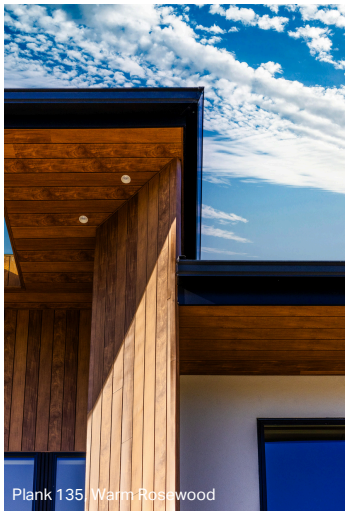
Bellara

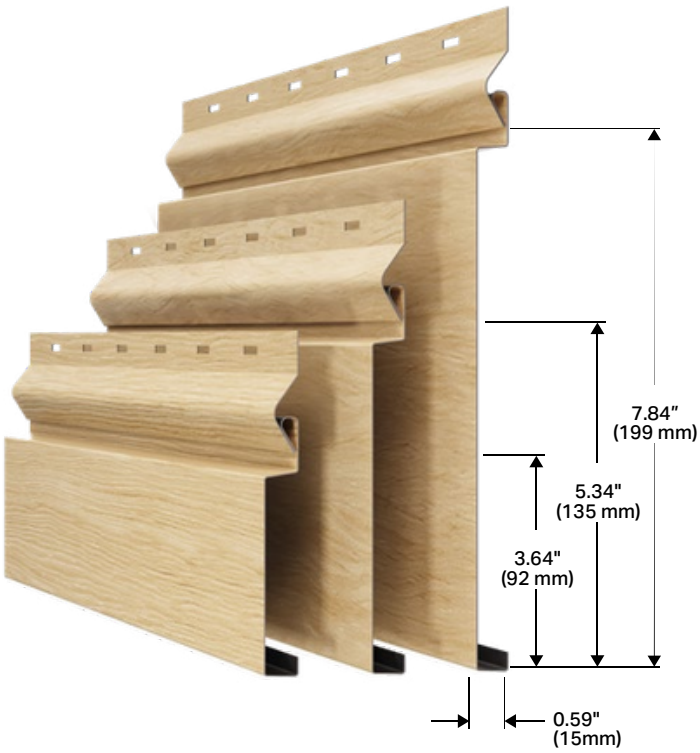
Data Sheet

Plank 90 | 135 | 200


Plank 135, River Rock Grey, Cambridge White, Mountain Cedar


Plank 135, Natural Maple


Plank 135, Warm Rosewood



Dimensions

Fastening System	**Hidden fasteners**
Application	**Wall**
Panel Width	Plank 90: **3.64" (92mm)** Plank 135: **5.34" (135mm)** Plank 200: **7.84" (199mm)**
Profile Depth	**0.59" (15mm)**
Screw Holes	Width: **0.187" (4.76mm)** Height: **0.63" (16.0mm)**
Screw Holes Spacing	**2.0" (50.8mm)** center to center

Panel Width	Gauges		Weight - LB/FEET
Plank 90	**24GA**	Non-Standard	**0.695**
Plank 90	**26GA**		**0.553**
Plank 135	**24GA**	Non-Standard	**0.836**
Plank 135	**26GA**		**0.666**
Plank 200	**24GA**	Non-Standard	**1.045**
Plank 200	**26GA**		**0.832**

*Weight-LB per linear feet may differ per paint finish, gauge and profile covered width. Please contact your sales representative for further assistance.

Installation Direction

Installation Orientation	**Horizontal & vertical**

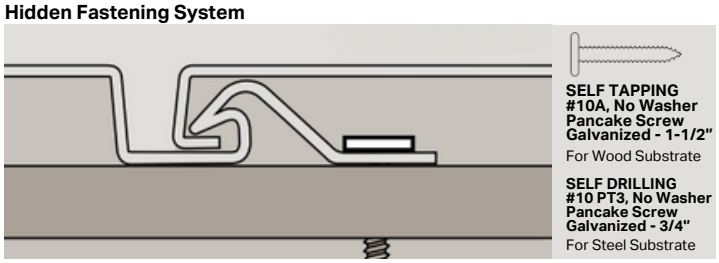
Lead Times

Standard Regional	**2–3 weeks**
Nonstandard	**Upon customer request**

Product Description

Our Bellara Plank steel siding series is an ideal choice for both residential and commercial projects. These 12-foot planks are incredibly versatile, serving a variety of purposes—from creating captivating wall features to crafting elegant soffits. The siding is designed to emulate natural wood, engineered from steel, and built to last a lifetime. For those who appreciate the beauty of woodgrain finishes, our Bellara Plank offers a hyper-realistic appearance without the environmental impact of using real wood.

Hidden Fastening System



Bellara

vicwest

Data Sheet

Plank 90 | 135 | 200

Expressence – Architectural Print Series

Warm Rosewood	Dark Rosewood	Charred Circle Sawn	Whitewashed	Smoked Barnboard	Brindle Barnboard	Obsidian Barnboard
18-0191	18-3280	18-3267	18-3269	18-0257	18-0270	18-3273
24, 26GA	26GA	26GA	26GA	26GA	26GA	26GA

Signature – SMP Coated metal

Deep Walnut	Mountain Cedar	River Rock Gray	Natural Maple	Regent Grey	Stone Grey	Cambridge White
18-2768	18-2772	18-0254	18-0255	56082	56071	56161
24, 26GA	24, 26GA	24, 26GA	24, 26GA	26GA	24, 26GA	24, 26GA

Signature Matte – SMP Coated metal

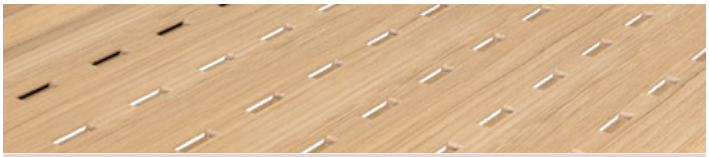
Ebony	Graphite	Espresso
9822	9821	10276
24, 26GA	24, 26GA	24, 26GA

Colour Availability

Please scan the QR code or click here to confirm colour availability for Bellara Plank 90, 135, & 200 by region.

Perforation*

7.0in2/ft2 (48,613mm2/m2)



Punch Size	Ventillation Area	% Open Air
0.5"(12.7mm) x 0.125"(3.175mm)	7.0in2/ft2 (48,613mm2/m2)	4.86%

*Only available for 135mm Plank.
Note: perforation voids warranty.

Warranty

Weather XL
Expressence

SHERWIN-WILLIAMS. Coil Coatings

Principal Characteristics

- Realistic 5/8" thick architectural profile
- Durable locking system
- Galvanized steel to protect from rust and UV exposure
- Longer lasting than traditional wood siding
- Hidden fastener system
- Pre-punched holes
- Complete system of colour-matched trims
- Sidelap design eliminates the need for clips or unsightly butt joints

Engineering & Environmental Documents

CSSBI EPD
XCarb EPD
Bellara EPD
Install Guide
Bellara Negative Wind Load - ASD
Bellara Negative Wind Load - LSD

Plank 135, Brindle Barnboard

Plank 135, Warm Rosewood

Bellara

Data Sheet

Plank 90 | 135 | 200

Matching Trim System

Inside Corner
TM01-301

Outside Corner
TM04-304

Conversion Moulding
TM15-315

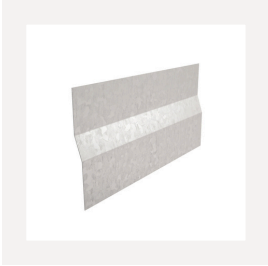
Partition Moulding
TM21-321

J-Trim
TMMLD-313

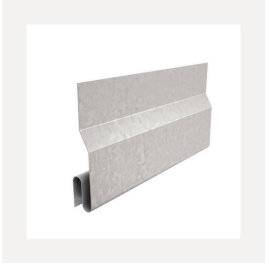
A & B 2-Piece J-Trim
TMMLD-350A
TMMLD-350B

Drip Edge
TM22-322

Z-58 Support Trim
TMMLD-Z58



Universal Starter
TMMLD-USTART



Starter Strip
TMMLD-352

Perforated Anti-Rodent
Starter Strip
TMMLD-351

ProKut Kit (UKUT8)

Description

While cutting Bellara Steel Siding can be done using traditional tools, we've developed a custom cutter to make installation even easier.

- Cut all Bellara profiles including Plank 90, 135, and 200, Board & Batten 140 and 260, and Lap Siding 155
- Kit includes 4 different blades
- Assembly required
- Available nationally

Plank 135, Brindle Barnboard

Plank 135, Warm Rosewood

CARLISLE SYNTEC SYSTEMS

Sure-Flex™ PVC Membrane

Overview

Carlisle's Sure-Flex PVC is an advanced-formula, heat-weldable PVC membrane that is designed for long-term weatherability and performance. The physical properties of the membrane are enhanced by a tenacious, anti-wicking, weft-inserted polyester fabric that is encapsulated by thick PVC-based top and bottom plies. The membrane's smooth surfaces facilitate a permanent weld for a consistent, watertight, monolithic roof assembly.

Features and Benefits

- Exceptional fire and chemical resistance
- Fully formulated monolithic top-ply for long-term weatherability
- Enhanced physical characteristics meeting ASTM D4434 Type IV requirements
- Antimicrobials throughout the polymer for increased resistance to mold, mildew, and algae growth
- Highly flexible with a wide window of weldability for ease of installation
- Available colors:

White | Gray | Tan | Light Gray | Slate Gray

Sustainable Attributes

Carlisle SynTec Systems' focus has always been innovation - Innovation to solve problems, improve performance, reduce labor, and above all, improve sustainability. Carlisle is committed to driving sustainable and efficient processes in the design and manufacturing of our products.

- PVC polymer derived from less than 50% fossil fuels
- Up to 10% pre-consumer recycled content
- Fully recyclable when used in mechanically-attached systems
- 3rd-party verified Environmental Product Declaration available
- California Title 24 compliant*
- See Radiative Properties and LEED® Information tables below for additional attributes

*White only.

Installation

Installation requires minimal labor and few components, making it quick and easy to install. Sheet seams are heat-welded together using hot-air welding equipment to create a monolithic, water-tight roof system.

Sure-Flex PVC is suitable for the following roof systems:

Fully-Adhered – membrane is adhered to a suitable substrate utilizing an appropriate bonding adhesive

Mechanically Fastened – membrane is attached to a suitable substrate utilizing plates and fasteners which are overlapped with membrane

Induction-Welded – membrane is attached to a suitable substrate via an induction welding tool being placed over the membrane where a fastened PVC induction welding plate is located to weld the two components together

Review Carlisle specifications and details for complete installation information.

Sure-Flex PVC Membrane

Precautions

- Sunglasses that filter out ultraviolet light are strongly recommended when working on reflective membranes. Roofing technicians should dress appropriately and wear sunscreen.
- Exercise caution when walking on wet membranes; membranes may be slippery when wet or due to frost and ice buildup.
- Care must be exercised while working close to a roof edge when the surrounding area is snow-covered, as the roof edge may not be clearly visible.
- Use proper stacking procedures to ensure sufficient stability of the materials.
- Store membrane in its original, undisturbed plastic wrap in a cool, shaded area and cover with light-colored, breathable, waterproof tarpaulins.
- Membrane that has been exposed to the weather or contaminated with dirt must be prepared with Sure-Flex PVC/KEE HP Membrane Cleaner prior to hot-air welding.

Supplemental Approvals, Statements and Characteristics

- Sure-Flex PVC meets or exceeds the requirements of ASTM D4434 Standard Specification for Poly (Vinyl Chloride) Sheet Roofing. Sure-Flex PVC is classified as Type III and/or Type IV as defined by ASTM D4434.
- Sure-Flex reinforced PVC was tested for dynamic puncture resistance per ASTM D5635-04 using the most recently modified impact head. 50-mil thick membrane was watertight after an impact energy of 22.5 J (16.6 ft-lbf), which passes the ASTM D4434 requirement.
- Sure-Flex reinforced PVC was tested for static puncture resistance per ASTM D5602-98 and exceeded 33 lbf (145 N), which passes the ASTM D4434 requirement.

Typical Properties and Characteristics

Physical Property	ASTM D4434 Requirement	50-mil	60-mil	80-mil
Thickness over scrim, in. (mm) ASTM D4434 optical method average of 3 areas	0.016 min (0.40)	0.022 (0.559)	0.027 (0.686)	0.037 (0.940)
Weight, lbs/ft² (kg/m²)	No requirement	0.33 (1.61)	0.40 (1.95)	0.55 (2.68)
Breaking strength (MD × CD), lbf (N) ASTM D751 grab method	275 min (1223)	320 x 300 (1423 x 1334)	330 x 300 (1468 x 1334)	360 x 330 (1601 x 1468)
Elongation break of reinforcement (MD x CD), % ASTM D751 grab method	25 min	30 x 30	30 x 30	30 x 30
Tearing strength (MD x CD), lbf (N) ASTM D751 proc. B, 8 in. x 8 in.	90 min (400)	100 x 120 (445 x 534)	100 x 130 (445 x 578)	100 x 132 (445 x 587)
Low temperature bend, ASTM D2136, no cracks 5x at -40°C	PASS	PASS (-40°C)	PASS (-40°C)	PASS (-40°C)
Linear dimensional change, % ASTM D1204, 6 hours at 176°F	±0.5 max	0.4	0.4	0.4
Ozone resistance, no cracks 7x ASTM D1149, 100pphm, 168 hrs	PASS	PASS	PASS	PASS
Water absorption resistance, mass % ASTM D570, 166 hours at 158°F water	±3.0 max	2.0	2.0	2.0
Field seam strength, lbf/in. (kN/m) ASTM D1876 tested in peel	No requirement	25 (4.4) min 60 (10.5) typ.	25 (4.4) min 60 (10.5) typ.	25 (4.4) min 60 (10.5) typ.
Water vapor permeance, Perms, ASTM E96 proc. B	No requirement	0.10 max 0.05 typ	0.10 max 0.05 typ	0.10 max 0.05 typ
Puncture resistance - Federal, lbf (kN) FTM 101C, method 2031	No requirement	280	320	380
Puncture resistance - Dynamic, J (ft-lbf) ASTM D5635	20 (14.7)	PASS	PASS	PASS
Puncture resistance - Static, lbf (N) ASTM D5602	33 (145)	99 (440)	99 (440)	99 (440)
Xenon-Arc resistance, no cracks/ crazing 10x, ASTM G155 0.35 W/m² at 340-nm, 63°C B.P.T. 12,600 kJ/m² total radiant exposure 10,000 hours	PASS	PASS	PASS	PASS
Properties after heat aging ASTM D3045, 56 days at 176°F Breaking strength, % retained Elongation reinf., % retained	90 min 90 min	90 min 90 min	90 min 90 min	90 min 90 min
Air Permeance ASTM E2178	No requirement	PASS	PASS	PASS

Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

CARLISLE SYNTEC SYSTEMS

Sure-Flex PVC Membrane

Radiative Properties for Cool Roof Rating Council (CRRC) and LEED

Physical Property	Test Method	White PVC	Tan PVC	Gray PVC	Light Gray PVC	Slate Gray PVC
CRRC - Initial Solar Reflectance	ASTM C1549	0.87	0.72	0.59	0.74	N/A
CRRC - Solar Reflectance after 3 years	ASTM C1549 (uncleaned)	0.70	0.56	0.49	0.59	N/A
CRRC - Initial Thermal Emittance	ASTM C1371	0.89	0.87	0.89	0.88	N/A
CRRC - Thermal Emittance after 3 years	ASTM C1371 (uncleaned)	0.88	0.87	0.89	0.89	N/A
Solar Reflective Index (SRI)	ASTM E1980	110	89	70	91	N/A
Solar Reflective Index (SRI) SRI after 3 years	ASTM E1980	86	65	57	70	N/A

Green Building Information

Pre-Consumer Recycled Content	10%
Post-Consumer Recycled Content	0%
Solar Reflectance Index (SRI)	White: 110, Tan: 89, Gray: 70, Light Gray: 91, Slate Gray: N/A
Global Warming Potential (GWP)	50-mils: 5.5, 60-mils: 6.6, 80-mils: 8.8
Volatile Organic Compounds (VOC) Content	N/A
Manufacturing Location(s)	Greenville, IL
Corporate Sustainability Report (CSR) Availability	Yes
Environmental Product Declaration (EPD) Availability	

800-479-6832 | P.O. Box 7000 | Carlisle, PA 17013 | Fax: 717-245-7053 | **www.carlislesyntec.com**

BUILDING TRUST

PRODUCT DATA SHEET

Sarnafil® S 327-60 EnergySmart

60 mil thick PVC thermoplastic membrane

PRODUCT DESCRIPTION

Sarnafil® S 327-60 EnergySmart Roof Membrane is a PVC thermoplastic membrane produced with an integral polyester reinforcement for high strength, is highly reflective, with heat-weldable seams, and a unique lacquer coating applied to the top of the membrane to reduce dirt pick up. Sarnafil® S 327-60 EnergySmart utilizes the Pro-Weld™ visual indicator to provide real-time feedback that the proper seam welding temperature and speed settings are being used during installation.

USES

Used in mechanically attached applications with various fastening methods, over various substrates. It can also be used in adhered applications to approved substrates.

AREAS OF APPLICATION

- New Roofs
- Reroofs
- Recovers

CHARACTERISTICS / ADVANTAGES

- Highly reflective
- Excellent tear strength resistance
- Factory applied lacquer coated to reduce dirt pick up
- Hot-air welded seams for long-term performance
- Proven membrane performance
- Superior fire resistance
- Pro-WeldTM visual welding temperature indicator[1]

[1] Available on White, Gray and Tan mebranes

APPROVALS / STANDARDS

- FM Global
- Underwriters Laboratories
- Underwriters Laboratories of Canada
- ICC Code Compliance – ESR 1157
- Miami-Dade County
- Florida Building Code
- NSF/ANSI 347: Platinum Certified
- California Title 24
- LEED / Green Globes

PRODUCT INFORMATION

Chemical Base	High-quality, PVC membrane containing ultraviolet light stabilizers, flame retardant and polyester scrim reinforcement with a unique lacquer coating on the top surface.	
Recycled Content	9% Pre-consumer, 1% Post-consumer	
Reinforcing Material	Polyester	
Packaging	**60 mil (1.5 mm) Membrane** 10 ft x 100 ft (3 m x 30 m) roll, 389 lbs (177 kg) per roll 8 rolls per pallet 5 ft x 100 ft (1.5 m x 30 m) roll, 195 lbs (89 kg) per roll 12 rolls per pallet Coverstrip: 8" x 100 ft (20 cm x 30 m) roll, 25 lbs (12 kg) per roll 25 per pallet	
Appearance / Color	▪ Top: White, Tan, and Reflective Gray ▪ Bottom: Gray	
Shelf Life	N/A	
Storage Conditions	Store rolls on pallets and fully protected from the weather with clean canvas tarpaulins. Unvented polyethylene tarpaulins are not accepted due to the accumulation of moisture beneath the tarpaulin in certain weather conditions that may affect the ease of membrane weldability.	
Overall Thickness	60 mil (1.5 mm), minimum thickness 45 mil	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Thickness Above Scrim	27 mil 16 mil	(ASTM D-7635) (ASTM Type III D-4434 Spec. Requirement)

TECHNICAL INFORMATION

Resistance to Static Puncture	Pass 33 lbf (15 kg)	(ASTM D-5602) (ASTM Type III D-4434 Spec. Requirement)
Resistance to Dynamic Puncture	Pass 14.7 ft-lbf (20 J)	(ASTM D-5635) (ASTM Type III D-4434 Spec. Requirement)
Tensile Strength	305 lbf (1356 N) 200 lbf (890 N)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Elongation at Break	28.5 & 29.5% MD & CMD[1] 15 & 15% MD & CMD[1] [1] MD = Machine Direction, CMD = Cross Machine Direction.	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Linear Dimensional Change	-0.12% 0.5%	(ASTM D-1204) (ASTM Type III D-4434 Spec. Requirement)
Tear Strength	48 lbf (213 N) 45 lbf (200 N)	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
Seam Strength	Pass 75% of original[2] [2] Failure occurs through membrane rupture not seam failure.	(ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)

Retention of Properties after Heat Ageing	Tensile Strength, % of original: Pass Elongation, % of original: Pass Tensile Strength, % of original: 90 Elongation, % of original: 90	(ASTM D-751) (ASTM D-751) (ASTM Type III D-4434 Spec. Requirement)
UV Exposure	10,000 hours 5,000 hours	(ASTM G-154) (ASTM Type III D-4434 Spec. Requirement)
	Cracking (7x magnification): None Crazing (7x magnification): None	
Weight Change after Immersion in Water	2.0% ± 3.0%	(ASTM D-570) (ASTM Type III D-4434 Spec. Requirement)

Solar Reflectance

EnergySmart Colors	Initial Solar Reflectance[1]	3-Year Solar Reflectance[1]
EnergySmart White[2]	0.84	0.76
EnergySmart Tan[2]	0.73	0.65
EnergySmart Reflective Gray[2]	0.73	0.66

[1] Solar Reflectance testing according to ASTM C1549.
[2] Meets LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.

Thermal Emittance

EnergySmart Colors	Initial Thermal Emittance[1]	3-Year Thermal Emittance[1]
EnergySmart White[2]	0.86	0.85
EnergySmart Tan[2]	0.85	0.86
EnergySmart Reflective Gray[2]	0.89	0.88

[1] Thermal Emittance testing according to ASTM C1371, Slide Method.
[2] Meets LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.

Solar Reflectance Index

EnergySmart Colors	Initial Solar Reflectance Index[1]	3-Year Solar Reflectance Index[1]
EnergySmart White[2]	105	93
EnergySmart Tan[2]	89	78
EnergySmart Reflective Gray[2]	90	80

[1] Solar Reflectance Index calculated according to ASTM E1980.
[2] Meets LEED, Green Globes, and California's Title 24 criteria for Low and Steep Slope applications.

Low Temperature Bend	Pass Pass -40°F (-40°C)	(ASTM D-2136) (ASTM Type III D-4434 Spec. Requirement)

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

AVAILABILITY/WARRANTY

AVAILABILITY
From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil or Sikaplan systems.

WARRANTY

Upon successful completion of the installed roof by the Sika Authorized Applicator in compliance with Sika requirements, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

APPLICATION INSTRUCTIONS

APPLICATION

Sarnafil S 327 is rolled out after proper preparation of the approved substrate and fastened to the roof deck with appropriate mechanically attached system with Sarnafasteners in accordance with Sika's technical requirements. Sarnafil S 327 seams are heat-welded together by trained operators using hot-air welding equipment. Different mechanically attached systems require different application methods. Please consult Sika's Specifications or Applicator Handbook for detailed installation procedures.

MAINTENANCE

Standard maintenance of Sarnafil systems should include regular inspections of flashings, drains, and termination sealants at least twice a year and after each storm.

OTHER RESTRICTIONS

See Legal Disclaimer.

LEGAL DISCLAIMER

- **KEEP CONTAINER TIGHTLY CLOSED**
- **KEEP OUT OF REACH OF CHILDREN**
- **NOT FOR INTERNAL CONSUMPTION**
- **FOR INDUSTRIAL USE ONLY**
- **FOR PROFESSIONAL USE ONLY**

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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 the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **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.**

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