dry, dust free, and frost free surface at a coverage rate of approximately 250 to 300 square feet per gallon on concrete. Exterior gypsum

Product Data Sheet

sheathing board products will vary in texture, performance and porosity. The coverage rate for Polyguard Adhesive/Sealants will be less than over concrete substrates. Specific testing for coverage is recommended. Other substrates may vary in coverage, please test according. The liquid sealant should be spread sufficiently to avoid areas of excess material. Areas of excess material will lengthen the curing time on the application of the California Sealant.

For best results California Sealant should be applied and allowed to become tacky to touch. Porosity of substrates could affect the tackiness of the adhesive; timing may vary due to atmospheric conditions. At this point membrane should be applied.

LIMITATIONS

The application of liquid sealant should be limited to what can be covered with Polyguard Membranes in one working day. Any areas not covered with membrane during the day must be recoated, and be sure to cover all open containers when not applying liquid sealant. If liquid sealant dries and is no longer tacky, then reapply liquid sealant.

When used on horizontal surfaces, the sealant remains tacky, and precautions must be used in this application.

SAFETY

SDS documents for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

P.O. Box 755, Ennis, TX 75120-0755

Sales: (615) 217-6061•Tech Support: (214) 515-5000•Fax: (615) 691-5500

Email: archtech@polyguard.com
Website: www.polyguard.com

PACKAGING	PART NUMBER	UNIT SIZE
CALIFORNIA SEALANT	CALSEAL5	5 gallon pail



The information contained in this document is based on data and knowledge considered to be true and accurate at time of printing and is offered for the users' consideration, investigation and verification. Polyguard Products, Inc. cannot be held liable for errors made as a result of information herein. Changes and modifications can be made to this document without prior notice. No statement, recommendation or suggestion is intended for use which would infringe on patents or copyrights held by Polyguard Products, Inc.



LM-95 Product Data Sheet

Two-Component Fast Cure Urethane Waterproofing Membrane

PRODUCT NAME LM-95

MANUFACTURER

Polyguard Products, Inc. Ennis, TX 75119 (214) 515-5000 www.polyguard.com

PRODUCT DESCRIPTION

LM-95 is a two-component, asphalt-modified, urethane material.

BASIC USES

LM-95 is designed to be used with Polyguard Membranes for several different types of detailing applications. It may be used as a fillet at the junction of the footing and foundation, a collar around drain detailing area, and a termination flashing material for protrusions through the waterproofing system. It can also be used for terminations and flashings to curbs and parapets on plaza decks or other similar horizontal applications.

COMPOSITION AND MATERIALS

LM-95 is a two-component, asphalt-modified, urethane material.

TECHNICAL DATA

See physical properties table.

INSTALLATION

Apply LM-95 in ambient and surface temperatures of 40°F (5°C) and rising. Coverage of one gallon of LM-95 is approximately:

- Flashings: 17 square feet
- Fillet & Reinforcement: 14 linear feet
- Fillet Only: 65 linear feet

When working with materials in these cold temperatures, store the LM-95 in a warm area or warm-up before the mixing and application. All surfaces to receive LM-95 must be free of contaminants and dry for the application. Areas to receive LM-95 should not be primed for the membrane.

For best results and lower viscosity, warm-up both LM-95 components A and B between 50°F (24°C) to 95°F (35°C) prior to mixing. To mix the two pre-measured components of the LM-95, using a 1/2-inch drill with an all-steel 2 1/2-gallon spiral mixer: mix component A thoroughly for 3 minutes, add component B to component A; thoroughly mix for an additional 2 minutes. DO NOT APPLY ANY MATERIAL IF STREAKS CAN BE SEEN DUE TO INSUFFICIENT MIXING.

Once LM-95 is mixed, it may be applied with a trowel or a bulk caulking gun within 45 minutes. Curing time may be accelerated at high temperatures. Once the material has started to thicken, it must be discarded. The material will cure to a very flexible, rubber like material.

Potable life at 75°F (24°C) and 50% relative humidity is approximately 45 minutes, longer for cooler temperatures

and higher humidity and shorter for hotter temperatures and lower humidity. Discard material that won't flow freely.

The 650 Waterproofing Membrane may be applied directly over LM-95 before it is cured. LM-95 must be applied in a minimum of 90 mils of coverage, unless otherwise noted on any details. In a reinforcing or fillet application at footing and wall junction, under the 650 Waterproofing System, it should be applied with a minimum of 3/4-inch face. LM-95 may also be applied as a waterproofing detailing material in this junction, 6-inches in all directions from the corner.

When used as a flashing at membrane terminations, LM-95 must be applied a minimum of 2-inches over the water-proofing membrane and a minimum of 1-inch onto the surface being waterproofed.

LM-95 will adhere to primed or unprimed concrete but unprimed concrete is preferred.

Before any flood testing should occur, a minimum cure of 3 hours must be allowed for LM-95.

STORAGE

Store LM-95 in temperatures between 40°F (5°C) and 80°F (27°C). If at any time in storage the Part B has been frozen, it must be discarded and replaced.

Clean material from tools and application equipment with mineral spirits before the LM-95 material residue cures.

Clean skin with a citrus-based cleaner.

Refer to SDS document for further handling information.

SAFETY

SDS sheets for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at 214.515.5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc.

P.O. Box 755, Ennis, TX 75120-0755

Sales: (615) 217-6061•Tech Support: (214) 515-5000•Fax: (615) 691-5500

Email: archtech@polyguard.com
Website: www.polyguard.com

Submitted 70732060SSelf f Addition in Strong Stro

PROPERTY	TEST METHOD	TYPICAL VALUE
PART A		
COLOR		Black
SPECIFIC GRAVITY	ASTM D 70	1.29
FLASH POINT (C.O.C.)	ASTM D 92	> 500°F
PART B		
COLOR		Brown
SPECIFIC GRAVITY	ASTM D 70	1.20
FLASH POINT (S.C.C.)	ASTM D 3278	> 375°F
MIXTURE		
VISCOSITY @ 80°F BROOKFIELD @ 20 RPM	ASTM D 2196	61
SOLIDS CONTENT	ASTM D 1754	100%

PACKAGING	PART NUMBER	UNIT SIZE
LM-95 (A & B yields 1.64 Gallons)	LM952	2 gallon pail



DETAIL TAPE

ILLULU 3

Adhesive Tape

PRODUCT NAME Detail Tape

MANUFACTURER

Polyguard Products, Inc. Ennis, TX 75119 (214) 515-5000 www.polyguard.com

PRODUCT DESCRIPTION

BASIC USES

Detail Tape is used as detail strips on inside and outside corners, penetrations, control joints, cold joints and for patching damaged areas of the following products: 650 Membrane and PRM™ waterproofing membranes.

COMPOSTITION & MATERIALS

Detail Tape is a strong, pliable, self-adhesive sheet consisting of a 4 mil cross-laminated, high-density polyethylene (HDPE) backing, bonded to 56 mils of rubberized-asphalt waterproofing compound.

Detail Tape is produced in both summer- and winter-grade formulations; use Detail Tape for ambient and substrate surface temperatures of $40^{\circ}F$ (5°C) and rising, use Detail Tape Winter for ambient and substrate surface temperatures of $25^{\circ}F$ ($-4^{\circ}C$) to $65^{\circ}F$ ($18^{\circ}C$).

TECHNICAL DATA

See physical properties table.

INSTALLATION

The 650 Membrane and PRM™ waterproofing membranes should be clean, dry and free of contaminates before application of the products Detail Tape.

Due to various uses of this product please see sheet membrane to be used for proper application instructions.

STORAGE AND HANDLING Material Handling

Membrane and accessories should be unloaded and stored carefully. Protect cartons and containers from weather, sparks, flames, excessive heat, cold and lack of ventilation. DO NOT stack membrane material higher than 5-feet vertically, nor double stack pallets. Store cartons on pallets and cover to prevent water damage. For best results, store

membrane above 50°F (10°C) prior to application.

PRECAUTIONS

• The Liquid Adhesive is an industrial coating and would be harmful or fatal if swallowed. It is marked as red label from the stand-point of flash point.

Product Data Sheet

- Prohibit flames, sparks, welding and smoking during application.
- Refer to product label for handling, using and storage precautions.
- Solvents could be irritating to the eyes; flush with water and contact physician.
- Avoid prolonged contact with skin and breathing of vapor or spray mist from liquid adhesive. In confined areas, use adequate forced ventilation, fresh air masks, explosion-proof equipment and clean clothing.
- Avoid solvent contact with light bulbs or other high temperature surfaces.

Ultraviolet Protection

Detail Tape is adversely affected by ultraviolet light. Cover the waterproofing system as soon as possible; DO NOT leave exposed to sunlight for over 30 days.

SAFETY

SDS documents for all Polyguard products can be obtained at our website www.polyguard.com. Call Polyguard Products, Inc. at (214) 515-5000 with questions.

WARRANTY

We, the manufacturer, warrant only that this product is free of defects, since many factors which affect the results obtained from this product are beyond our control; such as weather, workmanship, equipment utilized and prior condition of the substrate. We will replace at no charge product proved to be defective within twelve (12) months of purchase, provided it has been applied in accordance with our written directions for uses we recommended as suitable for this product. Proof of purchase must be provided. A five (5) year material or system warranty may be available upon request. Contact Polyguard Products, Inc. for further details.

TECHNICAL SERVICES

Technical assistance, information and Polyguard's products are available through a nationwide network of distributors and architectural representatives, or contact Polyguard Products, Inc. P.O. Box 755, Ennis, TX 75120-0755

Sales: (615) 217-6061•Tech Support: (214) 515-5000•Fax: (615) 691-5500

Email: archtech@polyguard.com
Website: www.polyguard.com

PVC Roofing Assembly

Product Data SheetEdition: 02/2013
Version no.: 0003





Sarnafil® G410 EnergySmart Roof® Membrane

	_48 _603_72 _80 Feltback				
Overview:	The G410 EnergySmart Roof membrane is a heat-weldable membrane produced with an integral fiberglass mat reinforcement for excellent dimensional stability, for use in a Sika Sarnafil Adhered System.				
	Sika Sarnafil's Energy Star qualified EnergySmart Roof color family consists of White, Tan, Light Gray, and Patina Green.				
Composition:	The G410 EnergySmart Roof membrane is a high-quality, thermoplastic PVC membrane with a fiberglass reinforcement. The G410 roof membrane has a unique lacquer coating applied to the top of the membrane to reduce dirt pick up.				
Features and Benefits:	 Excellent dimensional stability Meets EnergyStar/Title 24 Requirements for Cool Roofing (see pg. 2) Meets LEED/Green Globe Requirements for Cool Roofing (see pg. 2) Recycled content (see pg. 2) Lacquer coated to reduce dirt pick up Hot-air welded seams for long-term performance Proven membrane performance 				
Codes and Approvals:	Sika Sarnafil's Adhered Systems using G410 PVC membranes are classified by Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, FM Global, Miami-Dade and Florida Building Code. Sika Sarnafil membranes also meet the material requirements of the International building code. For more information, please visit the "technical downloads" section of our website.				
Packaging:	The G410 roof membrane rolls are wrapped in a protective film and strapped to a wood pallet. EnergySmart white, tan and light gray are available as 10 ft. (3 meters) wide. EnergySmart patina green is availale as 6.5 ft. (2 meters) wide. 6.5 ft. rolls weigh between 161 - 195 lbs and the 10 ft. rolls weigh between 265-375lbs. Weight is dependent on thickness of membrane and/or feltbacking.				
Installation:	G410 is installed by a Sika Sarnafil Authorized Applicator. After proper preparation of the substrate, G410 is unrolled into Sarnacol adhesive in accordance with Sika Sarnafil's Technical requirements and then pressed into place with a minimum 100lb linoleum roller. The G410 is then heat-welded together by trained operators using Sika Sarnafil's hot-air welding equipment. Different Sarnacol adhesives require different application methods. Please consult Sika Sarnafil's Applicator Handbook for detailed installation procedures.				
Availability:	The G410 roof membrane is available directly from Sika Sarnafil Authorized Applicators. Contact your Sika Sarnafil Regional Office or visit our website for further information.				
Warranty:	Upon successful completion of the installed roof by the Sika Sarnafil Authorized Applicator, Sika Sarnafil can provide a Warranty to the Building Owner via the Authorized Applicator.				
Maintenance:	The G410 roof membrane requires no maintenance. As a prudent preventative measure, Sika Sarnafil recommends that the Owner or that the Owner's designated representative inspect the installed roof system for damage, plugged drains, weathered sealants, etc. at least twice a year and				

after each storm.





damage, plugged drains, weathered sealants, etc. at least twice a year and

Technical Support: Sika Sarnafil provides technical support. Please contact your local technical representative or technical manager if you need assistance.

Technical Data (as manufactured):		ASTM Type II				
Doromotoro	ASTM Test Method	D-4434 Spec.		Typical Physic	al Branartica	
<u>Parameters</u>	<u>rest method</u>	Requirement	48	<u>Typical Physic</u> I 60	72	<u>80</u>
Reinforcing Material			Fiberglass	Fiberglass	Fiberglass	Fiberglass
Overall Thickness, mil	D638	45	48	60	72	80
Thickness Above Scrim, mil		16	24	30	36	40
Felt Weight oz/yd ²			9	9	9	9
Tensile Strength, min., psi, (Mpa)	D638		Ç			
Machine Direction		1500psi (10.4)	1500	1575	1625	1675
Cross Direction		1500psi (10.4)	1500	1550	1575	1625
Elongation at Break, min.	D638		· · · · · · · · · · · · · · · · · · ·	-		
Machine Direction %		250	250	250	250	250
Cross Direction %		220	220	220	220	220
Seam Strength, min., (% of original)*	D638	75	Pass	Pass	Pass	Pass
Retention of Properties After Heat Aging	D3045		Ç			
Tensile Strength, min., (% of original)	D638	90	Pass	Pass -	Pass	Pass
Elongation, min., (% of original)	D638	90	Pass	Pass	Pass	Pass
Tearing Resistance (M.D.), min., lbf (N)	D1004	10 (45.0)	15	17.5	20.5	22
Low Temperature Bend, -40 °F (-40 °C)	D2136	Pass	Pass	Pass	Pass	Pass
Accelerated Weathering Test (Florescent Light, UV exposure)	G154	5,000 Hours	10,000 Hours	10,000 Hours	10,000 Hours	10,000 Hours
Cracking (7x magnification)		None	None	None -	None	None
Discoloration (by observation)		Negligible	Negligible	Negligible	Negligible	Negligible
Crazing (7x magnification)		None	None	None	None	None
Linear Dimensional Change (C.D.), %	D1204	0.10% max.	-0.02	-0.02	-0.01	-0.01
Weight Change After Immersion in Water, %	D570	± 3.0% max.	2.4	1.9	1.8	1.7
Static Puncture Resistance, 33 lbf (15 kg)	D5602	Pass	Pass	Pass	Pass	Pass
Dynamic Puncture Resistance, 7.3 ft-lbf (10 J)	D5635	Pass	Pass	Pass	Pass	Pass
Recycled Content (10' & 5' sheet only)	9% Pre-Consun	ner / 1% Post-Con	sumer (······································)	
* Failure occurs through membrane rupture not seam failure.						

EnergySmart Colors	Initial Solar <u>Reflectance</u>	3 Year <u>Reflectance</u>	Initial Thermal Emittance	3 Year Thermal Emittance	Initial Solar <u>Reflectance Index</u>	3 Year Solar <u>Reflectance Index</u>
EnergySmart White *1	0.83	0.70	0.90	0.86	104	85
EnergySmart Tan *1	0.73	0.65	0.85	0.86	89	78
EnergySmart Light Grey *2	0.50	0.44	0.84	0.85	56	49
EnergySmart Patina Green *2	0.55	0.46	0.86	0.85	64	51

^{*1} Sika Sarnafil EnergySmart White and Tan membranes meet ENERGY STAR®, LEED, Green Globes and California's Title 24 criteria for Low and Steep Slope applications. *2 Sarnafil EnergySmart Light Grey and Patina Green membranes meet ENERGY STAR®, LEED and Green Globes criteria for Steep Slope applications. EnergySmart Light Grey meets California's Title 24 criteria for Steep Slope applications. EnergySmart Patina Green meets Title 24 criteria for steep slope applications with a 3 year calculated value of 0.445 when using Title 24's aged reflectance equation.



MIAMI-DADE COUNTY APPROVED Miami-Dade County **Product Control Approved**

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 **Fax:** (781) 828-5365

Web: usa.sarnafil.sika.com

Email: webmaster.sarnafil@us.sika.com

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Canada Office

Sika Sarnafil A Business Unit of Sika Canada 6915 Davand Drive Mississauga, ON L5T 1L5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

ENERGY STAR for roofing products is only valid in the United States

Edition: 4/2012 Version no.: 0007



G410 Flashing Membrane

Overview:	G410 flashing membrane is a heat-weldable thermoplastic roofing membrane formulated for direct exposure to the weather and is produced with an integral fiberglass mat reinforcement for dimensional stability. G410 flashing membrane is used to flash roof penetrations. It is also used as an exposed flashing membrane within Sarnafil waterproofing systems.
Composition:	G410 flashing mebrane is a high-quality product containing ultraviolet light stabilizers, flame retardant, and reinforcement. G410 has a unique lacquer coating applied to the top of the membrane. The standard color of the weathering surface of G410 is white and the underside color is dark gray.
Features:	G410 is available in 8" and 12" widths and is 60 mil (1.5 mm) thick. G410 flashing membrane comes in white, tan, light gray, patina green, lead gray, copper brown and evergreen.
Codes and Approvals:	Sika Sarnafil's Adhered Systems using G410 PVC membranes are classified by Underwriters Laboratories, Inc., Underwriters Laboratories of Canada, FM Global, Miami-Dade and Florida Building Code. Sika Sarnafil membranes also meet the material requirements of International building code.
Packaging:	G410 flashing membrane rolls are provided individually and are sealed for shipping.
Installation:	G410 flashing membrane is installed by Sika Sarnafil Authorized Applicators on walls, curbs and certain other penetrations using Sika Sarnafil's Sarnacol adhesives. The seams are then heat welded together by trained operators using Sika Sarnafil's hot-air welding equipment.
Availability:	G410 flashing membrane is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System. Contact Sika Sarnafil or visit our website www.sikacorp.com for further information.





Warranty:	As a Sika Sarnafil-supplied accessory, G410 flashing membrane is included in Sika Sarnafil's Standard or System Warranty.
Maintenance:	G410 flashing membrane requires no maintenance. Standard maintenance of roofs, plaza decks and green roofs should include regular inspection of flashings, drains and termination sealants at least twice per year and after each storm.
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.

Technical Data (as manufactured):

<u>Parameters</u>		ASTM Test Method	ASTM D-4434 Spec. <u>Requirement</u>	Typical Physical <u>Properties</u>
Reinforcing Material				Fiberglass
Overall Thickness ⁽¹⁾ ,		D638	0.045 (1.14)	(see note 1)
Thickness Above Scrim				
Tensile Strength, min., psi (MPa)		D638	1500 (10.4)	1600 (11.1)
Elongation at Break, min.		D638		
Machine Direction			250%	250%
Cross Direction			220%	220%
Seam Strength ⁽²⁾ , min., (% of tensile strength)		D638	75	80
Retention of Properties After Heat Aging		D3045		
Tensile Strength, min., (% of original)		D638	90	95
Elongation, min., (% of original)		D638	90	90
Tearing Resistance, min., lbf (N)		D1004	10 (45.0)	14 (63.0)
Low Temperature Bend, -40°F (-40°C)		D2136	Pass	Pass
Accelerated Weathering Test (Florescent Light, UV exposu	ure)	G154	5,000 Hours	10,000 Hours
Cracking (7x magnification)			None	None
Discoloration (by observation)			Negligible None	Negligible None
Crazing (7x magnification)		D1204	0.10% max.	0.02%
Linear Dimensional Change Weight Change After Immersion in Water		D1204 D570	± 3.0% max.	0.02% 2.5%
Static Puncture Resistance, 33 lbf (15 kg)		D5602	Pass	Pass
Dynamic Puncture Resistance, 7.3 ft-lbf (10 J)		D5635	Pass	Pass
Initial Solar Reflectance		E903		0.83
		C1371, Other		0.90
Solar Reflective Index (SRI)	,	E1980		104

⁽¹⁾ Typical Physical Properties data is applicable for 0.048 in. (1.2 mm) membrane thickness and greater.

Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa.sarnafil.sika.com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Corporate Office Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Fax: ka.com **Email:** webmaster.sarnafil@us.sika.com **Web**

Canada Office

Sika Sarnafil A Business Unit of Sika Canada 6820 Davand Drive Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

⁽²⁾ Failure occurs through membrane rupture not seam failure.

Edition: 2/2013 Version no.: 0007



Sarnaclad

Overview:	Sarnaclad is a heat-weldable flashing product used with Sarnafil G and S membranes to form a monolithic roofing or waterproofing system.
Composition:	Sarnaclad is a 24 gauge, G90 galvanized metal sheet with a 20 mil (0.5 mm) unsupported Sarnafil membrane laminated on one side. Sarnaclad is available in seven standard colors. Standard colors are Copper Brown, White, Evergreen, Lead Gray, Light Gray, Patina Green, and Tan. Sika Sarnafil's Energy Star rated EnergySmart Roof® color family consists of White, Tan, Light Gray, and Patina Green. The dimensions of Sarnaclad are 4 ft x 8 ft (1.2 m x 2.4 m) or 4 ft x 10 ft (1.2 m x 3.0 m).
	Recycled Content (metal): 25% Post Consumer, 6% Pre Consumer Recycled Content (membrane): 0%
Features:	Sarnaclad is a durable and attractive flashing product capable of being formed into a large variety of shapes and profiles. Heat-welding of Sarnafil G and S membranes to Sarnaclad assures watertight integrity. The Sarnaclad has a unique lacquer coating to resist staining from airborne dirt and pollutants.
Packaging:	See Technical Data section for information.
Installation:	Sarnaclad is cut to size and formed to shape on standard sheet metal equipment. Sarnaclad is fastened in position in accordance with Sika Sarnafil Technical requirements. The Sarnaclad joints are covered by 2 inch (50 mm) wide aluminum foil tape and then made watertight by heat-welding a 4 inch (100 mm) wide G410 membrane strip over the tape. By use of a Sarnafil G or S coverstrip, the roofing or waterproofing membrane is then heat-welded to the Sarnaclad.
Availability:	Sarnaclad is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil roofing or waterproofing system. Contact your Sika Sarnafil Regional Office or visit our website for further information.
Warranty:	As a Sika Sarnafil-supplied accessory, Sarnaclad is included in Sika Sarnafil's Standard or System Warranty to the Building Owner.





Technical Data:	Sika Sarnafil provides technical support. Technical staff is available to advise Applicators as to the correct installation method of Sarnaclad.				
	Sheets/Pallet	Size	Weight/Sheet	Weight/Pallet	
	25	4 ft x 8 ft (1.2 m x 2.4 m)	35 lbs (16 kg)	905 lbs (410.5 kg)	
	25	4 ft x 10 ft (1.2 m x 3.0 m)	44 lbs (20 kg)	1,130 lbs (512.6 kg)	
		tent (metal): 25% F tent (membrane): 0		Pre Consumer	

Sarnaclad requires no maintenance.

Corporate Office

Maintenance:

Sika Sarnafil A Division of Sika Corporation 100 Dan Road

Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

Web: usa.sarnafil.sika.com

Email: webmaster.sarnafil@us.sika.com

Canada Office

Sika Sarnafil

A Business Unit of Sika Canada

6915 Davand Drive

Mississauga, ON L5T 1L5

Tel.: (905) 670-2222

1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa sarnafil sika com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Product Data SheetEdition: 12/2013
Version no: 0019



Sarnacol® 2121 Adhesive

Overview:

Sarnacol® 2121 is a water-based dispersion adhesive used within a Sika Sarnafil Adhered system. It is formulated for adhering PVC membranes to clean, dry, water absorbent, horizontal roof surfaces with slopes up to 10° (2/12) when using the methods of installation noted below. See Technical Bulletins 03-09 and 04-09 for information on using Sarnacol 2121 on flashings. For

any other applications contact Sika Sarnafil.

Composition: See Material Safety Data Sheet for information.

VOC Content: 120.4g/L

Features: Sarnacol 2121 is uniquely formulated to be compatible with Sarnafil membranes. Sarnacol 2121 has a shelf life of 12 months in a tighly closed container

in temperatures between 40 and 99 degrees F (5 and 37 degrees C).

Installation Method A: (Squeegee Applied)

Sarnacol 2121 is applied with a notched-squeegee to the substrate. The membrane is then rolled into the adhesive while it is still wet and immediately broomed into place with a medium bristle push broom to work out any air bubbles. Push the broom down the center of the sheet followed by brooming out from the center on both sides. Immediately after brooming, roll the membrane in two directions with a minimum 100 lb (45 kg), steel, membrane roller. Sarnacol 2121 may only be used when temperatures are 40 °F (5°C) and rising. In cool or humid weather Sarnacol 2121 will take longer to cure. Sarnacol 2121 is not to be used on vertical or sloped surfaces greater than a

2/12 unless applied according to Technical Bulletins 03-09 and 04-09.

Installation Method B: (Roller Applied)

Sarnacol 2121 can be applied with a medium nap roller to the substrate. When using the roller application, the coverage rate is greatly improved (see coverage rate guide below). When applying 2121 with a roller, it is important to remember that Sarnacol 2121 is still a product designed for "wet lay in". When applied with a roller, care must be taken to insure that the adhesive has not dried before the membrane is laid in place. This is especially important during applications at high temperatures. Adjustments may be needed in the application technique to insure a wet lay in. It is recommended that only 3-4 ft (0.9 - 1.2 m) at a time is coated out ahead of the membrane to prevent dry laid membrane. The membrane is then rolled into the adhesive while it is still wet and immediately broomed into place with a medium bristle push broom to work out any air bubbles. Push the broom down the center of the sheet followed by brooming out from the center on both sides. Immediately after brooming, roll the membrane in two directions with a minimum 100 lb (45 kg), steel, membrane roller. Temperature and slope restrictions as mentioned above also apply for the roller method.

Installation Method c: (Spray Machine)

Sarnacol 2121 can be applied with a reccomended airless spray machine to the substrate. When applying 2121 with a spray machine, it is important to remember that Sarnacol 2121 is still a product designed for "wet lay in". When applied with a spray machine, care must be taken to insure that the adhesive has not dried before the membrane is laid in place. This is especially important during applications at high temperatures. Adjustments may be needed in the application technique to insure a wet lay in. It is recommended that only 3-4 ft (0.9 - 1.2 m) at a time is coated out ahead of the membrane to prevent dry laid membrane. The membrane is then rolled into the adhesive while it is still wet and immediately broomed into place with a medium bristle push broom to work out any air bubbles. Push the broom down the center of the sheet followed by brooming out from the center on both sides. Immediately after brooming, roll the membrane in two directions with a minimum 100 lb (45 kg), steel, membrane roller. Temperature and slope restrictions as mentioned above also apply for the roller method.



Installation Note:

The above installation instructions for squeegee, roller and spray are a condensed version for the product data sheet. Before installing the membrane with Sarnacol 2121, read the complete instructions detailed in the technical bulletin "07-12 Sarnacol 2121 Application Guide".

Packaging:	Sarnacol 2121 is supplied in 5-gallon plastic containers weighing 45 lbs (20.4 kg).			
Availability:	Sarnacol 2121 is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System. Contact your Sika Sarnafil Regional Office or visit our website for further information.			
Warranty:	As a Sika Sarnafil-supplied accessory, Sarnacol 2121 is included in Sika Sarnafil's Standard or System Warranty to the Building Owner.			
Maintenance:	Sarnacol 2121 requires no maintenance.			
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise Applicators as to the correct installation method of Sarnacol 2121.			
Technical Data:	(Method A) Squeegee Applied	(Meth	od B)	(Method C) Spray Applied
Substrate Bareback Membrane Rates:	Total Rate	<u>Total</u>		Total Rate
Isocyanurate Facer	67 ft² /gal (1.63 m²/L)	100 ft²/ga	I (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Isocyanurate Glass Facer	80 ft²/gal (1.96 m²/L)	100 ft²/ga	I (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Smooth Plywood	67 ft² /gal (1.63 m²/L)	100 ft²/ga	I (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Dens-Deck Prime®	80 ft²/gal (1.96 m²/L)	100 ft²/ga	I (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Substrate Feltback Membrane Rates: Isocyanurate Facer	57 ft² /gal (1.41 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Isocyanurate Glass Facer	67 ft²/gal (1.63 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Smooth Plywood	57 ft² /gal (1.41 m²/L)	_	ıl (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Concrete Deck	50 ft²/gal (1.23 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	100 ft²/gal (2.47 m²/L)
Cellular Concrete	50 ft²/gal (1.23 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	100 ft²/gal (2.47 m²/L)
Dens-Deck®	57 ft² /gal (1.41 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	100 ft²/gal (2.47 m²/L)
Dens-Deck Prime®	67 ft²/gal (1.63 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Securock® Gypsum-Fiber	67 ft²/gal (1.63 m²/L)	100 ft²/ga	ıl (2.47 m²/L)	133 ft²/gal (3.27m²/L)
Corporate Office Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021			6915 Davan	l Unit of Sika Canada
Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365 Web: usa.sarnafil.sika.com	webmaster.sarnafil@us.s	sika.com	Tel.: (905) 6 1-800-2 Fax: (905) 6 Web: can.si	268-0479 70-5278

Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa.sarnafil.sika.com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Product Data Sheet
Edition: 6/2009
Version no: 0006



Stabond U-148A Adhesive

Overview:	Stabond U-148A is an elastomeric contact adhesive used within the Sarnafil System for flashing details. It is formulated for adhering Sika Sarnafil PVC membranes to substrate such as dry, clean wood, concrete and DensDeck® Prime Roof Board.
Composition:	See Material Safety Data Sheet for information. VOC Content: 0 g/L
Features:	Stabond U-148A is clear in color and has a cure time of 48 hours.
Packaging:	Stabond U-148A is packaged in a 5 gallon (18.9L) container weighing 35 lbs (16kg) and has a shelf life of 12 months.
Installation:	Stabond U-148A is formulated for roller application using a solvent resistant 3/4" nap paint roller. Surfaces to be bonded must be free of dirt, oil and grease. Clean the substrate with a solvent such as acetone or MEK. Lightly abrading the substrate will improve the bond. Over the properly prepared substrate, adhesive shall be applied in smooth, even coatings with no gaps, globs or similar inconsistencies. Apply the adhesive to the substrate and allow it to dry. Apply to the backside of the precut G410 or G459 flashing membrane and roll into coated substrate while adhesive is tacky to the touch
	DO NOT ALLOW TO DRY. If adhesive dries or moisture develops on coatings, mist coated substrate and backside of coated membrane with acetone in a spray bottle prior to bonding to substrate. Only an area, which can be completely covered in the same day's operation, shall be flashed. Please refer to the Technical Department for rates and substrate acceptance.
Availability:	Stabond U-148A is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System. Contact your Sika Sarnafil Regional Office or visit our website for further information.
Warranty:	As a Sika Sarnafil supplied accessory, Stabond U-148A is included in Sika Sarnafil's Warranty to the Building Owner.





Maintenance: Stabond U-148A requires no maintenance.

Technical: Sika Sarnafil provides technical support. Technical staff is available to advise

Applicators as to the correct installation method of Stabond U-148A.

Technical Data: TYPE: Synthetic Elastomeric

> **APPEARANCE: Clear Liquid**

SOLIDS: 19%

SHELF LIFE: 12 Months

STORAGE TEMP.: 60-80 degrees F (16-26C)

WT/GAL: 7 Lbs. (3kg.) **CURE TIME:** 48 Hours 150°F (66C) TEMP. LIMITS:

Stabond A Thinner THINNER:

- 4°F (-20C) **FLASH POINT: VISCOSITY:** 2500 cps

APPLICATION RATES

Substrate Rate Membrane Rate Gallons/100 ft2 Gallons / 100 ft2 1.50 to 2.00 0.50 to 1.00 L/m2 L/m2 0.61 to 0.82 0.20 to 0.41

Corporate Office

Sika Sarnafil

A Division of Sika Corporation

100 Dan Road

Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504

Fax: (781) 828-5365 Web: www.sikacorp.com

Email: webmaster.sarnafil@us.sika.com

Canada Office

Sika Sarnafil

A Business Unit of Sika Canada

6820 Davand Drive Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: www.sika.ca

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Edition: 08/2013 Version no.: 0005

Sarnastop

Overview:	Sarnastop is a 1 inch wide aluminum alloy bar used with Sarnafasteners to clamp the Sarnafil membrane to the roof deck, walls, curbs and at certain details.	
Composition:	Sarnastop is produced from 1/8 inch (3 mm) thick 6063 T6 extruded aluminum alloy with a mill finish. Sarnastop is provided with predrilled holes at 6 inches o.c. for attachment at base of walls, curbs and transition points.	
Features:	Sarnastop distributes the loads uniformly across a series of fastening points maximizing fastener pullout and backout resistance.	
Packaging:	Sarnastop is packaged in bundles of 25 pieces. Each Sarnastop is 10 ft long (3 m) and weighs 1.5 lbs (680 g).	
Installation:	Sarnastop is installed by Sika Sarnafil a Authorized Applicators. Sarnastop is positioned over the top of the membrane and fastened to the roof deck with Sarnafasteners. Fastener spacing is determined by Sika Sarnafil. The Sarnafasteners are set to a depth to clamp the membrane in place without damaging the substrate. Depending on the specific detail, a membrane coverstrip is welded over the Sarnastop for watertightness.	
Availability:	Sarnastop is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil roof system. Contact your Sika Sarnafil Regional Office or visit our website for further information.	
Warranty:	As a Sika Sarnafil-supplied accessory, Sarnastop is included in Sika Sarnafil's Standard or System Warranty to the Building Owner.	





Maintenance:	Sarnastop requires no maintenance.	
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise Applicators as to the correct installation method of Sarnastop.	

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

Canada Office Sika Sarnafil A Business Unit of Sika Canada 6915 Davand Drive Mississauga, ON L5T 1L5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa.sarnafil.sika.com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Edition: 3/2010 Version no.: 0004

Shop drawings to Indicate where these are needed

Sarnafastener - CD10

Overview:	Sarnafastener-CD10 is a nail-in fastener used with Sarnaplate-HD/CD to attach insulation boards directly to structural concrete roof decks.
Composition:	Sarnafastener-CD10 is made from carbon steel, treated with a CR-10 coating to meet the Factory Mutual 4470 criteria for corrosion resistance.
Features:	Sarnafastener-CD10 has a shank diameter of 0.215 inch (5.5 mm), a split diameter of 0.265/0.275 inch (6.7/7.0 mm) and a flat drive head with a 0.435 inch (11 mm) diameter. Sarnafastener-CD10 provides very high pull-out values in structural concrete deck and is not depth-sensitive. The point helps to locate the predrilled hole through a thick roof assembly.
Packaging:	Sarnafastener-CD10 is packaged in boxes of 500. See Technical Data section for lengths and weights.
Installation:	Pullout tests are required prior to job start for Technical evaluation. A 7/32 inch diameter pilot hole is drilled into the concrete deck at a depth at least 1/2 inch (12 mm) deeper than the depth of the CD10 fastener tip. For insulation attachment, the Sarnafastener-CD10 is placed through the Sarnaplate-HD/CD and insulation and into the top of the predrilled hole. A 2 lb (approx. 1 kg) short-handled sledge hammer is used to set the Sarnafastener-CD10 in place, not less than 1-1/4 inch (32 mm) into the deck. A punch may be needed to set the final depth. Care must be taken to not damage the concrete deck, to choose the correct pilot hole and fastener length and to not overdrive or underdrive the Sarnafastener-CD10.
Availability:	Sarnafastener-CD10 is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil roof system. Contact the Sika Sarnafil Regional Office or visit our website for further information.
Warranty:	As a Sika Sarnafil-supplied accessory, Sarnafastener-CD10 are included in Sika Sarnafil's Standard or System Warranty to the Building Owner.





Maintenance:	Sarnafastener-CD10 require	es no maintenance.	
Technical:	Sika Sarnafil provides techn advise Applicators as to the CD10.	• •	
Technical Data:	<u>Length</u>	Packaging	<u>Weight</u>
	2.0 inch (51 mm) 2.5 inch (63 mm) 3.0 inch (76 mm) 3.5 inch (89 mm) 4.0 inch (101 mm) 4.5 inch (114 mm) 5.0 inch (127 mm) 5.5 inch (139 mm) 6.0 inch (152 mm) 7.0 inch (178 mm) 8.0 inch (203 mm) 9.0 inch (228 mm) 10.0 inch (254 mm) 11.0 inch (279 mm) 12.0 inch (304 mm)	500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box 500/Box	12 lb (5.4 kg) 15 lb (6.8 kg) 18 lb (8.2 kg) 20 lb (9.1 kg) 23 lb (10.4 kg) 25 lb (11.3 kg) 28 lb (12.7 kg) 31 lb (14.1 kg) 34 lb (15.4 kg) 39 lb (17.7 kg) 45 lb (20.4 kg) 49 lb (22.2 kg) 55 lb (24.9 kg) 60 lb (27.2 kg) 65 lb (29.5 kg)

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504

Fax: (781) 828-5365 **Web:** www.sikacorp.com

Email: webmaster.sarnafil@us.sika.com

Canada Office

Sika Sarnafil

A Business Unit of Sika Canada 6820 Davand Drive Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: www.sika.ca

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Edition: 12/2011 Version no.: 0005

Sarnaplate

Overview:	Sarnaplate is a specially-designed stress plate used with Sarnafasteners to attach an insulation board directly to steel roof decks prior to the installation of the Sarnafil mechanically-attached or adhered roof membrane.
Composition:	Sarnaplate is a 3 inch (75 mm) square, 26 gauge stamping of SAE 1010 steel with an AZ 55 Galvalume coating to meet Factory Mutual 4470 criteria for corrosion resistance.
Features:	Sarnaplate has a high-rib design to increase strength and to provide protection to the membrane underside from abrasion by the fastener head.
Packaging:	Sarnaplate is packaged in boxes of 1000. Each box weighs approximately 54 lbs (24 kg).
Installation:	Sarnaplate is positioned on the surface of the insulation board. A Sarna- fastener is set through the center of it and drilled into the roof deck. The Sarnaplate clamps the insulation board in place.
Availability:	Sarnaplate is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil roof system. Contact your Sika Sarnafil Regional Office or visit our website for further information.
Warranty:	As a Sika Sarnafil-supplied accessory, Sarnaplate is included in Sika Sarnafil's Standard or System Warranty to the Building Owner.





Maintenance:	Sarnaplate requires no maintenance.
Technical:	Sika Sarnafil provides technical support. Technical staff is available to ad-
	vise Applicators as to the correct installation method of Sarnaplate.

Corporate Office Sika Sarnafil Inc. 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

Web: usa.sarnafil.sika.com Emai

Email: webmaster.sarnafil@us.sika.com

Canada Office Sika Sarnafil A Business Unit of Sika Canada 6820 Davand Drive

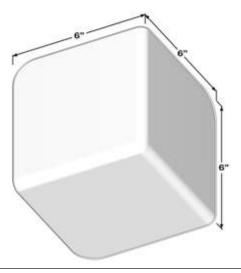
6820 Davand Drive Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Edition: 10/2011 Version no.: 0001

Sarnacorners - Inside



Overview:	Sarnacorners - Inside are a 60 mil (1.5 mm) thick prefabricated corner used as a time-saving and attractive part of a wall flashing detail. Sarnacorners - Inside come in EnergySmart white.
Composition:	Sarnacorners - Inside are injection molded with the same time-proven for- mulation used in our Sarnafil membranes.
Features:	Sarnacorners - Inside simplify the flashing procedures for inside corner details reducing the risk of leakage. They are available in one size which accomodates most inside corners. Sarnacorners - Inside are heat-welded in place, becoming an integral part of the flashing assembly.
Packaging:	Sarnacorners - Inside are packaged in boxes of 10 pieces. Each box weighs a total of 30 lbs (13.6 kg).
Installation:	After the wall flashings are installed, Sarnacorners - Inside are heat welded in place with a hand-held hot-air welder and roller. No caulking or sealants are necessary.
Availability:	Sarnacorners - Inside are available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System.
Warranty:	As a Sika Sarnafil supplied accessory, Sarnacorners - Inside are included in Sika Sarnafil's Standard or System Warranty.





Maintenance:	Sarnacorners - Inside require no maintenance. Periodic maintenance of a Sika Sarnafil system ensures extended performance and reduces life cycle costs. Consistent with industry practices, Sika Sarnafil recommends inspecting the roof system for damage, plugged drains, weathered sealants, etc. at least twice a year and after each storm.
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

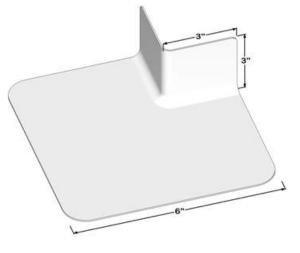
 Canada Office
Sika Sarnafil
A Business Unit of Sika Canada
6820 Davand Drive
Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Edition: 10/2011 Version no.: 0001

Sarnacorners - Outside



Overview:	Sarnacorners - Outside are a 60 mil (1.5 mm) thick prefabricated corner used as a time-saving and attractive part of curb and wall flashing details. Sarnacorners - Outside are available in EnergySmart white.
Composition:	Sarnacorners – Outside are injection molded with the same time-proven formulation used in Sarnafil membranes.
Features:	Sarnacorners – Outside simplify the flashing procedures for various penetrations, reducing the risk of leakage at outside corner details. They are available in one size which will accommodate most outside corners. Sarnacorners - Outside are heat-welded in place, becoming an integral part of the flashing assembly.
Packaging:	Each carton contains 20 outside corners. Each box weighs a total of 30 lbs (13.6 kg).
Installation:	After the curb or wall flashings are installed, Sarnacorners - Outside -are heat welded in place with a hand-held hot-air welder and roller. No caulking or sealants are necessary.
Availability:	Sarnacorners - Outside are available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System.
Warranty:	As a Sika Sarnafil supplied accessory, Sarnacorners - Outside are included in Sika Sarnafil's Standard or System Warranty.





Maintenance:	Sarnacorners - Outside require no maintenance. Periodic maintenance of a Sika Sarnafil system ensures extended performance and reduces life cycle costs. Consistent with industry practices, Sika Sarnafil recommends inspecting the roof system for damage, plugged drains, weathered sealants, etc. at least twice a year and after each storm.
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

 Canada Office Sika Sarnafil A Business Unit of Sika Canada 6820 Davand Drive Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Edition: 01/2013 Version no.: 0005

Sarnacircles

Sarnacircles are a 60 mil (1.2mm) thick prefabricated circle patch used as a time-saving and attractive part of a Sika Sarnafil roofing system. Sarnacircles are 4 1/2 in. round (11.4 cm) and come in EnergySmart White, Tan and Light Gray.	
Sarnacircles are injection molded with the same time-proven formulation used in our Sarnafil membranes.	
Sarnacircles simplify patching and reduce the risk of leakage at a void. Sarnacircles are heat-welded in place, becoming an integral part of the roofing/waterproofing system.	
Sarnacircles are packaged in boxes of 100 each weighing approx. 20 lbs.	
Sarnacircles are heat welded over the void (or at a T-joint) with a hand-held hot-air welder and roller. No caulking or sealants are necessary.	
Sarnacircles are available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System. Contact Sika Sarnafil for further information.	
As a Sika Sarnafil-supplied accessory, Sarnacircles are included in Sika Sarnafil's Standard or System Warranty.	





Maintenance:	Sarnacircles require no maintenance.
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

A Business I

Sika Sarnafil A Business Unit of Sika Canada 6915 Davand Drive Mississauga, ON L5T 1L5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Canada Office

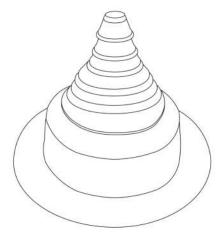
Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa.sarnafil.sika.com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Edition: 04/2013 Version no.: 0002

Sarnastack Universal



Overview:	Sarnastack Universal is a 60 mil (1.5 mm) thick prefabricated stack/pipe boot used as a time-saving and attractive part of a Sika Sarnafil roofing system. Sarnastack Universal comes in EnergySmart White, Tan and Light Gray.		
Composition:	Sarnastack Universal is injection molded with the same time-proven formulation used in our Sarnafil membranes.		
Features:	Sarnastack Universal simplifes the flashing procedures for stack/pipe details reducing the risk of leakage. They are available in one size which accomodates stack/pipe penetrations from 3/4" - 8" (19mm-203mm) in diameter. Sarnastack Universal is heat-welded in place, becoming an integral part of the Sika Sarnafil roofing system.		
Packaging:	Sarnastack Universal is packaged in boxes of 8 pieces and comes with custom made stainless steel clamps. Each box weighs a total of 30 lbs (13.6 kg).		
Installation:	Sarnastack Universal's lower flange is heat welded in place with a handheld hot-air welder and roller. The top is then clamped to the stack/pipe using the clamp provided. Sikaflex 1a is then used to caulk around the top		
Availability:	Sarnastack Universal is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System.		
Warranty:	As a Sika Sarnafil supplied accessory, Sarnastack Universal is included in Sika Sarnafil's Standard or System Warranty.		





Maintenance:	Sarnastack Universal requires no maintenance. Periodic maintenance of a Sika Sarnafil system ensures extended performance and reduces life cycle costs. Consistent with industry practices, Sika Sarnafil recommends inspecting the roof system for damage, plugged drains, weathered sealants, etc. at least twice a year and after each storm.	
Technical:	Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.	

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

 Canada Office

Sika Sarnafil
A Business Unit of Sika Canada
6915 Davand Drive
Mississauga, ON L5T 1L5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: can.sika.com

Disclaimer: All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Technical Data Sheet, product label and Material Safety Data Sheet which are available at usa.sarnafil.sika.com or by contacting 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Technical Data Sheet, product label and Material Safety Data Sheet prior to product use.

Edition: 5/2009 Version no.: 0005

Aluminium Tape

Overview:	Aluminum Tape is used as a separation barrier between contaminated materials and Sarnafil membrane.	
Composition:	Aluminum Tape is a 25/50 rated aluminum foil tape with a pressure sensitive adhesive applied to one side for bonding to substrates. The adhesive is covered with a paper liner.	
Features:	Aluminum Tape conforms to irregular surfaces. The paper liner removes eas to expose the pressure sensitive adhesive.	
Packaging:	Aluminum Tape is available in lengths of 150 ft (45.7 m) by 2 in (51 mm) wide and comes in rolls of 24 per case.	
Installation:	Aluminum Tape is to be applied to a clean, prepared surface. The supreparation may include but is not limited to scraping and wiping the sufface of any excessive contaminates. Once the surface has been prepared the Aluminum Tape to the prepared surface making sure all contaminated are covered completely with the Aluminum Tape. Once the Aluminum Tapplied, make sure it is securely in place and does not allow any contamto be exposed to the contact area of the Sarnafil membrane.	
Availability:	Aluminum Tape is available directly from Sika Sarnafil Authorized Applicators when used within a Sika Sarnafil Roofing or Waterproofing System. Contact Sika Sarnafil or visit our website www.sikacorp.com for further information.	
Warranty:	As a Sika Sarnafil-supplied accessory, Aluminum Tape is included in Sika Sarnafil's Standard or System Warranty.	





Maintenance:	Aluminum Tape requires no n	Aluminum Tape requires no maintenance.		
Technical:		Sika Sarnafil provides technical support. Technical staff is available to advise applicators as to the proper installation method.		
Technical Data:	Adhesion to Backing Adhesion to Steel Adhesive Backing Elongation Tensile Break Temperature Range	36 oz./in width (39 N/100 mm) 75 oz./in width (81 N/100 mm) Rubber 2 mil dead soft aluminum foil 11% 23 lbs/in width (403 N/100 mm) -20°F (-29°C) thru +150°F (66°C)		

Corporate Office

Sika Sarnafil A Division of Sika Corporation 100 Dan Road Canton, MA 02021

Tel.: (781) 828-5400 1-800-451-2504 Fax: (781) 828-5365

Web: www.sikacorp.com

Canada Office Sika Sarnafil

A Business Unit of Sika Canada 6820 Davand Drive

Mississauga, ON L5T 1J5

Tel.: (905) 670-2222 1-800-268-0479 Fax: (905) 670-5278 Web: www.sika.ca

Disclaimer: The information, and, in particular, the recommendation relating to the application and end-use of Sika Sarnafil products, are given in good faith based on Sika Sarnafil's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika Sarnafil recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, may be inferred from this information. The user of the product must determine the product's suitability for the intended application and purpose. Sika Sarnafil reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Email: webmaster.sarnafil@us.sika.com



PRODUCT DATA SHEET

MULTI-PURPOSE TAPE

Multi-Purpose Tape is a high performance sealant tape with superior surface tack that remains elastic and is designed to bond to Sarnafil and Sikaplan membranes and a variety of metals.

PRODUCT INFORMATION

USES

To seal the metal roof edge of buildings reducing air infiltration into the roof assembly, below edge tite metal, behind membrane flashing at termination details and to seal the overlaps of Vapor Retarder PE10.

AREAS OF APPLICATION

- Galvalume[®], Kynar 500[®], aluminized steel
- Zincalume®, galvanized metal, aluminum
- Siliconized polyester and polyvinyl flouride painted metals
- Glass, wood, concrete, fiber-reinforced plastics and similar substrates

FEATURES / BENEFITS

- High tensile strength and extensibility
- Useable in hot and cold climates
- Tenacious adhesion to substrates at temperatures as low as -5°F (-21°C)
- Odor free, formulated without asbestos fillers and contains a special additive which inhibits a broad spectrum of microbial activity
- Non-Corrosive
- Will not stain painted or unpainted surfaces
- Will not craze plastics

PRODUCT DATA

FORM

COMPOSITION

Multi-Purpose Tape is a white, high rubber content copolymer tape which contains isobutylene-isoprene.

DIMENSIONS

Width: 0.75 in (19 mm) Length: 50 ft (15.2 m) Thickness: 0.125 in (3 mm)

PACKAGING

14 rolls per case, 1 lb (0.5 kg) per roll

TECHNICAL DATA

TYPICAL PHYSICAL PROPERTIES			
Property	ASTM Test Method	Results	
Specific Gravity	D 792	1.35-1.47	
Percent Solids	C 771	100%	
Penetration	D 217	90-100 (9.0-10.0 mm) (300 gram cone @ 77°F)	
Vehicle Bleedout	C 772	No exudation of vehicle on Whatman No. 40 filter paper after exposure to 158°F (70°C) for 21 days.	
Flexibility	C 765	No cracking or loss of adhesion at -60°F (-51°C)	
Elongation	C 908	1150 % min.	
Adhesive Tensile Strength	C 907	20 psi min. (Cohesive failure)	
90 degree Peel Adhesion	D 3330	16 lbs/in. min. Cohesive failure (Method A 90 degree peel @ 77°F, 24 hrs. dwell backed with masking tape Galvalume®, Kynar 500®, galvanized, siliconized polyester)	
Weatherability	G 53	No cracking, bleeding or loss of rubbery characteristics	
Service Temperature Range		-60°F to 212°F (-51°C to 100°C)	
Application Temperature Range		-5°F to 120°F (-20°C to 49°C)	
Adhesion to cold Galvalume®		Excellent (8 lbs/in. AF @ 0°F 1 hour, 14 lbs/in. CF @ 77°F 1 hour)	
Water Resistance		@120°F (49°C) sealant will maintain adhesion to metal surface indefinitely submerged in water.	
Dimensional Stability		Sealant will no lose its shape in relation to bead size or diameter in transit or storage	
Hardness		Sealant hardness will not increase more than 30% max after aging in QUV test apparatus	
Chemicals		Excellent to water, ozonated water, water vapor, alsohols. Fair to weak for acids and bases. Poor to organic solvents	



SYSTEM INFORMATION			
INSTALLATION	Multi-Purpose Tape is installed by Sika Authorized Applicators to a clean surface. The surface preparation may include but is not limited to scraping and wiping free any excessive contaminates on both surfaces the Multi-Purpose Tape is to be in contact with. Once the surface has been prepared, apply the Multi-Purpose Tape to the substrate.		
AVAILABILITY	From Authorized Applicators when used within Sarnafil or Sikaplan roofing and waterproofing systems.		
MAINTENANCE	Standard maintenance of roofs should include regular inspection of flashings, drains and termination sealants at least twice a year and after each storm.		
WARRANTY	As a Sika supplied product, Multi-Purpose Tape is covered under Sika Corporation warrantees.		
LEGAL NOTES	All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-451-2504.		
	Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at usa.sarnafil.sika.com or by calling Sika's Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.		
	Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.		
	NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.		
SIKA CORPORATION – ROOFING	UNITED STATES 100 Dan Road Canton, MA 02021 800-451-2504 (p) 781-828-5365 (f) usa.sarnafil.sika.com webmaster.sarnafil@us.sika.com	SIKA CANADA INC. 6915 Davand Drive Mississauga, ON L5T 1L5 905-795-3177 (p) 905-795-3192 (f) can.sika.com marketing.construction@ca.sika.com	





PRODUCT DATA SHEET

SIKAFLEX®-1a

Sikaflex®-1a is a premium-grade, high-performance, moisture-cured, one-component polyurethane-based, non-sag elastomeric sealant used in certain Sarnafil® and Sikaplan® roofing or waterproofing system details. Typical applications include wall, curb and drain terminations. It is also used as a sealant at pipe penetrations and under certain metal flashings. Sikaflex-1a can be used as a pourable sealer pocket filler.

PRODUCT INFORMATION

USES

For Sarnafil and Sikaplan roofing and waterproofing system details.

AREAS OF APPLICATION

- Wall, curb and drain terminations
- Pipe penetrations
- Certain metal flashings
- Pourable sealer pocket filler

FEATURES / BENEFITS

- Bonds well to primed Sika PVC membranes and to common building materials
- High elasticity, cures to a tough, durable, flexible consistency with exceptional cut and tear resistance
- Easy to apply from the cartridge and has excellent workability characteristics
- Excellent resistance to aging and weathering
- Odorless, non-staining

TESTS

APPROVAL / STANDARDS

- Meets Federal Specification TT-S-0023C, Type II, Class A
- Meets ASTM C-920, Type S, Grade NS, Class 35
- Certified to the NSF/ANSI Standard 61 for potable water

PRODUCT DATA

FORM

COMPOSITION

Sealant

COLOR

White or Limestone

VOC CONTENT

40 g/l

Product Data Sheet SIKAFLEX-1a 05-12-14, VERSION #1 North America Sealant

	PACKAGING	
	10.1 fluid ounce (300 ml) disposable cartridge (24 cartridges per case),	
	25 lbs (11.3 kg) per case	
STORAGE	STORAGE CONDITIONS	
	Store at $40^{\circ}F-90^{\circ}F$ ($4^{\circ}C-35^{\circ}C$) in a dry, well-ventilated area. Condition material to $65^{\circ}F-75^{\circ}F$ ($18^{\circ}C-24^{\circ}C$) before using.	
	SHELF LIFE	
	12 months in an unopened cartridge	
TECHNICAL DATA	TYPICAL PHYSICAL PROPERTIES*	
	Shelf Life: 12 months	

Service Range: -40°F (-40°C) to 170°F (77°C)

Curing Rate:

Tack-free Time: 4 hours
Tack-free to Touch: 3 hours
Final Cure: 4 to 7 days

Tear Strength, ASTM D624: 55 lb./in. (9.63 N/mm) Shore A Hardness, ASTM D2240: 40±5 @ 21 days

Tensile Properties, ASTM D412:

Tensile Stress @ 21 days: 175 psi (1.21 MPa)

Elongation at Break: 550%

Chemical Resistance: Good resistance to water, diluted acids, and diluted alkalines

*Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and

SYSTEM INFORMATION

APPLICATION INSTRUCTIONS

SURFACE PREPARATION

curing conditions.

Clean all surfaces. Surfaces must be sound, clean, dry, frost-free, and free of oil and grease. Residues and any other foreign matter must be thoroughly removed. If rust is present on the penetration it must be wire brushed down to clean metal. A roughened surface will enhance the bond.

APPLICATION METHOD / TOOLS

The recommended application temperature for Sikaflex-1a is between 40°F (4°C) and 100°F (38°C). For cold weather applications, condition cartridges at approximately 70°F (21°C) and maintain that temperature until just prior to use.

Do not apply over damp surfaces as this will affect adhesion and may lead to bubbling within the sealant.

Whenever the Sikaflex-1a will come in contact with PVC membrane, solvent wipe the membrane and prime with Sarnacol 2170. This includes the walls of the pourable sealer pocket and the PVC membrane around the penetration below the pocket.

When used as a pourable sealer pocket filler, dispense the Sikaflex-1a into the pocket and tool it with a paint stirrer to work out entrapped air. Fill



North America Sealant



the pocket completely without using any filler material. Mound the Sikaflex-1a sufficiently to prevent water from collecting and ponding in the pocket. There must be a minimum of 1 inch (25 mm) between the walls of the pocket and the penetration to allow the sealant to be worked into any gaps or voids.

Use with adequate ventilation. Sikaflex-1a is easy to apply with conventional caulking equipment. Avoid air entrapment when applying sealant. Do not tool with detergent or soap solutions. Avoid contact with alcohol and other solvent cleaners during cure.

Use open cartridges the same day.

COVERAGE

15 linear feet (4.6 m) of 3/8 in. (9.5 mm) bead per cartridge.

PRODUCT LIMITATIONS

LIMITATIONS

- Since system is moisture-cured, permit sufficient exposure to air.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating element.
- Do not use in contact with bituminous/asphaltic materials.
- Do not apply when a moisture vapor transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Do not tool with detergent or soap solutions.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Avoid exposure to high levels of chlorine.

AVAILABILITY

From Authorized Applicators when used within Sarnafil or Sikaplan roofing and waterproofing systems.

MAINTENANCE

Standard maintenance of roofs should include regular inspection of flashings, drains and termination sealants as well as pourable sealer pockets at least twice a year and after each storm.

WARRANTY

Sika will replace defective Sikaflex-1a material provided the defect is identified by the Sika Authorized Applicator and acknowledged by Sika during the time of original installation and application. Maintenance of this sealant or of any other sealant after the original installation and application is not covered by the Sika Corporation Warrantees.

LEGAL NOTES

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at usa.sarnafil.sika.com or by calling 800-

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <u>usa.sarnafil.sika.com</u> or by calling Sika's Technical Service Department at 800-451-2504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Product Data Sheet SIKAFLEX-1a 05-12-14, VERSION #1 North America Sealant



SIKA CORPORATION – ROOFING	UNITED STATES	SIKA CANADA INC.
	100 Dan Road	6915 Davand Drive
	Canton, MA 02021	Mississauga, ON L5T 1L5
	800-451-2504 (p)	905-795-3177 (p)
	781-828-5365 (f)	905-795-3192 (f)
	usa.sarnafil.sika.com	<u>can.sika.com</u>
	webmaster.sarnafil@us.sika.com	marketing.construction@ca.sika.com



Elastomeric Coating Assembly



Technical Data Sheet

DOWSIL™ ALLGUARD Silicone Elastomeric Coating

Water-based silicone elastomer for waterproofing above-grade exterior masonry substrates

Features & Benefits

- Provides long-term waterproofing protection
- Maintains water protection properties even when exposed to sunlight, rain, snow, or temperature extremes

Composition

• One-component, pigmented, water-based silicone elastomer

Applications

 DOWSIL™ ALLGUARD Silicone Elastomeric Coating is designed to waterproof abovegrade exterior masonry substrates, such as concrete block, fluted block, brick, stucco, synthetic stucco, poured concrete, precast concrete, exterior insulation finish systems (EIFS), and previously coated masonry substrates.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Test ¹	Property	Unit	Result
ASTM D 2369	Solids Content	% by weight	58.6
		% by volume	50.1
ASTM D 1475	Specific Gravity	lb/gal (kg/L)	9.64 (1.155)
ASTM D 2196	Viscosity ²	cps (Pa s)	37,500 (37.5)
ASTM D 1849	High Temperature Stability (no change in viscosity)	days	> 28
EPA Method 24	Volatile Organic Content ³ (VOC)	g/L (lb/gal)	< 50 (< 0.42)
	As Cured		
ASTM D 2240	Durometer Hardness, Shore A	points	38
ASTM D 412	Tensile Strength	psi (MPa)	> 145 (1.00)
ASTM D 412	Elongation	%	600
ASTM D 1653	Permeance	English perms (ng/(m².Pa.s))	43.2 (2480)

^{1.} ASTM: American Society of Testing and Materials.

Brookfield HAV, spindle #3, 2 rpm.

^{3.} VOC includes all approved colors (EPA method 24 or 40 CFR 59.406 data).

Typical Properties (Cont.)

Test	Property	Unit	Result
ASTM D 522	Room Temperature, Flex, 1/8" mandrel		Pass
ASTM C 711	Low Temperature Flex, 1/4" mandrel		Pass
ASTM D 3274	Fungus Resistance		No growth
ASTM D 6904	Wind Driven Rain ⁴		Pass
ASTM D 2243	Freeze/Thaw Resistance		No Change

 Measured on coating system with two coats (10 mil dry film thickness) of DOWSIL ALLGUARD Silicone Elastomeric Coating.

Description

DOWSIL ALLGUARD Silicone Elastomeric Coating is a one-part, 100 percent water-based silicone elastomer supplied in three tint bases for pigmenting at distributor locations. The coating is typically applied in two coats. The use of DOWSIL™ ALLGUARD Primer may be necessary based on the substrate. The coating can be roller, brush, or spray applied. It cures to form a flexible membrane that is impervious to water but has the ability to "breathe," allowing water vapor to escape from inside the substrate. Its matte finish minimizes brush and roller marks. The coating provides long-term waterproofing protection, withstanding hurricane-force, wind-driven rain; normal movement imposed by seasonal thermal contraction and expansion; ultraviolet radiation; and the elements. The coating maintains its water protection properties even when exposed to sunlight, rain, snow, or temperature extremes.

Once pigmented, it is a ready-to-use material that can be applied between -6°C (20°F) and 38°C (100°F) to a clean, dry surface. The average drying time is 4 to 8 hours, depending upon temperature, humidity, and wind conditions. If the temperature drops below -6°C (20°F) after the coating is applied, the average drying time will increase. DOWSIL™ ALLGUARD Elastomeric Coating requires temperatures higher than -6°C (20°F) for a cumulative total of 24 hours to dry.

DOWSIL ALLGUARD Silicone Elastomeric Coating will attain full adhesion and physical properties in 7 to 14 days.

DOWSIL ALLGUARD Silicone Elastomeric Coating is available in more than 55 standard colors or can be custom colored to order.

How To Use

When properly applied and cured, DOWSIL ALLGUARD Silicone Elastomeric Coating provides a fast, easy, and effective method of keeping exterior above-grade surfaces waterproof.

Design Considerations

In many building designs, areas such as ledges and windowsills allow air-borne dirt and soot to accumulate. Surfaces exposed to concentrated water run-down may appear dirty or streaky over time and the coating may become difficult to clean. In those areas, drip edges should be installed before the coating is applied to rechannel water away from the surface to protect the long-term appearance of the facade.

How To Use (Cont.)

Design Considerations (Cont.)

The success of a drip edge is achieved by moving the runoff water away from the wall onto the drip edge, creating a non-uniform runoff.

A drip edge can be fabricated from the same material as the windowsills or from other formable composites. The drip edge can be mechanically adhered to the substrate or attached with DOWSIL™ 795 Silicone Building Sealant (see Figure 1).

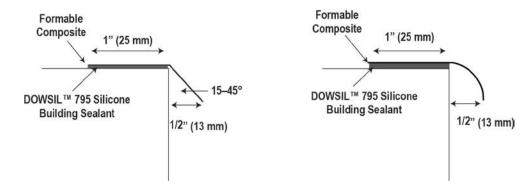


Figure 1: Drip Edge Design Consideration

Surface Preparation

All surfaces to be coated with DOWSIL ALLGUARD Silicone Elastomeric Coating must be prepared as described in the most recent DOWSIL ALLGUARD Silicone Elastomeric Coating Application and Maintenance Guide (Form No. 62-617). The following is a short reference guide for surface preparations.

All surfaces must be clean and free of dirt, frost, dust, oil, grease, mold, fungus, efflorescence, laitance, peeling coating, chalking coating, and any other foreign material. Green concrete must be allowed to cure 28 days before application of DOWSIL ALLGUARD Silicone Elastomeric Coating (see "Limitations"). Pressure clean, wire brush, or grind the wall surface to remove all of the above materials. Repair any damaged concrete, stucco, block, brick, masonry, or EIFS. Repair cracks larger than 1/16" (1.6 mm) with a material that is compatible with the substrate and DOWSIL ALLGUARD Silicone Elastomeric Coating. DOWSIL™ 790 Silicone Building Sealant or DOWSIL™ 791 Silicone Weatherpoofing Sealant can be used for crack repairs.

How To Use (Cont.)



Coating

A minimum of two coats of DOWSIL ALLGUARD Silicone Elastomeric Coating are necessary to achieve the required 10 mil (0.25 mm) minimum dry film thickness to attain protection against through-water penetration and to qualify for a project-specific warranty.

Apply the coating in a 10 mil (0.25 mm) wet thickness (a job-specific mockup is recommended to determine actual usage). Due to DOWSIL ALLGUARD Silicone being 50% solids, two thick wet coats (10- to 12-mil [0.25- to 0.30-mm]) will result in the required 10-mil (0.25-mm) dry coating thickness. On occasion, a third coat may be necessary on porous or rough surfaces to achieve the minimum dry film thickness.

Apply using a ¾ to 1½" (19 to 38 mm) nap, polyester, or 50/50 polyester/wool blend roller cover, nylon bristle brush, or airless sprayer. When applying the coating with a roller, apply it in a fan pattern to achieve uniform thickness. Always finish roller applications in the same direction to reduce visual surface texture differences. When applying with an airless sprayer, follow the spray application with a back roll of material to ensure a uniform coating and appearance.

Allow the coating to dry (typically 2 to 4 hours) before applying additional coats. Note: Do not thin or cut back DOWSIL ALLGUARD Silicone Elastomeric Coating.

After the additional coat has been applied, the average drying time is 4 to 8 hours, depending upon temperature, humidity, and wind conditions. DOWSIL ALLGUARD Silicone Elastomeric Coating will attain full adhesion and physical properties in 7 to 14 days.

How To Use (Cont.)

Low Temperature Application

If temperatures drop below -6°C (20°F), the coating will freeze on the surface until the temperature increases. This will not affect the cured properties of the coating, but will extend the drying time.

The coating should be dry to touch, not simply freeze between coats. Application equipment such as rollers and the tips of spraying equipment should be kept above 0°C (32°F) when not in use.

DOWSIL ALLGUARD Silicone Elastomeric Coating was developed to obtain good adhesion to the substrate without the need of a primer. To verify that this adhesion is sufficient, field adhesion tests must be performed as described in the DOWSIL ALLGUARD Silicone Elastomeric Coating Application and Maintenance Guide. If adhesion does not meet requirements, a field adhesion test with primer should be performed. To obtain a project-specific warranty, field adhesion testing, meeting the requirements, must be performed and documented. Surface adhesion tests on each type of substrate and each face of the structure must be field adhesion tested and acceptable per the DOWSIL ALLGUARD Silicone Elastomeric Coating Application and Maintenance Guide.

Maintenance

Walls should be inspected at least once a year. If coating becomes damaged, repair damaged portion to maintain weatherproofing performance. Any touch-ups or repairs to the coating can be completed by applying DOWSIL ALLGUARD Silicone Elastomeric Coating to the clean, dry area in accordance to the recommendations in this data sheet and the DOWSIL ALLGUARD Silicone Elastomeric Coating Application and Maintenance Guide.

Dow recommends routine cleaning to minimize dirt accumulation, following these guidelines:

- 1. Abrasive cleaners and cleaning equipment should never be used.
- Clean using pressurized water and a basic cleaning agent such as TSP (Trisodium Phosphate)¹ or Simple Green™. Water pressure should not exceed 1,500 psi (10.3 MPa) to clean the surface without removing the coating material from the wall surface. A small test patch should be done first to determine how long the cleaning agent should be left on the surface before rinsing.
- 3. Removal of stubborn marks may require the use of a soft bristle brush with the cleaning solution. Avoid stiff brushes that may abrade the coating.

Follow solvent manufacturer's recommended safe handling instructions and applicable federal, state, and local laws.

Handling **Precautions**

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life And Storage

Protect DOWSIL ALLGUARD Silicone Elastomeric Coating and DOWSIL ALLGUARD Primer from freezing. Store in a cool, dry place out of the weather. When properly stored in its original, unopened container above 1°C (34°F) and below 32°C (90°F), DOWSIL ALLGUARD Silicone Elastomeric Coating and DOWSIL ALLGUARD Primer have shelf lives of 9 months and 18 months, respectively, from date of manufacture. Refer to product packaging for "Use by Date."

If DOWSIL ALLGUARD Silicone Elastomeric Coating is stored at temperatures below -6°C (20°F) for longer than 8 hours, the coating will start to freeze. Allow the DOWSIL ALLGUARD Silicone Elastomeric Coating to sit at temperatures greater than 20°F for at least 8 hours or until the material thaws before application.

Packaging Information

DOWSIL ALLGUARD Silicone Elastomeric Coating and DOWSIL ALLGUARD Primer are available in 5 gal (19 L) pails (42–46 lb [19–21 kg] per pail depending on color).

Limitations

DOWSIL ALLGUARD Silicone Elastomeric Coating should not be applied:

- When there is a threat of rain within the next 24 hours or the relative humidity is in excess of 90 percent (because conditions would not permit complete surface drying)
- On below-grade applications
- On non-masonry substrates such as metal, wood, plastic, or asphaltic materials, or on tar-contaminated masonry
- As a decorative paint (DOWSIL ALLGUARD Silicone Elastomeric Coating is not warranted for aesthetics)
- On newly applied or green cementitious materials; Industry guidelines recommend at least 28 days cure before painting or coating the substrates (see SSPC, 2010 Painting Manual, Chapter 3.1. Concrete Surface Preparation)

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health And Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, www.consumer.dow.com or consult your local Dow representative.

Simple Green is a trademark of Sunshine Makers, Inc.

http://www.consumer.dow.com

LIMITED WARRANTY INFORMATION - PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

NOTE: DOWSIL ALLGUARD Silicone Elastomeric Coating is NOT warranted for use on single-family residential dwellings.

