**Tremco, Inc. Commercial Sealants & Waterproofing**

**Section 07 18 00 TRAFFIC COATINGS Vehicular Traffic Coatings Guide Specification**

Specifier: This guide specification section specifies **Tremco Vulkem® EWS Traffic Coating System with PUMA Technology** and **350NF[360NF]/950NF/951NF low-VOC** polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products. **360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products.**360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products.**360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products.**360NF/950NF/951NF** **low-VOC** deck coating systems of polyurethane traffic coating products.

**Tremco PUMA Primer** is a methyl methacrylate (MMA) primer that is applied to the shot blast concrete to prepare it for the application of Tremco PUMA BC base coat.

**Tremco PUMA BC Base Coat** is a polyurethane methacrylate (PUMA) base coat that bonds firmly to Tremco PUMA Primer. It retains its integrity even if substrate movement causes hair line cracks of up 1/16”. Tremco PUMA BC will prevent water migration between it and its substrate.

**Tremco PUMA BC LM Detailing Coating** is a polyurethane methacrylate (PUMA) detail coat that bonds firmly to Tremco PUMA Primer. It retains its integrity even if substrate movement causes hair line cracks of up 1/16”. It has a higher modulus than Tremco PUMA BC and is used for detailing cracks and control joints prior to the Tremco PUMA BC base coat application.

**Tremco PUMA BC T Base Coat** is a thixotropic polyurethane methacrylate (PUMA) base coat that bonds firmly to Tremco PUMA Primer. It retains its integrity even if substrate movement causes hair line cracks of up 1/16”. Tremco PUMA BC T will prevent water migration between it and its substrate. Tremco PUMA BC T is used on ramps, vertical rises, detailing and field applied cant beads.

**Tremco PUMA BC R Base Coat** is a rollable version of Tremco PUMA BC that bonds firmly to Tremco PUMA Primer. It retains its integrity even if substrate movement causes hair line cracks of up 1/16”. Tremco PUMA BC R is used for ramps and upturns.

**Tremco PUMA WC Wear Coat** is a polyurethane methacrylate (PUMA) wear coat. Tremco PUMA WC is applied after Tremco PUMA BC has cured. The wear coat is loaded with aggregate to give the system excellent impact, abrasion and chemical resistance.

**Tremco PUMA TC Top Coat** is a methyl methacrylate (MMA) top coat that is applied after Tremco PUMA WC has cured. Interlaminary adhesion to Tremco PUMA WC is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete the Vulkem EWS system.

**Vulkem 350NF is a one-part, aromatic, low-VOC elastomeric polyurethane membrane that bonds firmly to clean, dry concrete, wood or primed metal. Vulkem 350NF maintains waterproofing integrity even under the development of cracks up to 1/16 in. wide due to substrate movement. Vulkem 350NF is available in R (roller) and SL (self-leveling) grades for vertical or horizontal use.**

**Vulkem 350NF Base Coat** is a one-part, aromatic, low-VOC elastomeric polyurethane membrane that bonds firmly to clean, dry concrete, wood or primed metal. Vulkem 350NF maintains waterproofing integrity even under the development of cracks up to 1/16 in. wide due to substrate movement. Vulkem 350NF is available in R (roller) and SL (self-leveling) grades for vertical or horizontal use.

**Vulkem 360NF** **Base Coat** is a neighbor-friendly, low-odor, VOC-compliant, water-cured, rapid-setting polyurethane basecoat that possesses tenacious adhesion primarily to clean and dry concrete. Vulkem 360NF is a versatile basecoat that can be applied at various thicknesses, making it ideal for patching and sloping areas on restoration jobs. In areas not exposed to vehicular wheel traffic. Use a cementitious sloping, patching , and repair mortar when exposed to vehicular traffic.

**Vulkem 950NF** **Intermediate Coat** is a high-performance, neighbor-friendly, two-part polyurethane coatings for vehicular applications where low odor and extremely durable coatings are desired. It is a nearly 100 percent solids, VOC-compliant system that is extremely durable and can be installed in a fast-track method. Vulkem 950NF can be used as a top coat for interior applications only.

**Vulkem 951NF Top Coat** is an aliphatic two-component polyurethane that is applied after the Vulkem 950NF intermediate coat has cured. Interlaminar adhesion to Vulkem 950NF is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete this Vulkem Traffic Deck Coating System.t is an aliphatic two-component polyurethane that is applied after the Vulkem 950NF intermediate coat has cured. Interlaminar adhesion to Vulkem 950NF is exceedingly strong. The top coat affords excellent abrasion resistance, UV stability and chemical resistance to complete this Vulkem Traffic Deck Coating System.

Basic Uses

Vulkem EWS with PUMA Technology is used in high-wear vehicular traffic deck coating applications include waterproofing concrete slabs and protecting occupied areas underneath from water damage. Heavy-duty areas include all turns, ramps, ticket spitters and an 8’ diameter around all drains. The system also protects concrete from damaging effects of water deicing salts, chemicals, gasoline, oils and anti-freeze.

Vulkem 350NF[360NF]/950NF/951NF deck coating system is a cold-applied vehicular traffic deck coating system designed for waterproofing concrete slabs and protecting occupied areas underneath from water damage. Additionally, the system will protect concrete from damaging effects of deicing salts, gasoline, oils and antifreeze.

This section is easily edited using several common commercial specification software tools.

We recommend you consult with your Tremco construction technical representative, who can be contacted through: Tremco, Inc., Commercial Sealants and Waterproofing Division, Beachwood OH; (866) 321-6357; email: techresources@tremcoinc.com; [www.tremcosealants.com](http://www.tremcosealants.com).

SECTION 07 18 00 – TRAFFIC COATINGS, VEHICULAR TRAFFIC

1. GENERAL
	* + 1. SECTION INCLUDES

**Tremco, Inc. Commercial Sealants and Waterproofing**

**Section 07 14 16 COLD FLUID-APPLIED WATERPROOFING
Vertical Deck Applications**

Specifier: This guide specification section specifies **Tremco TREMproof**® **PUMA**,

• Designed for use on foundation walls, retaining walls, and most backfilled applications.

This section is easily edited using several common commercial specification software tools.

We recommend you consult with your Tremco technical representative, who can be contacted through: Tremco, Inc., Commercial Sealants and Waterproofing Division, Beachwood OH; (866) 321-6357); email: techresources@tremcoinc.com;  [www.tremcosealants.com](http://www.tremcosealants.com).

Tremco sealant and waterproofing products appear in the following CSI MasterFormat specifications sections:

• Section 07 01 91 Joint Sealant Rehabilitation and Replacement
• Section 07 14 13.01 Hot Fluid-Applied Waterproofing, Deck (TREMproof 6100)
• Section 07 14 13.02 Hot Fluid-Applied Waterproofing, Vegetated Roof (TREMproof 6100)
• Section 07 14 16.02 Cold Fluid-Applied Waterproofing, Vertical (TREMproof 250GC)
• Section 07 14 16.03 Cold Fluid-Applied Waterproofing, Deck (TREMproof 250GC)
• Section 07 14 16.04 Cold Fluid-Applied Waterproofing, Vegetative Roof (TREMproof 250GC)
• Section 07 17 00 Bentonite Waterproofing (Paraseal GM/LG 60 mil)
• Section 07 18 00.01 Traffic Coatings, Vehicular
• Section 07 18 00.02 Traffic Coatings, Pedestrian
• Section 07 18 00.03 Traffic Coatings, Vehicular and Pedestrian
• Section 07 27 13 Modified Bituminous Sheet Waterproofing, Vapor-Retarding (ExoAir 110)
• Section 07 27 23 Board Product Waterproofing, Vapor Permeable (SECUREROCK ExoAir 430)
• Section 07 27 26.01 Fluid-Applied Membrane Waterproofing, Vapor-Retarding (ExoAir 120)
• Section 07 27 26.02 Fluid-Applied Membrane Waterproofing, Vapor Permeable (ExoAir 220)
• Section 07 27 26.03 Fluid-Applied Membrane Waterproofing, Vapor Permeable (ExoAir 230)
• Section 07 84 13 Penetration Firestopping
• Section 07 84 46 Fire-Resistive Joint Systems
• Section 07 92 00 Joint Sealants
• Section 08 85 00 Glazing Sealants
• Section 32 13 73 Concrete Paving Joint Sealants

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Polyurethane methacrylate and polymethyl methacrylate technology traffic coatings for high-wear vehicular traffic applications

Polyurethane traffic coatings for vehicular traffic applications

* + - 1. RELATED REQUIREMENTS

Specifier: If retaining this optional Related Requirements Article, edit to include only those sections included in project manual.

Section 03 31 00 "Cast-in-Place Concrete" for moisture curing of concrete traffic coating substrate.

 Sections 07 90 00 / 07 95 00 Joint Protection/ Expansion Control

Section 07 92 00 "Joint Sealants" for joint sealants and accessories and joint preparation.

* + - 1. REFERENCES
				1. References, General: Versions of the following standards current as of the date of issue of the project apply to the Work of this Section.

Specifier: If retaining this optional References Article, edit to include only those references cited in the edited section.

* + - * 1. ASTM International (ASTM): [www.astm.org](http://www.astm.org):

ASTM C920 - Standard Specification for Elastomeric Joint Sealants

ASTM C957 - Standard Specification for High-Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface

ASTM C1127 - Standard Guide for Use of High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with an Integral Wearing Surface

ASTM C1193 - Standard Guide for Use of Joint Sealants

ASTM D4258 - Standard Practice for Surface Cleaning Concrete for Coating

ASTM D4259 - Standard Practice for Abrading Concrete

CSA S413 for Parking Structures

* + - * 1. International Concrete Repair Institute (ICRI): [www.icri.org](http://www.icri.org):

ICRI 310.2R - Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair

* + - * 1. Sealant, Waterproofing, and Restoration Institute (SWRI): [www.swrionline.org](http://www.swrionline.org):

SWR Institute Validation Program

* + - * 1. UL Laboratories, Inc.(UL): [www.ul.com](http://www.ul.com):

UL790 - Standard Test Methods for Fire Tests of Roof Coverings

* + - * 1. U. S. Environmental Protection Agency (EPA): [www.epa.gov](http://www.epa.gov):

40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings

* + - 1. ADMINISTRATIVE REQUIREMENTS
				1. Preinstallation Conference: Conduct conference at Project Site.

Review requirements for traffic coating products and installation, including surface preparation, substrate conditions, expansion joint as required, project and manufacturer's details, installation procedures, mockups, testing and inspection requirements, protection and repairs, and coordination and sequencing of traffic coating work with work of other Sections.

* + - 1. ACTION SUBMITTALS
				1. Product Data: For each type of traffic coating product and expansion joint accessory specified, indicating compliance with requirements.
				2. Shop Drawings: Show locations for traffic coating system components. Show details for each type of substrate, movement joints, corners, and edge conditions, including penetrations, transitions, and terminations.
			2. INFORMATIONAL SUBMITTALS
				1. Qualification Data:

Certification of manufacturer's approval of Installer.

* + - * 1. Product Test Reports: Test data for traffic coating products and traffic coating system, by qualified testing agency, indicating proposed traffic coating meets performance requirements, when requested by Architect.
				2. Warranty: Sample of unexecuted manufacturer and installer special warranties.
				3. Field quality control reports.
			1. QUALITY ASSURANCE
				1. Installer Qualifications: A manufacturer-approved firm with minimum [five] years' experience in installation of specified or similar products in successful use on similar projects, employing workers trained by manufacturer, including a full-time on-site supervisor with a minimum of [three] years' experience installing similar work, and able to communicate verbally with Contractor[, Architect,] and employees.

Specifier: Retain "Approval of Manufacturers and Comparable Products" Paragraph below to provide control over qualifying of substituted manufacturers.

Specifier: Retain "Testing Agency Qualifications" Paragraph if Contractor is required to provide independent inspections under Part 3 Field Quality Control article.

Include intersections of deck traffic coating with adjacent vertical coating and moisture control system applications.

* + - * 1. Manufacturer Qualifications: A qualified manufacturer [listed in this Section] with minimum five years experience in manufacture of traffic coating as one of its principal products.

Manufacturer's product submitted has been in satisfactory operation on five similar installations for at least two years.

Specifier: Retain "Approval of Manufacturers and Comparable Products" Paragraph below to provide control over qualifying of substituted manufacturers.

Approval of Manufacturers and Comparable Products: [Submit] [Prime Bidder must submit] the following in accordance with project substitution requirements, within time allowed for substitution review:

Completed and signed Substitution Request form.

Product data, including certified independent test data indicating compliance with requirements.

Sample shop drawings from similar project.

Project references: Minimum of five installations of similar system not less than five years old, with Owner and Architect contact information.

Name and resume of proposed qualified Inspector.

Sample warranty.

* + - * 1. Testing Agency Qualifications: Qualified independent agency experienced in the installation of the specified traffic coating system, and qualified to perform observation and inspection specified in Field Quality Control Article to determine Installer’s compliance with the requirements of this Project, acceptable to Architect, retained by the Contractor.
				2. Mockups: Provide traffic coating mockup application within mockups required in other sections, or if not specified, in an area of not less than 150 sq. ft. (14 sq. m) of surface where directed by [Architect] [Owner] for each type of substrate condition. Include examples of surface preparation, crack and joint treatment, traffic coating application, slip-resistant aggregate application, and flashing, transition, and termination conditions, to set quality standards for execution.

Include intersections of deck traffic coating with adjacent vertical coating and moisture control system applications.

If applicable, include no less than 13ft (3.96m) including a minimum of one splice joint of Willseal® Expansion Joint System.

* + - 1. DELIVERY, STORAGE AND HANDLING
				1. Accept materials on site in manufacturer's unopened original packaging.
				2. Store products in weather protected environment, clear of ground and moisture, within temperature ranges recommended by traffic coating manufacturer.
				3. Construction Waste: Store and dispose of packaging materials and construction waste in accordance with requirements of Division 01 Section ["Construction Waste Management"] ["Temporary Facilities and Controls."]\

Specifier: Retain first option in "Construction Waste" Paragraph below for LEED projects; retain second option for other projects.

* + - 1. ENVIRONMENTAL REQUIREMENTS
				1. Environmental Limitations: Apply traffic coating within the range of ambient and substrate temperatures recommended by traffic coating manufacturer.

Protect substrates from environmental conditions that affect system performance.

Do not apply traffic coating (or expansion joint accessories if applicable) to a damp or wet substrate or during snow, rain, fog, or mist.

* + - 1. SCHEDULING
				1. Coordinate installation of traffic coating with completion of roofing and other work requiring interface with traffic coating.
				2. Schedule work so traffic coating system (including expansion joints if applicable) applications may be inspected prior to concealment.
			2. WARRANTY
				1. Applicator:  Company specializing in performing the work of this section qualified by system manufacturer for warranted membrane installation. Applicator shall submit the following certification for review:

Applicator shall submit documentation from the membrane manufacturer to verify contractor’s status as a qualified approved applicator for warranted installations.

Specifier: Consult Tremco representative for available special project warranty terms and conditions.

Access for Repair: Owner shall provide unimpeded access to the Project and the traffic coating system for purposes of testing, leak investigation, and repair,

Cost Limitation: Manufacturer's obligation for repair or replacement shall be limited to the original installed cost of the work.

High-Wear (Turns, Ramps, Ticket Spitters and ann 8’ diameter around all drains) Warranty Period for Vulkem EWS with PUMA Technology: [ ] years from date of Substantial Completion.

Vehicular Traffic (Drive Lanes and Parking Stalls) Warranty Period for Vulkem 350NF[360NF]/950NF/951NF: [ ] years from date of Substantial Completion.

* + - * 1. Special warranties specified in this article exclude deterioration or failure of traffic coating materials from the following:

Movement of the structure caused by structural settlement or stresses on the traffic coating exceeding manufacturer's written specifications for elongation.

Mechanical damage caused by outside agents.

1. PRODUCTS
	* + 1. MANUFACTURERS
				1. Basis-of-Design Products: Provide traffic coating products manufactured by **Tremco, Incorporated, Commercial Sealants and Waterproofing Division**, Beachwood OH; (866) 321-6357; email: techresources@tremcoinc.com; [www.tremcosealants.com](http://www.tremcosealants.com), [or comparable products of other manufacturer approved by Architect in accordance with Instructions to Bidders and Division 01 General Requirements].
				2. Source Limitations: Provide traffic coating system materials and accessory products from single-source manufacturer.

Specifier: Retain and edit option below if substitutions are allowed for project.

* + - 1. PERFORMANCE REQUIREMENTS
				1. General: Traffic coating system shall be capable of performing as a continuous watertight installation and as a moisture drainage plane transitioned to adjacent flashings and discharging water to the structure exterior. Traffic coating shall accommodate normal substrate movement and seal expansion and control joints, construction material transitions, opening transitions, penetrations, and perimeter conditions without resultant moisture deterioration.
				2. Compatibility: Provide traffic coating system materials that are compatible with one another and with adjacent materials under conditions of service and application required, as demonstrated by traffic coating manufacturer based on testing and field experience.

Specifier: Retain "Fire-Test-Response Characteristics" Paragraph below for traffic coatings that are roof coverings; revise to suit Project. Indicate class for each traffic coating when tested according to ASTM E 108. Verify requirements of authorities having jurisdiction and of Owner's insurer.

Specifier Retain "Energy Performance" paragraph below to specify cool-roof performance for traffic coatings that are installed on exposed decks. Verify availability of compliant products with manufacturers.

Specifier: Vulkem 950NF Topcoat can be used both as an intermediate coat for the Tremco heavy duty system and a topcoat for interior applications. Vulkem 951NF is a low-odor topcoat designed for exterior applications and for use over Vulkem 950NF in heavy duty applications.

* + - * 1. High-Wear Traffic Coating for Turns, Ramps, Ticket Spitters and an 8’ diameter around all drains: Manufacturer's polyurethane methyl methacrylate system for extreme exterior exposure conditions, traffic-bearing, seamless, high-solids-content, cold liquid-applied, elastomeric, waterproofing membrane system with integral wearing surface for high-wear vehicular traffic.

Basis of Design Products: **Tremco, Inc., Vulkem EWS Vehicular System**

Primer: Two-component, chemically curing methyl methacrylate

Tremco PUMA Primer - 17 wet mils

30 to 50 mesh silica sand

Base Coat: Polyurethane methacrylate

Tremco PUMA BC Base Coat - 80 wet mils

Wear Coat: Polyurethane methacrylate

Tremco PUMA WC Wear Coat mixed with Tremco PUMA Filler Powder - 65 wet mils

16 to 30 mesh silica sand to refusal

Top Coat: Methyl Methacrylate

Tremco PUMA TC Top Coat – 17-30 wet mils

Color: As selected by Architect from manufacturer's full range.

* + - * 1. Vehicular Traffic Coating for Drive Lanes and Parking Stalls: Manufacturer's standard low-odor, low-VOC, traffic-bearing, seamless, high-solids-content, cold liquid-applied, elastomeric, waterproofing membrane system with integral wearing surface for vehicular traffic; meeting ASTM C957, and SWRI validated and below 100 g/L maximum per 40 CFR 59, Subpart D (EPA Method 24).

Basis of Design Products: **Tremco, Inc., Vulkem 350NF[360NF]/950NF/951NF**

Primer: Liquid primer recommended for substrate and conditions by traffic-coating manufacturer when required.

Base Coat: Aromatic polyurethane

Vulkem 350NF – 25 wet mils

Wear Coat seeded with aggregate: Aromatic polyurethane with aggregate broadcast to refusal

Vulkem 950NF – 15 wet mils

20 to 40 mesh silica sand

Top Coat: Aliphatic polyurethane

Vulkem 951NF – 10-12 wet mils

* + - 1. ACCESSORY MATERIALS for Vulkem EWS with PUMA Technology
				1. General: Accessory materials as described in manufacturer's written installation instructions, recommended to produce complete traffic coating system meeting performance requirements, and compatible with traffic coating material and adjacent materials.
				2. Initiator; Benzoyl Peroxide

Tremco PUMA Initiator/Initiator+

* + - * 1. Cleaner; One component methyl methacrylate

Tremco PUMA Cleaner

* + - * 1. Crack and Joint Detailing Coating

Tremco PUMA BC LM and/or Tremco PUMA WC with silica

* + - * 1. Vertical and Ramp Application Coating

Tremco PUMA BC R

* + - * 1. Cant Beads and Detailing of Penetrations

Tremco PUMA BC T

* + - * 1. Expansion Joint Pre-Compressed or Closed Cell, Monolithic Foam System. Foam Structure Must not Contain Unbonded Foam Laminations;

1. Willseal® 250 for use in both vehicular and pedestrian traffic applications.

2. Willseal® 250-R for use in both vehicular and pedestrian traffic applications requiring additional point load resistance.

3. Willseal® Color Coreseal – CM for use in both vehicular and pedestrian traffic applications requiring +/-25% movement capability, closed cell, and a lightweight seal with an integrated waterproofing membrane. For vertical applications refer to Color Coreseal – V.

4. Willseal® FR-H - for use in both vehicular and pedestrian traffic applications requiring hourly fire rated systems. For vertical applications refer to Willseal® FR-V.

5. Willseal® approved accessory sealants as per Willseal application instructions.

* + - 1. ACCESSORY MATERIALS for Vulkem 350NF[360NF]/950NF/951NF
				1. General: Accessory materials as described in manufacturer's written installation instructions, recommended to produce complete traffic coating system meeting performance requirements, and compatible with traffic coating material and adjacent materials.
				2. Single-Component, Non-Sagging Urethane Joint Sealant: ASTM C 920, Type NS, Class 50.

Basis of Design Product: **Tremco Incorporated; Dymonic 100.**

* + - * 1. Expansion Joint Pre-Compressed or Closed Cell, Monolithic Foam System. Foam Structure Must not Contain Unbonded Foam Laminations;

Willseal ® 250 for both vehicular and pedestrian traffic applications.

2. Willseal® 250-R for use in both vehicular and pedestrian traffic applications requiring additional point load resistance.

3. Willseal® 250-CR for use in both vehicular and pedestrian traffic applications subject to chemical exposure, reference Willseal list of approved chemicals.

4. Willseal® Coreseal for use in both vehicular and pedestrian traffic applications requiring +/-25% movement capability, closed cell, and a lightweight seal.

5. Willseal® Color Coreseal – H for use in both vehicular and pedestrian traffic applications requiring +/-25% movement capability, closed cell, and a lightweight seal. For vertical applications refer to Color Coreseal – V.

6. Willseal® Color Coreseal – CM for use in both vehicular and pedestrian traffic applications requiring +/-25% movement capability, closed cell, and a lightweight seal with an integrated waterproofing membrane. For vertical applications refer to Color Coreseal – V.

7. Willseal® FR-H - for use in both vehicular and pedestrian traffic applications requiring hourly fire rated systems. For vertical applications refer to Willseal® FR-V.

8. Willseal® approved accessory sealants as per Willseal application instructions.

1. EXECUTION
	* + 1. EXAMINATION
				1. Surface Condition: Before applying traffic coating materials, and system accessories, examine substrate and conditions to ensure substrates are fully cured, smooth, and free from high spots, depressions, loose and foreign particles and other deterrents to adhesion, and conditions comply with manufacturer's written recommendations.

Verify concrete surfaces are visibly dry, have cured for time period recommended by traffic coating manufacturer, and are free from release agents, curing agents, laitance, and other contaminates.

Test surfaces following cleaning and abrasion specified below.

Test for capillary moisture by method recommended in writing by traffic-coating manufacturer.

Test for traffic coating adhesion per manufacturer's recommended method.

Notify Architect in writing of unsatisfactory conditions.

* + - * 1. Proceed with installation once unsatisfactory conditions have been corrected.
			1. PREPARATION
				1. Surface Preparation: Clean, prepare, and treat substrates in accordance with ASTM C1127 and traffic coating manufacturer's written instructions.

Remove contaminants, curing compounds, and film-forming coatings from substrates.

Remove projections and excess materials and fill voids with manufacturer's recommended substrate patching material.

Mechanically abrade concrete surfaces by method of shot blasting to a uniform profile in accordance with ASTM D4259 and meeting ICRI Surface Profile CSP 3. Do not acid etch.

Clean prepared surfaces in accordance with ASTM D4258.

* + - * 1. Protect adjacent finished surfaces by masking. Mask termination point on vertical surfaces. Protect weep holes and drains.
				2. For accessory materials, follow manufacturers application instructions.
			1. TERMINATIONS AND PENETRATIONS
				1. Prepare vertical and horizontal surfaces at horizontal to vertical transitions, terminations, joints, and penetrations through traffic coatings in accordance with ASTM C1127 and manufacturer's written instructions, using accessory materials specified.
				2. At terminations of traffic coating exposed to traffic, rout 1/4 by 1/4 inch keyway in concrete.
				3. Detail Preparation: Prepare non-moving shrinkage cracks, large cracks, construction joints, expansion joints, projections and protrusions, penetrations, drains, and changes in plane in accordance with manufacturer's written instructions and details, .

Prepare joints and cracks in substrate in accordance with ASTM C1127 and ASTM D4258 and manufacturer's written instructions.

* + - * 1. Joint Coating Installation: Comply manufacturer's written instructions. Allow joint coatings to cure adequately before coating with traffic coating.

Provide coating cants at penetrations and at horizontal-to-vertical intersections. Tool coating material to form 45 degree angle transition. Penetrations must be grouted solid at all instances.

Rout and fill cracks with coating and tool flush with surface.

Feather edges of joint coating applications.

Allow coating to cure.

Fill expansion joints less than 1” with backer rod and joint sealant contact Tremco for sealant recommendation. Do not apply traffic coating over expansion joints.

Fill expansion joints greater than 1” with specified Willseal Expansion Joint material, contact Tremco for sealant recommendation. Do not apply traffic coating over expansion joints.

* + - 1. VEHICULAR TRAFFIC-COATING APPLICATION
				1. Primer: Prime surfaces to receive traffic coating system. Allow to cure before proceeding.

Specifier: Retain first paragraph below if applicable; recommended for large scale or critical applications.

* + - * 1. Apply traffic coating according to manufacturer's written instructions.

Verify that wet film thickness of each coat complies with requirements every [100 sq. ft. (9 sq. m)].

Specifier: Edit number of coats below based upon manufacturer's recommendation for type of traffic. Intermediate coat is typically recommended for heavy traffic areas.

* + - * 1. Apply traffic coatings to prepared wall terminations and vertical surfaces to height indicated; omit aggregate on vertical surfaces.
				2. Cure traffic coatings. Prevent contamination and damage during application and curing stages.
			1. FIELD QUALITY CONTROL

Specifier: Retain "Testing Agency" Paragraph below if applicable to Project, and edit to identify party retaining independent agency to perform tests and inspections.

* + - * 1. Coordination of Testing: Cooperate with testing agency. Allow access to work areas and staging. Notify testing agency in writing of schedule for Work of this Section to allow sufficient time for testing and inspection.

Do not cover Work until testing and inspection is completed and accepted.

* + - * 1. Reporting: Forward written inspection reports to the Architect within 3 working days of the inspection and test being performed.
				2. Correction: Correct deficient applications not passing tests and inspections, make necessary repairs, and retest as required to demonstrate compliance with requirements.
			1. CLEANING AND PROTECTING
				1. Clean spills, stains, and overspray resulting application utilizing cleaning agents recommended by manufacturers of affected construction. Remove masking materials.
				2. Protect traffic coating from damage from subsequent work. Protect traffic coating materials from exposure to UV light for period in excess of that acceptable to traffic coating manufacturer; replace overexposed materials and retest.

END OF SECTION