

**Document Name:** 

# Technicals Specifications for Parking Lot Improvements [OAT]

Prepared By

INGENIUM

PROFESSIONAL GROUP



## Ingenium Professional Group PSC 654 Muñoz Rivera Ave. – Suite 1838, San Juan PR 00917

654 Muñoz Rivera Ave. – Suite 1838, San Juan PR 00917 Progreso Street # 50 E – Suite 202, Fajardo PR 00738 Tels. 787.918.5890 / 5891 | Email: <u>info@ingenium.group</u>

## **TABLE OF CONTENTS**

1.TABLE OF CONTENTS	1
2.GE LIGHTING Evolve LED Garage Light [EG2R]	iError! Marcador no definido6
3.WATERPROOF – AUTO GARD - NEOGARD	7-11
4.BACKER ROD_TREMCO	12-13
5.SIKALASTIC-710 BASE [TRAFFIC SYSTEM]	14-18
6.SIKALASTIC-715 TOP COAT	19-22
7.SIKALASTIC FTP PRIMER	23-26
8.VULKEM 45SSL [TREMCO]	27-29
9.VULKEM 116 DATA SHEET	30-31

# **Evolve™ LED Garage Light**

(EG2R)





## **Product Features**

High quality lighting meets long life and controllability with the Evolve™ LED Garage Light, EG2R. This fixture features an advanced LED optic specifically designed for applications such as parking decks with low mounting heights to provide high uniformity and excellent vertical light distribution with reduced glare, illuminating your parking area with effective security light levels.

Features include programmable motion sensing, step dimming and daylight harvesting. GE's optical approach with reflective optics and prismatic lens provides a low-glare solution ideal for low mounting height garage applications. Additionally, up-lighting is a standard photometric feature in the EG2R, providing a driver-friendly appearance, and eliminating the "cave-effect" that often occurs without up-light.

The Evolve LED Garage Light significantly reduces energy and maintenance expenses over the life of the system with a rated life of L70, 100,000 hrs and is also RoHS compliant, giving you a lead and mercury free lighting solution.

## **Applications**

• Garage, warehouse, walkway and stairway lighting.

## Housing

 Die-cast aluminum heat sink to maximize heat transfer for electrical components and provide long LED life.

## **LED & Optical Assembly**

- Evolve™ light engine consisting of reflective technology designed to optimize application efficiency and produce a low-glare lighting solution.
- Utilizes high brightness LEDs, 70 CRI typical at 4000K and 5000K.

## **Lumen Maintenance**

• Projected L70(10K) > 100,000 at Ta 25C per IES TM-21.

## **Ratinas**

- **(4)**/• **(4)** listed per UL 1598.
- UL 8750 LED equipment in Lighting Products.
- IP65 rated optical enclosure per ANSI C136.25-2009.
- Vibration rating at 1G (min) on 2 axis, per ANSI C136.31-2010.
- Driver Rated Life >=100,000 hrs for fixture max ambient at or below 40°C.
- Temperature rated at -40° to 50°C ambient.
- Title 24 compliant with occupancy sensor.
- DLC Listed

Please refer to the DLC QPL website for the latest and most complete information.  ${\bf www.designlights.org/QPL}$ 

## **Mounting**

- Available with seven different mounting options providing a versatile product to meet almost any field installation condition.
  - Mounting options with wet location rating: 04, 05, 06, 11. 20.
  - Mounting options with damp location rating: 01, 02.

## **Finish**

- Corrosion resistant polyester powder painted, minimum 2.0 mil. thickness.
- Standard colors: Gray & White.
- RAL and custom colors available.

## **Electrical**

- 120-277 volt.
- System power factor is >90% and THD <20%
- Class "A" Sound rating.
- EMI: Title 47 CFR 15 Class A.
- Integral surge protection exceeds ANSI C136.2-2015 "Basic" (6kV/3kA - 120 Events).
- Dimming:
  - Wired 0-10V continuous dimming. Order with "D" Option.
  - Optional standalone motion sensor dimming.

## **Ordering Number Logic**

**Evolve™ LED Garage Light (EG2R)** 



A5 EG2R

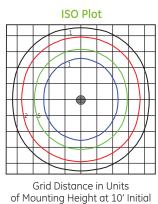
PROD. ID	VOLTAGE	OPTICAL CODE	LENS TYPE	DRIVE CURRENT	LED COLOR TEMP	MOUNTING ARM	COLOR	OPTIONS
E = Evolve G = Garage 2 = Housing R = Round	<b>0</b> = 120-277	<b>A5</b> = 56W, 5040 Lumens	P = Prismatic Polycarbonate Lens	S = Standard	<b>50</b> = 5000K <b>40</b> = 4000K	01 = Primary Electric Disconnect with MPM-C* 02 = Primary Electric Disconnect with MPM-3PR* 04 = Primary Electric Disconnect with MPM-3PRW 05 = Primary Electric Disconnect with MPM-3PRTFV 06 = Primary Electric Disconnect with MPM-WW 11 = 3/4 * Rigid Pendant 20 = Surface mounting with slide on wiring box * Damp location rated only	GRAY = Gray WHTE = White	D = Dimming* H = Motion Sensor * D option required for External Dimming (Option not needed with Option D)
PHC	TOMETRIC	OPTIC		AL INITIAL MENS	TYPICAL SY WATTAG		IES FILE NUMBE	:R

PHOTOMETRIC TYPE	OPTICAL CODE	TYPICAL LUM		TYPICAL SYSTEM WATTAGE	IES FILE NUMBER	
		4000K	5000K	120-277V	4000K	5000K
Type V Symmetric	A5	5,040	5,040	56	EG2R_A5PS40120-277V.IES	EG2R_A5PS50120-277V.IES

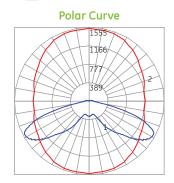
## **Photometrics**

**Evolve™ LED Garage Light (EG2R)** 

# EG2R Type V – Symmetric (A5) 5,040 Lumens, 5000K (EG2R\_A5PS50\_\_-120-277V.IES)



Footcandle Values at Grade

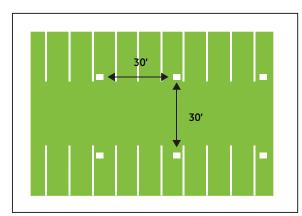


- Vertical plane through horizontal angle of maximum candlepower at 90°

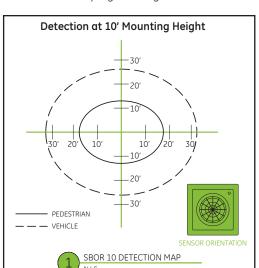
  — Horizontal cone through vertical angle
- of maximum candlepower at 62.5°

## **H-Motion Sensing Option:**

- Recommended for lower mounting heights between 8-15 ft, this sensor provides excellent pedestrian coverage of greater than 2x the mounting height.
- In a garage application, 360° of coverage is achievable, allowing the sensor detection to closely match the lighting distribution of a typical garage.
- Comes standard with 50% dimmed light output with no occupancy, and full power at occupancy.
- Comes standard with a 5 minute occupancy time delay and a 5 minute ramp-down to the 50% dimmed level.
  - \* Standard options may be reprogrammed in the field. Contact manufacturer for reprogramming instructions.



In a typical parking garage application with a mounting height of 10 ft, the sensor's coverage for walking motion extends out (30 ft.)

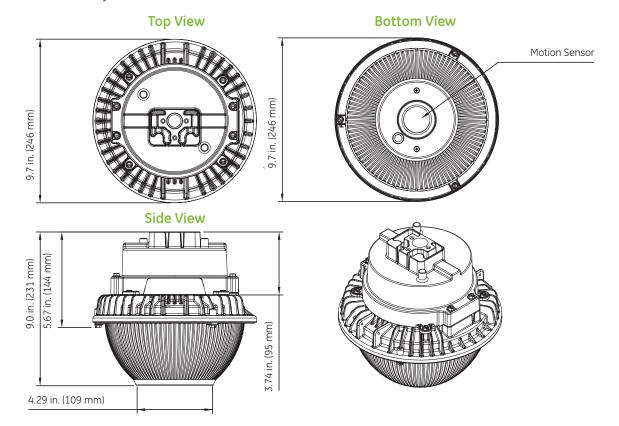


Motion Sensor

## **Product Dimensions**

## **Garage with Motion Sensor**

No major dimensional differences between SKUs with motion sensor and without.



## **Product Dimensions**

## Mounting Option Code: 01, 20

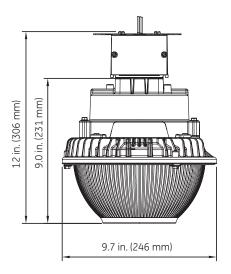
Primary Electric Disconnect w/MPM-c (01) Surface Mounting w/Slide on wiring Box (20)

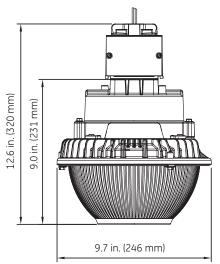
Primary Electric Disconnect with MPM-3PR (02) Primary Electric Disconnect with MPM-3PRW (04)

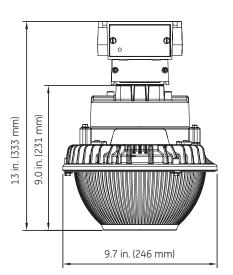
Mounting Option Code: 02, 04

## **Mounting Option Code: 05**

Primary Electric Disconnect w/MPM-3PRTFW (05)

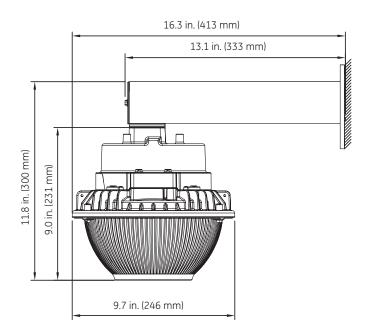






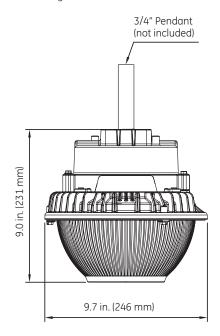
## **Mounting Option Code: 06**

Primary Electric Disconnect w/MPM-WW (06)



## **Mounting Option Code: 11**

3/4" Rigid Pendant (standard) (11)



• Approximate Net Weight 8-10 lbs



## www.gelighting.com

GE and the GE Monogram are trademarks of the General Electric Company. All other trademarks are the property of their respective owners. Information provided is subject to change without notice. All values are design or typical values when measured under laboratory conditions. GE Lighting is a business of the General Electric Company. © 2017 GE.

Auto-Gard Section 07 18 16 Vehicular Traffic Coatings



## **PART 1 GENERAL**

## 1.1 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install a fluid-applied vehicular traffic coating system as outlined in this specification to new or existing concrete surfaces.
- B. The manufacturer's application instructions for each product used are considered part of this specification and should be followed at all times.
- C. Related Sections:
  - 1. Section 03 30 00: Cast-in-Place Concrete
  - 2. Section 03 40 00: Precast Concrete
  - 3. Section 07 90 00: Joint Protection

## 1.2 SYSTEM DESCRIPTION

- A. Auto-Gard shall be a complete system of compatible materials supplied by Neogard to create a seamless waterproof membrane with integral wearing surface.
- B. Auto-Gard shall be designated for application on the specific type of deck indicated on the drawings.

## 1.3 SUBMITTALS

- A. Technical Data: Submit manufacturer's product data and Safety Data Sheets (SDS) on each product.
- B. Samples: Submit samples of specified vehicular traffic coating system. Samples shall be construed as examples of finished color and texture of the system only.
- C. Applicator Approval: Submit letter from manufacturer stating applicator is approved to install the specified vehicular traffic coating system.
- D. Warranty: Submit copy of manufacturer's standard warranty.

## 1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: Auto-Gard, as supplied by Neogard, is approved for use on this project.
- B. Applicator Qualifications: Applicator shall be approved to install specified system.
- C. Requirement of Regulatory Agencies: Comply with applicable codes, regulations, ordinances and laws regarding use and application of coating systems.
- D. Field Sample:
  - 1. Install a field sample of at least 100 square feet at the project site or pre-selected area as agreed to by owner's representative, applicator and manufacturer.
  - 2. Apply material in accordance with manufacturer's written application instructions.
  - 3. Field sample will be standard for judging color and texture on remainder of project.
  - 4. Maintain field sample during construction for workmanship comparison.
  - 5. Do not alter, move, or destroy field sample until work is completed and approved by Owner's representative.

## 1.5 DELIVERY, STORAGE AND HANDLING

A. Delivery: Materials shall be delivered in original sealed containers, clearly marked with supplier's name, brand name and type of material.

Issued: October 2020 Page: 1/5

# **Auto-Gard**Section 07 18 16 Vehicular Traffic Coatings



B. Storage and Handling: Recommended material storage temperature is 75°F (23°C). Handle products to prevent damage to container. All materials shall be stored in compliance with local fire and safety requirements. Do not store at high temperatures or in direct sunlight.

## 1.6 PROJECT CONDITIONS

- Prior to starting work, read and follow the SDS and container labels for detailed health and safety information.
- B. Only proceed with application of materials when substrate temperature is 40°F (4°C) or greater. Do not proceed if precipitation is imminent. Only apply to dry, clean surfaces; do not apply to damp, dirty, or frosty surfaces. Ambient temperature should be a minimum 40°F (4°C) and rising, and more than 5°F (3°C) above dew point. Take special precautions when ambient and/or substrate temperatures are approaching, at, or above 100°F (38°C); it may be necessary to limit material application to evening hours for exterior exposed decks.
- C. Coordinate waterproofing work with other trades. Applicator shall have sole right of access to the specified area for the time needed to complete the application and allow the vehicular traffic coatings to cure adequately.
- D. Protect plants, vegetation or other surfaces not to be coated against damage or soiling.
- E. Keep products away from spark or flame. Do use equipment which may produce sparks during application and until all vapors have dissipated. Post "No Smoking" signs.
- F. Maintain work area in a neat and orderly condition, removing empty containers, rags and trash daily from the site.

#### 1.7 WARRANTY

A. Upon request, Neogard shall offer a manufacturer's standard warranty for institutional, commercial, industrial, and high-rise/multi-family residential projects only, after substantial completion of the application and receipt of a properly executed warranty request form.

## PART 2 MATERIALS

#### 2.1 MANUFACTURER

A. Neogard, A part of Hempel, 2728 Empire Central, Dallas, TX 75235, (800) 321-6588, www.neogard.com.

Page: 2/5

#### 2.2 MATERIALS

- A. Auto-Gard materials (Hempel product numbers in parentheses):
  - 1. Primer: Concrete and metal primers as required by Neogard.
  - 2. Flashing Tape: 86218 (62ZJB) flashing tape.
  - 3. Reinforcing Fabric: 86220 (63BJB) reinforcing fabric (Tietex T-272).
  - Sealant: 70991 (47XJB) urethane sealant.
  - 5. Aggregate: 7992 (66010) silica quartz sand.
  - 6. Base Coat: 70410 (45010) urethane coating.
  - 7. Wear Coat: 7430 (57040) series urethane coating.
  - 8. Topcoat: 7430 (57040) series urethane coating.

## 2.3 MATERIAL PERFORMANCE CRITERIA

- A. Typical physical properties of cured 70410 urethane used on this project are:
  - 1. Tensile Strength, ASTM D412, 1,200 psi
  - 2. Elongation, ASTM D412, 400%
  - 3. Permanent Set, ASTM D412, < 10%
  - 4. Tear Resistance, ASTM D1004, 100 pli
  - 5. Shore A, ASTM D2240, 70–75

## Auto-Gard Section 07 18 16 Vehicular Traffic Coatings



- 6. Adhesion, ASTM D4541, 300 psi
- 7. Water Resistance, ASTM D471, < 3% @ (7 days)
- 8. Taber Abrasion, ASTM D4060, 30 mg (1,000 CS-17)
- B. Typical physical properties of cured 7430 series urethane used on this project are:
  - Tensile Strength, ASTM D412, 2,500 psi
  - 2. Elongation, ASTM D412, 400%
  - 3. Permanent Set, ASTM D412, < 30%
  - Tear Resistance, ASTM D1004, 200 pli
  - 5. Shore A, ASTM D2240, 75-80
  - 6. Adhesion, ASTM D4541, 300 psi
  - 7. Water Resistance, ASTM D471, < 3% (7 days)
  - 8. Taber Abrasion, ASTM D4060, 25 mg (1,000 CS-17)
- C. Auto-Gard exceeds requirements for ASTM C957, "Standard Specifications for High Solids Content, Cold-Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface."
- D. Auto-Gard meets Class A requirements for ASTM E108, "Standard Test Methods for Fire Tests of Roof Coverings."
- E. The above tested results are typical values. Individual lots may vary up to 10% from the typical value. Further technical information can be found at www.neogard.com.

## 2.4 ACCESSORIES

A. Miscellaneous materials such as cleaning agents, adhesives, reinforcing fabric, backer rod, deck drains, and others shall be compatible with the specified vehicular traffic coating system.

## 2.5 MIXING

Comply with manufacturer's instructions for mixing procedures.

## PART 3 EXECUTION

## 3.1 EXAMINATION

- A. Concrete: Verify that the work done under other sections meets the following requirements:
  - 1. That the concrete deck surface is free of ridges and sharp projections. If metal forms or decks are used they should be ventilated to permit adequate drying of concrete.
  - 2. That the concrete was cured for a minimum of 28 days. (Minimum of 4,000 psi compressive strength). Water-cured treatment of concrete is preferred. The use of concrete curing agents, if any, shall be of the sodium silicate base only; others require written approval by Neogard.
  - 3. That the concrete was finished by a power or hand steel trowel followed by soft hair broom to obtain light texture or "sidewalk" finish.
  - 4. That damaged areas of the concrete deck be restored to match adjacent areas. Use 70714/70715-09 (45062) clear 100% solids epoxy and sand for filling and leveling.

## 3.2 PREPARATION

- A. Cleaning: Surfaces contaminated with oil or grease shall be vigorously scrubbed with a stiff bristle broom and a strong non-sudsing detergent such as Neogard 8500 BioDegradable Cleaner (089JB). Thoroughly wash, clean, and dry. Areas where oil or other contaminants penetrate deep into the concrete may require removal by mechanical methods.
- B. Shot-Blasting: Required surface preparation method for remedial construction is also the preferred method for new construction. Mechanically prepare surface by shot-blasting to industry standard surface texture (ICRI's CSP3–CSP4) without causing additional surface defects in substrate. Shot-blasting does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to ensure proper bonding of the deck coating.

Issued: October 2020 Page: 3/5

## Auto-Gard Section 07 18 16 Vehicular Traffic Coatings



- C. Acid Etching: If shot blasting is not practical, treat concrete surfaces with 10% to 15% solution of muriatic acid to remove laitance and impurities. After acid has stopped foaming or boiling, immediately rinse thoroughly with water. Re-rinse as required to remove muriatic acid solution. Acid etching does not remove deep penetrating oils, grease, tar or asphalt stains. Proper cleaning procedures should be followed to ensure proper bonding of the deck coating.
- D. Cracks and Cold Joints: Visible hairline cracks (less than 1/16" in width) in concrete and cold joints shall be cleaned, primed as required and treated with thoroughly mixed 70410 base coat material a minimum distance of 2" on each side of crack to yield a total thickness of 30 dry mils. Large cracks (greater than 1/16" in width) shall be routed and sealed with 70991 sealant. Sealant shall be applied to inside area of crack only, not applied to deck surface. Detail sealed cracks with thoroughly mixed 70410 base coat material a distance of 2" on each side of crack to yield a total thickness of 30 dry mils.
- E. Control Joints: Seal control joints equal to or less than 1" in width with 70991 urethane sealant. Depending on the width to depth ratio of the joint, backing material and a bond breaker may be required. Install sealants in accordance with ASTM C 1193 and manufacturer's instructions. Detail sealed joints with thoroughly mixed 70410 base coat material a distance of 2" on each side of joint to yield a total thickness of 30 dry mils.
- F. Flashing Tape: Install 86218 flashing tape and 86220 reinforcing fabric where indicated on the drawings and/or where required by the manufacturer prior to the application of base coat.
- G. Surface Condition: Surface shall be clean and dry prior to coating.

## 3.3 APPLICATION

A. Factors That Affect Dry Film Thickness: Volume of solids, thinning, surface profile, application technique and equipment, overspray, squeegee, brush and roller wet out, container residue, spills and other waste are among the many factors that affect the amount of wet coating required to yield proper dry film thickness. To ensure that specified dry film thickness is achieved, use a wet mil gauge to verify actual thickness of wet coating applied, adjusting as needed for those factors which directly affect the dry film build.

## B. Seed and Lock Method:

- 1. Primer: Where required, thoroughly mix primer and apply at a rate of 300 sf/gal (0.33 gal/100 sf) to all concrete surfaces. Within 24 hours of application of primer, base coat must be applied. If base coat cannot be applied within 24 hours, inspect surface for contaminants, clean surface as necessary, and re-prime.
- 2. Base Coat: Thoroughly mix 70410 base coat material and apply at a rate of 60 sf/gal (1.66 gal/100 sf or 26 wet mils), to yield 20 dry mils. Extend base coat over cracks and control joints which have received detail treatment.
- 3. Wear Coat: Thoroughly mix 7430 series wear coat material and apply at a rate of 150 sf/gal (0.66 gal/100 sf or 10 wet mils) to yield 8 dry mils, and immediately broadcast aggregate, evenly distributed, into wet coating at the rate of 15 lbs/100 sf. When dry, remove excess aggregate.
- 4. Heavy Duty Areas Only: For heavy traffic areas such as ticket booths, spiral ramps, turn areas, or in other areas subjected to high traffic abrasion, heavy duty application is required. In such areas, thoroughly mix 7430 wear coat material and apply a second wear coat at a rate of 100 sf/gal (1.0 gal/100 sf or 16 wet mils) to yield 12 dry mils, and immediately broadcast additional aggregate, evenly distributed, into wet coating at a rate of 10 lbs/100 sf. When dry, remove excess aggregate.
- 5. Topcoat: Thoroughly mix 7430 topcoat material and apply at a rate of 100 sf/gal (1.0 gal/100 sf or 16 wet mils) to yield 12 dry mils.
- 6. Standard system coating thickness is 40 dry mils exclusive of primer and aggregate. Heavy duty application areas will yield 52 dry mils exclusive of primer and aggregate.

## C. Seed and Backroll Method:

Primer: Where required, thoroughly mix primer and apply at a rate of 300 sf/gal (0.33 gal/100 sf) to all
concrete surfaces. Within 24 hours of application of primer, base coat must be applied. If base coat
cannot be applied within 24 hours, inspect surface for contaminants, clean surface as necessary, and
re-prime.

# Auto-Gard Section 07 18 16 Vehicular Traffic Coatings



- Base Coat: Thoroughly mix 70410 base coat material and apply at a rate of 60 sf/gal (1.66 gal/100 sf or 26 wet mils), to yield 20 dry mils. Extend base coat over cracks and control joints which have received detail treatment.
- 3. Wear Coat (Heavy Duty Areas Only): For heavy traffic areas such as ticket booths, spiral ramps, turn areas, or in other areas subjected to high traffic abrasion, heavy duty application is required. In such areas, thoroughly mix 7430 series wear coat material and apply at a rate of 100 sf/gal (1.0 gal/100sf or 16 wet mils) to yield 12 dry mils, and immediately broadcast aggregate, evenly distributed, into wet coating at the rate of 10 lbs/100 sf. When dry, remove excess aggregate.
- 4. Topcoat: Thoroughly mix 7430 topcoat material and apply at a rate of 60 sf/gal (1.66 gal/100 sf or 26 wet mils) to yield 20 dry mils. Immediately broadcast aggregate, evenly distributed, into wet coating at a rate of approximately 15 lbs/100 sf and backroll to encapsulate aggregate.
- Standard system coating thickness is 40 dry mils exclusive of primer and aggregate. Heavy duty application areas will yield 52 dry mils exclusive of primer and aggregate.
- D. Applicator is responsible for applying sufficient coating to the substrate.

## 3.4 CLEANING

- A. Remove debris resulting from completion of coating operation from the project site.
- B. Refer to the Neogard Vehicular Deck Coating Systems Maintenance Manual for typical cleaning methods.

## 3.5 PROTECTION

A. After completion of application, do not allow traffic on coated surfaces for a period of at least 72 hours at 75°F (23°C) and 50% relative humidity, or until completely cured.

## **END OF SECTION**

Issued by: Hempel (USA) – Neogard Auto-Gard

This Guide Specification supersedes those previously issued.

Manufacturer warrants that the physical properties of the product reported above will meet the standards and deviations of the associated ASTM test method.

MANUFACTURER HEREBY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY
IMPLIED WARRANTY OF MERCHANTABILITY AND/OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. Buyer must make its own determination of
the suitability of any product for its use, whether such product is used alone or in combination with other materials. To the extent this or any of Manufacturer's products is
proven to be defective, Buyer's sole remedy shall be limited to the replacement of such defective product, exclusive of any costs of labor. MANUFACTURER SHALL NOT BE
LIABLE OR OBLIGATED FOR ANY LOSS OR CONSEQUENTIAL OR OTHER DAMAGE INCURRED DIRECTLY OR INDIRECTLY BY BUYER OR ANY OTHER PERSON
OR ENTITY THAT ARISES IN ANY WAY IN RELATION TO THIS OR ANY OF MANUFACTURER'S OTHER PRODUCTS. Nothing contained herein shall be construed to
constitute inducement or recommendation to practice any invention covered by any patent without authority of the owner of the patent. No Applicator is or should be viewed
as an employee or agent of Manufacturer. AutoGard-GSCSI ksk 10202020.docx

Neogard®, A part of Hempel 2728 Empire Central - Dallas, Texas 75235 - Phone (214) 353-1600 - Fax (214) 357-7532 - www.neogard.com

Issued: October 2020 Page: 5/5



# TREMCO® BACKER ROD

## **DESCRIPTION**

Tremco backer rod is an extruded round, closed-cell, low density polyethylene foam material with a skin-like outer texture. It is highly flexible and an ideal non-absorbent compressible backup material. It is compatible with butyl, polysulfide, acrylic polyurethane, silicone and most other cold applied sealant compositions.

## **BASIC USES**

It is inserted into a joint to control sealant depth to create a backstop to:

- · Allow proper sealant tooling.
- Allow proper sealant wetting of the joint surfaces.
- To yield a proper bond breaker between the backer rod and sealant.

It can also be used as a temporary seal. Commonly used in glazing installations, window and door applications, expansion joints, curtain wall joints, partitions, log construction, pavement joints, repairs, precast units and copings.

## **PACKAGING**

Continuously wound on reel, and packed in hand holes carton for handling. Except for the

1-1/2 and 2 inch sizes. Backer rods of 1-1/2 and 2 inch sizes are packed in 6 feet lengths. Available in a wide variety of diameters.

## SIZES AVAILABLE

Diameter	Per Carton	
Inch (Metric)	Roll	Feet (Meters)
1/4 (6mm)	2 Spools	4,000 (1,219)
3/8 (9mm)	1 Spools	2,100 (640)
1/2 (12mm)	2 Spools	2,500 (762)
5/8 (15mm)	2 Spools	1,550 (472)
3/4 (19mm)	1 Spools	1,100 (335)
7/8 (22mm)	1 Spools	850 (259)
1 (25mm)	1 Spools	600 (182)
1-1/4 (31mm)	1 Spools	400 (121)
1-1/2 (38mm)	6ft Lengths	420 (128)
2 (50mm)	6ft Lengths	240 (73)

Note: Sizes greater than 2 inches, please contact local sales representative for details.

## **TECHNICAL DATA**

Tremco Backer Rod is chemically inert and will resist oil, gasoline and most other solvents. It will not stain nor adhere to sealant materials and is non-exuding. Refer to Table (I) for typical physical properties.

## **INSTALLATION**

Joint or opening must be cleaned, dry and free of obstructions. Refer to Table (II) to select proper rod diameter and cut to length or use directly from spool. With a blunt instrument or roller, uniformly install rod at the level recommended by the sealant manufacturer, specifier or architect involved.

Generally, the depth of the joint after the backer rod is installed is one half the widths. Very large and very small joints vary in terms of this depth to width ratio. DO NOT PUNCTURE, STRETCH OR OVERLY COMPRESS.

## **TECHNICAL SERVICE**

Technical advice or suitability of material for specific application and end-use requirements is available from the manufacturer. Refer to Safety Data Sheet (SDS) and label for precautionary information.

## **TREMCO QUALITY**

Tremco reserves the right to continue to improve its product technology. Information contained in the Data Sheet could be superseded by changes in performance characteristics. These changes, should they occur, will not be to the detriment of the product.

## **LIMITATIONS**

Tremco backer rod should not be used with hot-melt adhesives and sealants where their temperature is over 160 °F (70 °C).

## WARRANTY

Tremco warrants its backer rods to be free of defects in materials, but makes no warranty as to appearance or colour. Since methods of application and on-site conditions are beyond our control and can affect performance. Tremco makes no other warranty. expressed or implied including warranties of MERCHANTABILITY **FITNESS** and PARTICULAR PURPOSE, with respect to Tremco backer rods. Tremco's sole obligation shall be, at its option, to replace or refund the purchases of the quantity of Tremco backer rods proven to be defective and Tremco shall not be liable for any loss or damage.



## Table (I)

PHYSICAL PROPERTY ANALYSIS			
Physical Property	Test Method	Value	
Density (nominal)	ASTM D1622	2.0 lbs / cu. ft.	
Tensile Strength	ASTM D1623	50 PSI	
Compression Deflection	ASTM D1621	5 PSI @ 25%	
Water Absorption	ASTM C1016	0.03 gm / cc	
Water Absorption	ASTM C509	0.02% by volume	
Temperature Range		- 90°F to 210°F (- 67°C to 98°C)	

Water Absorption <sup>1</sup> "Determination of water absorption by sealant (joint filler) materials"
Water Absorption <sup>2</sup> "Standard specifications for cellular elastomeric preformed gasket and sealing material.
Historic standard no longer applicable to Backer Rod.

## Table (II)

ROD SIZE TO JOINT WIDTH			
Joint Width (Inch)	Rod Diameter – Inch (Metric)		
1/8 – 3/16	1/4 (6mm)		
3/16 – 1/4	3/8 (9mm)		
1/4 – 3/8	1/2 (12mm)		
3/8 – 1/2	5/8 (15mm)		
1/2 – 5/8	3/4 (19mm)		
5/8 – 3/4	7/8 (22mm)		
3/4 – 7/8	1 (25mm)		
7/8 – 1	1-1/4 (31mm)		
1 – 1-1/4	1-1/2 (38mm)		
1-1/4 — 1-1/2	2 (50mm)		



## PRODUCT DATA SHEET

# Sikalastic®-710 Base

SINGLE COMPONENT, ELASTOMERIC, CRACK-BRIDGING, WATERPROOFING BASE COAT

## PRODUCT DESCRIPTION

Sikalastic®-710 Base is a single component, aromatic, moisture cured, elastomeric polyurethane coating intended for use as the waterproofing base coat under polyurethane or epoxy wearing surfaces for pedestrian and vehicular applications, and as the waterproofing base coat with a protective polyurethane top coat under a separate wearing course such as concrete, and tile in a setting bed.

## **USES**

Sikalastic®-710 Base may only be used by experienced professionals.

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arenas
- Plaza and rooftop decks
- Balconies

## **CHARACTERISTICS / ADVANTAGES**

- Excellent crack-bridging properties and flexibility, even at low temperatures
- Resistant to water and deicing salts
- Alkaline resistant

## PRODUCT INFORMATION

Packaging	5 gal. pails, 50 gal. (net) drums	
Shelf Life	12 months in original, unopened containers	
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using.	
Solid content by volume	71 %	(ASTM D-2697)
Volatile organic compound (VOC) content	241 g/L	(ASTM D-2369-81)
Viscosity	6500 ± 3000 cps	

Product Data Sheet Sikalastic®-710 Base August 2018, Version 01.01 020812040020000032

## TECHNICAL INFORMATION

Shore A Hardness	75 +/- 5 (75 °F (24 °C) and 50 % R.H.)	(ASTM D-2240)
Tensile Strength	800 +/- 100 psi (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Elongation at Break	500 +/- 50 % (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Tear Strength	170 +/- 25 pli (75 °F (24 °C) and 50 % R.H.)	(Die C, ASTM D-624)
Chemical Resistance	Resistant to deicing salts, and alkaline concrete and adhesives	cementitious mortars/tile

## **APPLICATION INFORMATION**

Coverage	50 sf/gal. at 32 wet mils (23 dry mils)
	Coverage rates provided are intended to achieve required wet film thickness under optimal conditions. Additional material may be required depending on substrate surface roughness and porosity, material and substrate temperatures, and other site-dependent factors. This will result in a lower coverage rate.

## **APPLICATION INSTRUCTIONS**

## SURFACE PREPARATION

Surface must be clean, dry and sound with an open texture. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to application.

**Concrete** - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means (CSP 3-4 per ICRI guidelines).

**Plywood** - Should be clean and smooth, APA and exterior grade, not less than 1/2" thick, and spaced and supported according to APA guidelines. Seams should be sealed with Sikaflex® 2c or 1a and detailed and may need embedded fabric reinforcement.

**Metal** - Should be thoroughly cleaned by grinding or blast cleaning to near white metal (SSPC SPS-10).

## **Priming**

**Primer Selection** - Determine maximum moisture content of concrete substrate by weight with a Tramex CME or CMExpert type concrete moisture meter.

NOTE: For new plywood decks, a primer is not required.

**Sikalastic® Primer** – For concrete decks with a maximum moisture content of 4 % by weight, apply Sikalastic® Primer with a flat squeegee or phenolic resin core roller at approximately 250 - 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing,

and puddles are avoided. Sikalastic® Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® FTP Primer – For concrete decks with a maximum moisture content of 4 % by weight, and for weathered plywood decks, apply Sikalastic® FTP Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® FTP Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® PF Lo-VOC Primer - For concrete and plywood decks with a porous or rough surface, and for metal flanges and penetrations, use Sikalastic® PF Lo-VOC Primer. For exterior exposed concrete decks with a maximum moisture content of 4 % by weight, interior protected concrete decks with a maximum moisture content of 5 % by weight, and plywood decks, apply Sikalastic® PF Lo-VOC Primer with a flat squeegee or phenolic resin core roller at approximately 200 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. For exterior exposed concrete decks with a maximum moisture content of 5 % by weight, two applications of Sikalastic® PF Lo-VOC Primer are required. Refer to separate primer data sheet for additional information.

Sikalastic® FTP LoVOC Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® FTP LoVOC Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® FTP LoVOC Primer with a flat squee-



gee or phenolic resin roller at approximately 175 - 220 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® MT Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® MT Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® MT Primer with a flat squeegee or phenolic resin roller at approximately 175 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® Recoat Primer – For existing polyurethane coatings, incidental exposed concrete deck areas, and as an interlaminate primer, apply Sikalastic® Recoat Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work will into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Recoat Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

## Detailing

Non-structural cracks up to 1/16" - Apply a detail coat of Sikalastic®-710 Base at 32 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

Cracks and joints over 1/16" up to 1 inch - Rout and seal with Sikaflex® sealant and allow to cure. Apply a detail coat of Sikalastic®-710 Base at 32 wet mils, 4" wide, centered over the crack. Allow to become tack free before over coating.

**Joints over 1 inch** - Should be treated as expansion joints and brought up through the Sikalastic®-710 Base water-proofing membrane and sealed with Sikaflex® sealant.

Fabric Reinforcement – An optional 3" or 6" wide Sikalastic Flexitape Heavy fabric strip may be embedded within the base coat. Flexitape width shall be chosen such that a minimum of 1" tape is embedded on either side of the crack/joint. Apply additional coating as required to fully embed the Flexitape in the coating.

**Panelized Joints** - Panelized joints that are restrained across the joint and without differential movement may be sealed and the deck coating, including detail coat, applied over the joint.

NOTE: movement within panelized joints may cause deterioration of the aggregated wear coat, in which case the joints should be treated as expansion joints and brought up through the Sikalastic Traffic System and sealed with Sikaflex® 2c or 1a sealant. For additional questions please contact Sika Technical Services.

Expansion Joints - Should be extended through System .

#### MIXING

Thoroughly mix coating using a mechanical mixer (Jiffy) at slow speed until a homogenous mixture and uniform color is obtained (typically 1 minute). Use care not to allow the entrapment of air into the mixture.

## **APPLICATION**

Apply at the recommended coverage rate (see appropriate System Guide) using a notched squeegee or trowel, and backroll using a phenolic resin core roller. Extend base coat over entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 16 hours at 70 °F and 50 % R.H. or until tack fee before top coating. Allow coating to cure for a minimum of 72 hours before installing separate wear course.

#### Removal

Remove liquid coating immediately with dry cloth. Once cured, coating can only be removed by mechanical means.

## **LIMITATIONS**

- To avoid dew point conditions during application relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperature.
- Maximum moisture content of substrate: 4 % by weight with Sikalastic® Primer, Sikalastic® FTP primer, Sikalastic® PF LoVOC Primer and 6 % by weight with Sikalastic® FTP LoVOC Primer, Sikalastic® MT primer.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 95 °F (35 °C).
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect materials with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements.
- Do not thin with solvents.
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions).
   Surface irregularities may reflect through the cured system.



- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather as there is the potential for bonding problems.
- When applying over existing coatings compatibility and adhesion testing is recommended.
- Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and for vapors into the building/structure during product application and cure.
- On grade, lightweight concrete, asphalt pavement, and applications where chained or studded tires may be used should not be coated with Sikalastic® Traffic Systems.
- Unvented metal pan decks or decks containing a between-slab membrane require further technical evaluation and priming with a moisture-tolerant primer contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion.
- Sikalastic®-710 Base is not UV stable and must be top coated or protected by a separate wearing course.
- Primer coat must be kept clean and recoated within open window time. If this window is exceeded, contact Sika for recommendations.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

## **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.

## LOCAL RESTRICTIONS

See Legal Disclaimer.

## **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.

## **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 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 AP-PLY INCLUDING ANY WARRANTY OF MERCHANTABIL-ITY 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 OTH-ERS. Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 201-933-8300.



## Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225 Sika Canada Inc.

601 Delmar Avenue Pointe Claire Quebec H9R 4A9 Phone: 514-697-2610 Fax: 514-694-2792 Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920

Phone: 52 442 2385800 Fax: 52 442 2250537



Product Data Sheet Sikalastic®-710 Base August 2018, Version 01.01 020812040020000032 Sikalastic-710Base-en-US-(08-2018)-1-1.pdf





## PRODUCT DATA SHEET

# Sikalastic®-715 Top

SINGLE COMPONENT, ELASTOMERIC, TRAFFIC BEARING WEAR AND TOP COAT

## PRODUCT DESCRIPTION

Sikalastic®-715 Top is a single component, UV-resistant, aromatic, moisture cured, elastomeric polyurethane coating intended for use as the traffic bearing wear and top coat over polyurethane waterproofing membrane for pedestrian and vehicular traffic bearing applications, and as a protective top coat over polyurethane waterproofing membrane under a separate wearing course such as concrete or asphalt pavement, and tile in a setting bed. Optional Sikalastic® 700 ACL accelerator can be used to speed cure time .

## **USES**

Sikalastic®-715 Top may only be used by experienced professionals.

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arena
- Plaza and rooftop decks
- Balconies

## **CHARACTERISTICS / ADVANTAGES**

- Excellent crack-bridging properties and flexibility, even at low temperatures
- Resistant to water and de-icing salts
- Alkaline resistant
- UV stable
- Range of standard colors

## **PRODUCT INFORMATION**

Packaging	5 gal. pails, 50 gal. (net) drums	
Appearance / Color	Gray, Charcoal and Tan , Custom Colors ( min. 250 gal.)	
Shelf Life	12 months in original, unopened containers	
Storage Conditions	Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using.	
Solid content by volume	72 %	(ASTM D-2697)

Product Data Sheet Sikalastic®-715 Top July 2018, Version 01.01 020812040030000008

Volatile organic compound (VOC) content	232 g/l	(ASTM D-2369-81)
Viscosity	1500 +/- 500 cps	
TECHNICAL INFORMATION		
Shore A Hardness	85 +/- 5 (75 °F (24 °C) and 50 % R.H.)	(ASTM D-2240)
Tensile Strength	3200 +/- 300 psi (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Elongation at Break	500 +/- 50 % (75 °F (24 °C) and 50 % R.H.)	(ASTM D-412)
Tear Strength	85 +/- 5 pli (75 °F (24 °C) and 50 % R.H.)	(Die C, ASTM D-624)
Chemical Resistance	Resistant to de-icing salts, and alkaline concrete and mortars/tile adhesives cure.	cementitious
APPLICATION INFORMATION	N	
Coverage	96 ft²/gal. at 16 wet mils (12 dry mils) 82 ft²/gal. at 18 wet mils (14 dry mils) 72 ft²/gal. at 20 wet mils (16 dry mils)	

## **APPLICATION INSTRUCTIONS**

## SURFACE PREPARATION

Surface must be clean, dry and sound with an open texture. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application.

rate.

Sikalastic® 710 Waterproofing Base Coat - Coating should be cured and tack free.

**Existing Coatings** - Should be cleaned and mechanically abraded to provide a contaminant free, open textured surface. Solvent wipe as allowed by state and local regulations.

## MIXING

Thoroughly mix coating using a mechanical mixer (Jiffy) at slow speed until a homogenous mixture and uniform color is obtained (typically 1 minute). Use care not to allow the entrapment of air into the mixture.

#### **APPLICATION**

Apply at the recommended coverage rate using a notched squeegee or trowel, and backroll using a phenolic resin core roller. Apply aggregate evenly distributed at the appropriate rate immediately into wet coating and backroll if required (see appropriate System Guide). Al-

low coating to cure a minimum of 16 hours at 70 °F and 50 % R.H. or until tack fee between coats. Allow coating to cure for a minimum of 72 hours before opening to vehicular traffic or installing separate wear course.

Coverage rates provided are intended to achieve required wet film thickness under optimal conditions. Additional material may be required depending on substrate surface roughness and porosity, material and substrate temperatures, and other site-dependent factors. This will result in a lower coverage

Aggregate: Use clean, rounded or semi-angular oven dried quartz sand with a size gradation of 16–30 for vehicular traffic and 20–40 mesh for pedestrian traffic, and a minimum hardness of 6.5 per the Moh's scale. It should be supplied in pre-packaged bags and free of metallic or other impurities. Seeding of aggregate means an even, light broadcast short of refusal. A full broadcast of aggregate means a heavy application to refusal. Any loose aggregate must be removed prior to recoating. Backroll aggregate where indicated.

**Accelerator**: Sikalastic® 700 ACL may be added to Sikalastic® 715 in order to speed cure time particularly in cold weather conditions. Mix thoroughly prior to application. Add a maximum of 1 quart to 5 gallons (or 1:20 ratio) and only to material that will be applied within 2–3 hours.

## **CLEANING OF TOOLS**

Remove liquid coating immediately with dry cloth. Once cured, coating can only be removed by mechanical means.

Product Data Sheet
Sikalastic®-715 Top
July 2018, Version 01.01
02081204003000008



## **MAINTENANCE**

Clean with non-sudsing detergent and water and inspect regularly for mechanical damage. Snow removal equipment must have shoes, rubber tips or small skis to prevent ruptures. The use of metal blades without protection is not recommended. Damaged areas should be repaired promptly. Remove delaminated coating back to well adhered material and reinstall patch according to procedures described above. Do not use asphalt or tar modified products. Consult a Sika representative for recommendations on top coat or wearing surface restoration.

## **LIMITATIONS**

- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 90 °F (32 °C).
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect materials with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements.
- Do not thin with solvents.
- Use properly graded, oven dried aggregates only.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various Sika product solutions). Surface irregularities may reflect though the cured system.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather as there is the potential for bonding problems.
- When applying over existing coatings compatibility and adhesion testing is recommended.
- Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and for vapors into the building/structure during product application and cure.
- Opening to traffic or installation of separate wear course prior to final cure may result in loss of aggregate, or permanent staining and subsequent premature failure.
- Vehicle fluids and some high performance tires can stain the coating. Fluid spills should be removed promptly as the coating can in some cases be damaged

- from prolonged exposure.
- On grade, lightweight concrete, asphalt pavement, and applications where chained or studded tires may be used should not be coated with Sikalastic® traffic systems.
- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation and priming with a moisture-blocking primer - contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion.
- Sikalastic 715 Top will chalk, fade, or discolor over time when exposed to UV and under certain artificial lighting conditions. Aliphatic top coats with superior color and gloss retention are available.
- Base coat must be kept clean and recoated within 72 hours. If this window is exceeded, contact Sika for recommendations.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

## **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.

## **LOCAL RESTRICTIONS**

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 http://usa.sika.com/ or by calling Sika's Technical Service Department at 800.933.7452 nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

## **ECOLOGY, HEALTH AND SAFETY**

Keep container tightly closed. Keep out of reach of children. Not for internal consumption. For industrial use only. For professional use only. For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Product Data Sheet Sikalastic®-715 Top July 2018, Version 01.01 020812040030000008



## **LEGAL DISCLAIMER**

KEEP CONTAINER TIGHTLY CLOSED •KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMP-TION •FOR INDUSTRIAL USE ONLY •FOR PROFESSION-AL 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 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. 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, ecological, 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. 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 LEG-AL THEORY FOR SPECIAL OR CONSEQUENTIAL DAM-AGES. 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. Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 201-933-8300.

## Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225 Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920

Phone: 52 442 2385800 Fax: 52 442 2250537



Product Data Sheet Sikalastic®-715 Top July 2018, Version 01.01 020812040030000008 Sikalastic-715Top-en-US-(07-2018)-1-1.pdf





## PRODUCT DATA SHEET

# Sikalastic® FTP Primer

TWO-COMPONENT, LOW ODOR, FAST CURING WATER-BASED PRIMER

## PRODUCT DESCRIPTION

Sikalastic® FTP Primer is a two-component, waterborne epoxy diluted with water in the field.

## **USES**

Use with Sikalastic® Traffic Systems as a primer on concrete, cementitious or plywood surfaces exposed to vehicular or pedestrian traffic. Refer to the Sikalastic® 710/715/735 AL Traffic System, Sikalastic® 710/715/736 LoVOC Traffic System and Sikalastic® 720/745 Traffic System Product Data Sheets for system application instructions as well as limitations.

## **CHARACTERISTICS / ADVANTAGES**

- Low VOC
- Fast dry time
- Low odor

## PRODUCT INFORMATION

Packaging	Sikalastic® FTP Primer is packaged in pre-proportioned kits, both diluted with water in the field. 7gal. kit - two 1 gal. cans Part A and two short-filled pails Part B (1.25 gal. each). Kit yields 7 gal. after dilution with 2.5 gal. water (see mixing instructions). 1 gal. kit - short filled can of Part A (0.28 gal.) and a short filled gallon can Part B (0.35 gal.). The kit will yield one gallon of mixed product after dilution with 0.35 gal. water. (see mixing instructions).		
Shelf Life	2 years in original unopened container under proper storage conditions.		
Storage Conditions	Store dry between 40–90 °F (4–32 °C). Condition material to 65–85 °F (18–30 °C) before using.		
Volatile organic compound (VOC) content	98 g/L	(ASTM D-2369)	
TECHNICAL INFORMATION			
Tensile Adhesion Strength	> 400 psi (100 % concrete failure)	(ACI 503R, Appendix A)	

Product Data Sheet Sikalastic® FTP Primer July 2018, Version 01.01 020915951000000027

## APPLICATION INFORMATION

Coverage	Approximately 300 ft. <sup>2</sup> /gal. Porous and rough substrates will increase consumption.	
Pot Life	Approx. 1 hour at 77 °F (25 °C) and 50 % relative humidity	
Cure Time	3–4 h at 77 °F (25 °C) and 50 % relative humidity	
Waiting Time / Overcoating	Up to 48 h at 77 °F (25 °C)	

## **APPLICATION INSTRUCTIONS**

## SUBSTRATE PREPARATION

Concrete surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. Concrete should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by shot blasting to a minimum of (CSP 3-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. The compressive strength of the concrete substrate should be at least 3500 psi at 28 days and at least 250 psi in tension at the time of application of Sikalastic® FTP Primer.

#### MIXING

**7 gal. kit:** It is important to remember that this coating has a limited pot life of approximately 1 hour at 77 °F (25 °C) and 50 % relative humidity. Do not use beyond this frame regardless of whether or not the product appears to still be usable. Review that all surface preparation is complete and application equipment is in good working order before starting the mixing sequence.

- Premix each component. Sikalastic® FTP Primer, Part B is dark olive green in color and may appear black in the container. Sikalastic® FTP Primer, Part A is light amber in color.
- 2. Add the 1 gallon of Sikalastic® FTP Primer, Part A to the 1.25 gallons of Part B in the short filled Part B pail.
- 3. Mix thoroughly with a low speed (300–500 rpm) drill with Jiffy paddle for a minimum of 3 minutes. The mixture will appear as a uniform light olive green color.
- Slowly add 1.25 gallons of potable water to the mixture under agitation.
- Mix for a minimum of 2 additional minutes until the mixture is fully dispersed. Fully dispersed material will appear as light yellow to white in color.

**1 gal. kit:** It is important to remember that this coating has a limited pot life of approximately 1 hour at 77 °F (25 °C) and 50% relative humidity. Do not use beyond this frame regardless of whether or not the product appears

to still be usable. Review that all surface preparation is complete and application equipment is in good working order before starting the mixing sequence.

- Premix each component. Sikalastic® FTP Primer, Part B
  is dark olive green in color and may appear black in
  the container. Sikalastic® FTP Primer, Part A is light
  amber in color.
- Add the 0.28 gallons of Sikalastic® FTP Primer, Part A to the 0.35 gallons of Part B in the short filled Part B
- 3. Mix thoroughly with a low speed (300–500 rpm) drill with Jiffy paddle for a minimum of 3 minutes. The mixture will appear as a uniform light olive green color.
- 4. Slowly add 0.35 gallons of potable water to fill the gallon can under agitation.
- Mix for a minimum of 2 additional minutes until the mixture is fully dispersed. Fully dispersed material will appear as light yellow to white in color.

**NOTE:** The order that the FTP components are mixed is critical to the performance of this product. Failure to mix properly may result in an incomplete cure, despite a dry appearance.

## **APPLICATION**

Apply with flat squeegee or roller at the recommended rate. Allow for sufficient wetting of the slab and backroll, utilizing a ¼" or ¾" nap roller to eliminate puddles on the surface of the slab. Minimize the overlap from batch to batch or bead-to-bead applications while achieving complete slab coverage, as these areas of overlap may not bond.

#### Removal

Remove wet primer with MEK, xylene, or oxygenated solvents. Once cured, primer can only be removed by mechanical means. Strictly follow solvent manufacturer's warnings and instructions for use.

## **Over Painting**

Sikalastic® FTP Primer has a recoat window of up to 48 hours. Do not apply a second coat of Sikalastic® FTP Primer, as it will not properly bond. There is no need for additional mechanical or chemical preparation of the Sikalastic® FTP Primer prior to the installation of the topcoat, if recoated with in the recoat window, and the Sikalastic® FTP Primer has not been exposed to foot or



vehicular traffic or similar. If the recoat window is missed (48 hours) the surface requires grinding or screening with 80 grit, followed by a broom sweep and vacuum, prior to reapplication of Sikalastic® FTP Primer.

## **LIMITATIONS**

- Product must be protected from freezing. If frozen, discard.
- To avoid dew point conditions and prolonged cure during application, relative humidity must be no more than 85 % and substrate temperature must be ate last 5 °F (3 °C) above measured dew point temperatures.
- Minimum ambient and substrate temperature during application and curing of material is 41 °F (5 °C); maximum is 90 °F (32 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying epoxy primers. Note that low temperatures will slow down the cure, and high temperatures will acceelrate it.
- Do not apply on substrates with moisture content greater than 4 % by weight, measured by a Tramex CME or CMExpert type concrete moisture meter.
- Minimum age of concrete must be 21–28 days depending on curinga nd drying conditions.
- The compressive strength of the concrete substrate should be a tleast 3500 psi at 28 days and at least 250 psi in tension at the time of application of Sikalastic® FTP Primer.
- Do not thin with solvents.
- Do not store materials outdoors exposed to sunlight and moistuer for prolonged periods.
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure.
   This condition may be checked using ASTM D-4263 (Polyethylene Sheet method).
- Substrate must be dry prior to application. Do not apply to a rfosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems.
- Protect freshly applied primer from freezing, dampness, condensation and water prior to top coating.
- Not intended for immersion applications, or any use where moisture can reach the underside of the primed surface.
- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature. If applied during rising temperature pinholing may occur.
- Precautions should be taken to prevent vapors and/or odors from entering the building/structure, including but not limited to turning off and sealing air intake vents and throughwall air conditioners, and other means of vapor/odor ingress during application and cure.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions).
   Surface irregularities may reflect through the cured system. When applying over existing coatings or mem-

- branes compatibility and adhesion testing, and subsequent approval by Technical Services is required.
- On grade, lightweight concrete, asphalt pavement, or insulateds plit slab applications, or applications where chained or studded tires may be used should not be coated with Sikalastic® Traffic Systems.
- Unvented metal pan decks or decks containing between-slab membar nes require further technical evaluation prior to coating with Sikalastic® Traffic Systems – the use of a moisture tolerant primer such as Sikalastic® MT primer is required - contact Sika regarding recommendations.
- Not recommended for metal substrates.
- Primer is not UV stable and must be topcoated

## **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.

## LOCAL RESTRICTIONS

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 http://usa.sika.com/ or by calling Sika's Technical Service Department at 800.933.7452 nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

## **ECOLOGY, HEALTH AND SAFETY**

Keep container tightly closed. Keep out of reach of children. Not for internal consumption. For industrial use only. For professional use only. For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

## **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

Product Data Sheet Sikalastic® FTP Primer July 2018, Version 01.01 020915951000000027



Service Department at 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. 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, ecological, 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. 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 LEG-AL THEORY FOR SPECIAL OR CONSEQUENTIAL DAM-AGES. 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. Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 201-933-8300.

#### Sika Corporation

201 Polito Avenue Lyndhurst, NJ 07071 Phone: 800-933-7452 Fax: 201-933-6225



Product Data Sheet Sikalastic® FTP Primer July 2018, Version 01.01 020915951000000027

#### Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5 Fracc. Industrial Balvanera Corregidora, Queretaro C.P. 76920

Phone: 52 442 2385800 Fax: 52 442 2250537

## **United States**

100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sarnafil.sika.com
webmaster.sarnafil@us.sika.com

## SIKA Canada Inc.

6915 Davand Drive
Mississauga, ON L5T 1L5
Phone: +1 905-795-3177
Fax: +1 905-795-3192
can.sika.com
marketing.construction@ca.sika.com

SikalasticFTPPrimer-en-US-(07-2018)-1-1.pdf





## Vulkem® 45SSL

## Semi-Self-Leveling, Single-Component, Polyurethane Sealant

## **Product Description**

Vulkem® 45SSL is a semi-self-leveling, single-component, moisture-curing, low-modulus, polyurethane sealant.

#### **Basic Uses**

Vulkem 45SSL is formulated for use in expansion joints in sidewalks, swimming pool decks, plazas, floors and any other horizontal surfaces with slopes up to 6% (e.g. 1' rise for every 16' run).

## **Features and Benefits**

- Vulkem 45SSL is a traffic rated, pourable, semi-self-leveling sealant with exceptional primerless adhesion and movement capability.
- Vulkem 45SSL is suitable for continuous immersion in non-chlorinated water.
- The Vulkem 45SSL technology provides the sealant with greater UV resistance and will not out gas.
- Vulkem 45SSL provides exceptional wear and tear resistance required in high traffic areas.
- · Jet Fuel Resistant
- Formulated with an innovative polymer technology, similar to TREMproof® 250GC and Dymonic® 100, Vulkem 45SSL is highly versatile and has a unique capability to adhere to damp or green concrete.

## **Availability**

Vulkem 45SSL is immediately available from your local Tremco Sales Representative, distributor, or warehouse.

## **Coverage Rates**

308' of joint per gallon for a 1/4" x 1/4" (6 mm x 6 mm) joint. For specific coverage rates that include joint size, and usage efficiencies, visit our website usage calculator at www.tremcosealants.com

## **Packaging**

1-qt (890-mL) cartridges 2-gal (7.6-L) pails 5-gal (18.9-L) pails 55-gal (208-L) drums

#### Colors

Black, Buff, Gray, Limestone, White.

#### **Shelf Life**

1 year when stored at 40 to 110 °F (5 to 43 °C)

#### **Storage**

Store Vulkem 45SSL in original, undamaged packaging in a clean, dry, protected location with temperatures between 40 to 110 °F (5 to 43 °C).

## **Applicable Standards**

Vulkem 45SSL meets or exceeds the requirements of the following specifications:

- ASTM C920, Type S, Grade P, Class 35, Use T, M, A, O and I (Class 2)
- CAN/CGSB 19.13-M87. MC-1-25-B-N
- ASTM E 1966/UL 2079

## **Fire Rated Systems**

FF-D-1062, and FW-D-1058

## **Limitations**

· Use with adequate ventilation.

- Always utilize the accompanying MSDS for information on Personal Protective Equipment (PPE) and Health Hazards.
- Vulkem 45SSL is not recommended for use in chlorinated, potable, heavy or waste water.
- Although Vulkem 45SSL is paintable, this does not imply adhesion to and compatibility with all paints. Please refer to Tremco Technical Bulletin No. S-09-05 for more information.

## **Substrate Preparation**

Surfaces must be sound and clean. All release agents, existing waterproofing, dust, loose mortar, paints, other finishes or field applied coating must be removed. This can be accomplished with a thorough wire brushing, grinding, sandblasting, or solvent washing, depending on the contamination.

Tremco recommends that surface temperatures be 40 °F (5 °C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40 °F, please refer to the Tremco Technical Bulletin for Applying Sealants in Cold Conditions (No. S-08-44 rev 1) that can be found on our website at www.tremcosealants.com

## **Priming**

Vulkem 45SSL typically adheres to common construction substrates without primers. However, Tremco always recommends that a mock-up or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer, proper cleaning and prep requirements. A description of the field adhesion test can be found in appendix X1 of ASTM C1193, Standard Guide for Use of Joint Sealants.

Where deemed necessary, use Vulkem® Primer #191 Low-VOC QD on porous substrates and TREMprime® Non-Porous Primer for metals or plastics.

## **Application**

Vulkem 45SSL is easy to apply with conventional caulking equipment. Ensure that the backer rod is properly friction-fitted and any primers have been applied.

Fill the joint completely with a proper width-to-depth ratio, and then tool to ensure intimate contact of sealant with joint substrates.

Dry tooling is always preferred, although compatible wetting agents can be used in limited amounts to slick the spatula if needed after an initial pass.

For a cleaner finish, mask the sides of the joint with tape prior to filling.

## **Joint Design**

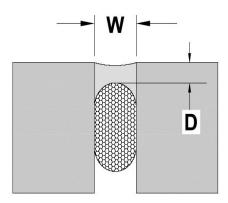
Vulkem 45SSL may be used in horizontal joints designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement but not less than 1/4" (6 mm).

## **Joint Backing**

Polyethylene backer rod is recommended as joint backing to control sealant depth and ensure intimate contact of sealant with joint substrate when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at the time of sealant application.

#### **Sealant Dimensions**

W = Sealant width, D = Sealant depth,



Expansion Joints- The minimum width and depth of any sealant application should be 1/4" x 1/4" (6 mm x 6 mm). The depth (D) of sealant may be equal to width (W) of joints that are less than 1/2" wide.

For joints ranging from 1/2" to 1" (13 mm to 25 mm) wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 1/2" (13 mm). For joints that are wider than 1" (25 mm) contact Tremco Technical Services or your local Tremco Sales Representative.

## **Cure Time**

At 75 °F (23.9 °C), 50% RH a skin forms within 5 hr. Curing continues at a rate of approximately 1/16" (1.6 mm) per day. The cure time will increase as the temperature and/or humidity decrease. A good rule of thumb is one additional day of cure for every 10 °F decrease in temperature. Cure time can be decreased by adding water when using pails of Vulkem 45SSL. Please refer to the Technical Bulletin No. S-17-01 on Vulkem 45SSL/445SSL Activator that can be found on our website at: www.tremcosealants.com

## Clean Up

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

## **Warranty**

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage.

Please refer to our website at <a href="www.tremcosealants.com">www.tremcosealants.com</a> for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

Semi-Self-Leveling, Single-Component, Polyurethane Sealant

TYPICAL PHYSICAL PROPERTIES				
PROPERTY	TEST METHOD	TYPICAL VALUES		
Туре		Single component polyurethane sealant		
Color		4 Standard Colors		
Solids		98%		
Specific Gravity		1.32		
Application		Semi self leveling sealant, applied with typical caulking equipment		
Rheological Properties	ASTM C639	Type I Single component, flowable		
Hardness, durometer scale "A"	ASTM C661	40 +/-5		
Weight Loss	ASTM C1246	Pass		
Skin Time	ASTM C679	2 hr		
Tack Free Time	73.4°F (23°C) 50% RH	5 hr		
Stain and Color Change	ASTM C510	Pass		
Adhesion to Concrete	ASTM C794	31 pli (before water)		
Adhesion to Concrete After Immersion	ASTM C794	28 pli		
Adhesion to Green Concrete	ASTM C794	>15 pli		
Adhesion to Damp Concrete	ASTM C794	>15 pli		
Effects of Accelerated Aging	ASTM C793	Pass		
Movement Capability	ASTM C719	+/-35%		
Movement Capability	ASTM C719* Modified	+100/-50%		
Tensile Strength	ASTM D412	250 to 300 psi		
% Elongation	ASTM D412	600 to 750%		
Tear Strength	ASTM D412	35 psi		
Service Temperature		-40 to (-40 to 37°C)		
Application Temperature		40 to 100°F (4 to 37 °C)		





## Vulkem® 116

## Textured, Single-Component, Polyurethane Sealant

## **Product Description**

Vulkem® 116 is a textured, single-component, moisture-curing, gun-grade polyurethane sealant.

#### **Basic Uses**

Vulkem 116 is an excellent general-purpose sealant designed for use on poured and precast concrete, masonry work, window and door perimeters, and similar types of construction joints. Vulkem 116 is approved for exterior use only.

## **Features and Benefits**

- Vulkem 116 has a 30-year history of delivering superior primerless adhesion to porous substrates, which makes it the choice for sealing expansion joints in commercial construction applications.
- Vulkem 116 is suitable for certain water immersion applications.
- Vulkem 116 is rated for +/-25% movement capability.
- The cure of the sealant can be accelerated with the addition of the Vulkem Catalyst 45/116.
- Vulkem 116 is durable, flexible, and offers excellent performance in dynamic joints.

## **Availability**

Immediately available from your local Tremco Field Representative, Tremco Distributor or Tremco Warehouse.

## **Coverage Rates**

308 linear feet of joint per gallon for a 1/4" x 1/4" (6 mm x 6 mm) joint. For specific coverage rates that include joint size, and usage efficiencies, visit our website usage calculator at www.tremcosealants.com.

## **Packaging**

10.1-oz. (300-mL) cartridges, 20-oz. (600-mL) sausages, 2- and 5-gal (7.6- and 18.9-L) pails, and 55-gal (208-L) drums. All colors are not available in every package size. Contact Tremco Customer Service for more information.

## **Colors**

Almond, Aluminum, Aluminum Stone, Anodized Aluminum, , Beige, Black, Bronze, Buff, Dark Bronze, Gray, Ivory, Limestone, Natural Clay, Redwood Tan, Stone, White.

## **Storage**

Store Vulkem 116 in original, undamaged packaging in a clean, dry, protected location with temperatures between 40 to 110 °F (5 to 43 °C).

## **Applicable Standards**

Vulkem 116 meets or exceeds the requirements of the following specifications:

- ASTM C920 Type S, Grade NS, Class 25, Use T, NT, M, A, I class II, and O
- U.S. Federal Specification TT-S-00230C, Class A, Type II
- CAN/CGSB-19.13-M87
- USDA regulation for indirect food contact
- Canadian Food Inspection Agency
- City of Los Angeles (COLA) approval standards

#### **Limitations**

- Do not apply Vulkem 116 over damp, green or contaminated surfaces.
- Vulkem 116 is approved for exterior use only. Do not use this product inside an occupied building even if there are no occupants present during use.

- Always utilize the sealant's SDS found on our website at www.tremcosealants.com for information on proper ventilation, Personal Protective Equipment (PPE) and other health concerns.
- Do not use in chlorinated, potable, heavy or waste water.
- Although this product is paintable, this does not imply adhesion to and compatibility with all paints. Please refer to Tremco Technical Bulletin No. S-09-05 for more information.

## **Substrate Preparation**

Surfaces must be sound and clean. All release agents, existing waterproofing, dust, loose mortar, paints, other finishes or field applied coating must be removed. This can be accomplished with a thorough wire brushing, grinding, sandblasting, or solvent washing, depending on the contamination.

Tremco recommends that surface temperatures be 40 °F (5 °C) or above at the time the sealant is applied. If sealant must be applied in temperatures below 40 °F, please refer to the Tremco Technical Bulletin for Applying Sealants in Cold Conditions (No. S-08-44 rev 1) that can be found on our website at www.tremcosealants.com

## **Priming**

Vulkem 116 typically adheres to common construction substrates without primers; however, Tremco always recommends that mock-up or field adhesion test be performed on the actual materials being used on the job to verify the need for a primer, proper cleaning and prep requirements. The field adhesion test can be found in appendix X1 of ASTM C 1193, Standard Guide for Use of Joint Sealants.

Where deemed necessary, use Vulkem Primer® #191 Low VOC QD for porous substrates and TREMprime® Non-Porous Primer for metals and plastics.

## **Application**

Vulkem 116 is easy to apply with conventional caulking equipment. Ensure that the backer rod is friction-fitted properly and any primers have been applied.

Fill the joint completely with a proper width-to-depth ratio, and then tool to ensure intimate contact of sealant with joint walls.

Dry tooling is always preferred, although xylene can be used in limited amounts to slick the spatula if needed.

For a cleaner finish, mask the sides of the joint with tape prior to filling.

## **Joint Design**

Vulkem 116 may be used in any vertical or horizontal joint designed in accordance with accepted architectural/engineering practices. Joint width should be 4 times anticipated movement, but not less than 1/4" (6 mm).

## **Joint Backing**

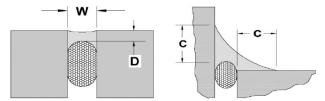
Closed cell or reticulated polyethylene backer rod is recommended as joint backing to control sealant depth and to ensure intimate contact of sealant with joint walls when tooling. Where depth of joint will prevent the use of backer rod, an adhesive backed polyethylene tape (bond breaker tape) should be used to prevent three-sided adhesion. All backing should be dry at time of sealant application.

## **Sealant Dimensions**

W = Sealant width, D = Sealant depth, C = Contact area.

## Vulkem® 116

Multi-Purpose, Single-Component, Polyurethane Sealant



EXPANSION JOINTS - The minimum width and depth of any sealant application should be 1/4" x 1/4" (6 mm x 6 mm). The depth (D) of sealant may be equal to the width (W) of joints that are less than 1/2" (13 mm) wide. For joints ranging from 1/2" to 1" (13 mm to 25 mm) wide, the sealant depth should be approximately one-half of the joint width. The maximum depth (D) of any sealant application should be 1/2" (13 mm). For joints that are wider than 1" (25 mm) contact Tremco's Technical Service Department, or your local Tremco Sales Representative.

WINDOW PERIMETER – For fillet beads, or angle beads around windows and doors, the sealant should exhibit a minimum surface contact area [C] of 1/4" (6 mm) onto each substrate, with provisions for release at the heel of the angle using backer rod or bond breaker tape.

## **Cure Time**

Vulkem 116 generally cures at a rate of 1/16" (2 mm) per day at 75 °F (24 °C) and 50% RH. It will skin in 5 hr and be tack free in 30 hr. The cure time

will increase as temperatures and/or humidity decrease. A good rule of thumb is one additional day for every 10 °F decrease in temperature.

## **Clean Up**

Excess sealant and smears adjacent to the joint interface can be carefully removed with xylene or mineral spirits before the sealant cures. Any utensils used for tooling can also be cleaned with xylene or mineral spirits.

## **Warranty**

Tremco warrants its Products to be free of defects in materials, but makes no warranty as to appearance or color. Since methods of application and on-site conditions are beyond our control and can affect performance, Tremco makes no other warranty, expressed or implied including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE with respect to Tremco Products. Tremco's sole obligation shall be, at its option, to replace or refund the purchase price of the quantity of Tremco Products proven to be defective, and Tremco shall not be liable for any loss or damage

Please refer to our website at <a href="www.tremcosealants.com">www.tremcosealants.com</a> for the most up-to-date Product Data Sheets.

NOTE: All Tremco Safety Data Sheets (SDS) are in alignment with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) requirements.

TYPICAL PHYSICAL PROPERTIES				
PROPERTY	TEST METHOD	TYPICAL VALUES		
Type		Single component polyurethane sealant		
Color		Almond, Aluminum, Black, Bronze, Buff, Gray, Dark Bronze, Ivory, Limestone, Redwood Tan, Beige, Stone, Anodized Aluminum, Aluminum Stone, White, Natural Clay.		
Solids		94%		
Specific Gravity		1.1344		
Application		gun-grade sealant, applied with typical caulking equipment		
Extrusion Rate	ASTM C1183	40 to 50 mL/min		
Hardness Properties	ASTM C661	40		
Weight Loss	ASTM C1246	Pass		
Skin Time	ASTM C679	6 hr		
Tack Free Time	73.4°F (23°C) 50% RH	30 hr		
Stain and Color Change	ASTM C510	No visible color change/No stain		
Adhesion to Concrete	ASTM C794	20 to 25 pli (89 to 111 N)		
Adhesion to Brick	ASTM C794	19 to 23 pli (85 to 102 N)		
Effects of Accelerated Aging	ASTM C793	Pass		
Movement Capability	ASTM C719	±25%		
Tensile Strength	ASTM D412	200 to 250 psi		
% Elongation	ASTM D412	200 to 300%		

#### 0819/V116DS-ST

Please refer to our website at www.tremcosealants.com for the most up-to-date Product Data Sheets.



## **Tremco Commercial Sealants & Waterproofing**