\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*GUIDE SPECIFICATION IS PROVIDED BY PROSOCO, INC. AS A SERVICE AND IS INTENDED TO BE USED AS A PROJECT SPECIFIC SPECIFICATION SECTION. This guide specification is written around the Construction Specifications Institute (CSI), FormatS AND GUIDING TECHNICAL PRINCIPALS and therefore may be used with most master specification systems. For specification assistance on specific product applications, please contact our offices AT (800) 255-4255 or our local product representatives.

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**TIPS:**

To view non-printing **Editor's Notes** that provide guidance for editing, click on the Show/Hide button or Word 2010 offers a convenient keyboard shortcut; press the Ctrl+\* keystroke to toggle on/off. (Press the Ctrl key, Shift key, and the number 8 simultaneously).

##### Retain the applicable section title below to suit the project.

# SECTION [07 19 00–Water Repellents] [07 19 19.10- SILICONE Water AND Graffiti-Resistant Treatments] [09 90 00- Painting & Coating] [09 96 00 -HIGH PERFORMANCE COATINGS] [09 96 23- GRAFFITI-RESISTANT COATINGS]

## GENERAL

### SUMMARY

#### Section Includes:

##### Water and graffiti resistant treatment applied to exterior exposed masonry walls.

#### Related Sections:

##### Retain subparagraphs below to suit the project.

##### Section 01 33 00 - Submittal Procedures.

##### Section 04 01 10- Unit Masonry Cleaning.

##### Section 04 20 00- Unit Masonry.

### References

#### The date of the standard is that in effect as the date of receipt of bids for the project.

#### ASTM International (ASTM):

##### C67- Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.

##### C140- Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.

##### D2369- Standard Test Method for Volatile Content of Coatings.

##### D6490- Standard Test Method for Water Vapor Transmission of Non-Film Forming Treatments Used on Cementitious Panels.

##### D6532- Standard Test Method for Evaluation of the Effect of Clear Water Repellent Treatments on Water Absorption of Hydraulic Cement Mortar Specimens.

##### D7089- Standard Practice for Determination of the Effectiveness of Anti-Graffiti Coating for Use on Concrete, Masonry and Natural Stone Surfaces by Pressure Washing.

##### E96- Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials.

### SUBMITTALS

#### General: Submit the following according to the Conditions of the Contract and Division 01 General Requirements specification sections.

#### Submit product data including detailed test results of materials applied to surfaces similar to requirements of this Section.

#### Submit manufacturer's instructions for methods and application procedures.

#### Submit manufacturer's certification indicating water and graffiti-resistant treatment conforms to or exceeds requirements stated herein.

### QUALITY ASSURANCE

#### The Contractors involved with work covered by this Section shall have had a minimum of five (5) years experience using specified techniques for water and graffiti-resistant treatment application.

#### Tradesman must be competent and experienced and shall demonstrate reasonable care during performance of operations described in this Section.

#### Tests and Approvals:

##### Sample Area:

###### Contractor shall apply a test area of wall surface from four square feet in size for inspection and approval by the Owner’s Representative after treatment has cured. Test area shall be available for comparison during the specified scope of work.

###### Samples of adjacent materials shall be tested for possible reaction with the water and graffiti-resistant treatment. Such samples shall be available for inspection by the Owner’s Representative.

##### If any part of this work shall be found defective (because of improper preparation of surfaces or application of treatment) at any time before the final acceptance of the item, the Contractor shall, at his own expense, make good such defect to the satisfaction of the A/E.

### PROJECT CONDITIONS

#### Protection:

##### Contractor shall provide, at all times, covered access to premises and necessary utilities, space for storage of material and equipment, etc.

##### All activities shall be in compliance with local and governmental regulations and codes.

##### The surface and atmospheric temperature should be at least 40 degrees Fahrenheit. and rising during application and for eight hours following. Surface and air temperatures should not exceed 90 degrees Fahrenheit.

##### Surfaces should be dry.

##### Apply only in well ventilated areas.

##### All caulking (sealants) should be applied a minimum of 24 hours prior to application, or as required by sealant manufacturer, whichever is greater, before application of water and graffiti-resistant treatment.

##### The Contractor shall require applicators to observe safety precautions as outlined on containers and labels. It is the responsibility of the Contractor to provide well ventilated areas for all workmen as well as to observe safety precautions as stipulated on labels and instructions of all materials used, and as required by governing authorities during application and drying.

### WARRANTY

#### Warranty: Manufacturer's warranty that water repellant will repel water and will allow water vapor out of substrate for not less than ten (10) years commencing on Date of Substantial Completion.

## PRODUCTS

### WATER AND GRAFFITI-RESISTANT TREATMENTS

Retain the paragraphs below to suit the project.

Retain paragraph below if Water-Based Water & Graffiti Repellent with 6% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, and Unpolished Sandstone. May darken or enhance the natural color of some surfaces.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, water-based silicone emulsion for weatherproofing masonry materials and protecting them from graffiti attacks without altering their natural appearance.

##### Physical and Performance Properties:

###### Total Solids per ASTM D2369: Six (6) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C67: Greater than 98 percent.

###### Water Absorption Reduction (CMU) per ASTM C140: Greater than 87 percent.

###### Water Vapor Transmission per ASTM E96:

Clay Brick: Greater than 99 percent.

Concrete Block: Greater than 95 percent.

Mortar: Greater than 88 percent.

###### Water Vapor Transmission WVT per ASTM D6490: Minimum 91 percent retention.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control](https://prosoco.com/product/blok-guard-graffiti-control-wb-6/) WB 6"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

Retain paragraph below if Solvent-Based Water & Graffiti Repellent with 9% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, Unpolished Marble, Unpolished Travertine, Unpolished Limestone, Unpolished Sandstone, and Wood. May darken or enhance the natural color of exposed aggregate, pigmented block or mortar.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, solvent-based silicone for weatherproofing masonry materials and protecting them from graffiti attacks.

##### Physical and Performance Properties:

###### Total Solids per ASTM D 2369: Nine (9) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 96 percent.

###### Water Absorption Reduction per ASTM C 140:

Heavy Weight CMU: Greater than 89 percent.

Split Face CMU: Greater than 95 percent.

###### Water Vapor Transmission per ASTM E96:

Limestone: Greater than 86 percent.

Sandstone: Greater than 95 percent.

Concrete Block: Greater than 95 percent.

Mortar: Greater than 95 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 93 percent retention.

###### Cleanability Level 2 per ASTM D7089.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control 9](https://prosoco.com/product/blok-guard-graffiti-control-9/)"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

Retain paragraph below if VOC Exempt Water & Graffiti Repellent with 9% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, Unpolished Marble, Unpolished Travertine, Unpolished Limestone, Unpolished Sandstone, and Wood. May darken or enhance the natural color of exposed aggregate, pigmented block or mortar.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, solvent-based silicone for weatherproofing masonry materials and protecting them from graffiti.

##### Physical and Performance Properties:

###### Total Solids per ASTM D 2369: Nine (9) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 96 percent.

###### Water Absorption Reduction per ASTM C 140:

Heavy Weight CMU: Greater than 89 percent.

Split Face CMU: Greater than 95 percent.

###### Water Vapor Transmission per ASTM E96:

Limestone: Greater than 86 percent.

Sandstone: Greater than 95 percent.

Concrete Block: Greater than 95 percent.

Mortar: Greater than 95 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 88 percent retention.

###### Cleanability Level 2 per ASTM D7089.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control VOC](https://prosoco.com/product/blok-guard-graffiti-control-voc-9/) 9"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

Retain paragraph below if Solvent-Based Water & Graffiti Repellent with 15% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, Unpolished Marble, Unpolished Travertine, Unpolished Limestone, Unpolished Sandstone, and Wood. May darken or enhance the natural color of exposed aggregate, pigmented block or mortar.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, solvent-based silicone for weatherproofing masonry materials and protecting them from graffiti attacks.

##### Physical and Performance Properties:

###### Total Solids per ASTM D 2369: Fifteen (15) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 99 percent.

###### Water Absorption Reduction per ASTM C 140:

Light Weight CMU: Greater than 89 percent.

Medium Weight CMU: Greater than 95 percent.

###### Water Vapor Transmission per ASTM E96:

Medium Weight CMU: Greater than 86 percent.

Clay Brick: Greater than 95 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 85 percent retention.

###### Cleanability Level 2 per ASTM D7089.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control](https://prosoco.com/product/blok-guard-graffiti-control-15/) 15"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

Retain paragraph below if Water-Based Water & Graffiti Repellent with 15% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, and Unpolished Sandstone. Will not darken the substrate.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, water-based silicone emulsion for weatherproofing masonry materials and protecting them from graffiti attacks without altering their natural appearance.

##### Physical and Performance Properties:

###### Total Solids per ASTM D 2369: Fifteen (15) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 99 percent.

###### Water Absorption Reduction (CMU) per ASTM C 140: Greater than 92 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 97 percent retention.

###### Cleanability Level 2 per ASTM D7089.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control WB](https://prosoco.com/product/blok-guard-graffiti-control-wb-15/) 15"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

Retain the paragraph below if VOC Exempt Water & Graffiti Repellent with 15% solids is required. Applicable Substrates: Architectural Concrete Block, Concrete, Fired Clay, Unpolished Marble, Unpolished Travertine, Unpolished Limestone, Unpolished Sandstone, and Wood. May darken or enhance the natural color of exposed aggregate, pigmented block or mortar.

#### Water and Graffiti- Resistant Treatment:

##### Use clear-drying, penetrating, solvent-based silicone for weatherproofing masonry materials and protecting them from graffiti attacks.

##### Physical and Performance Properties:

###### Total Solids per ASTM D 2369: Fifteen (15) percent.

###### Comply with national, state, and district AIM VOC regulations.

###### Water Absorption Reduction (Brick) per ASTM C 67: Greater than 99 percent.

###### Water Absorption Reduction per ASTM C 140:

Light Weight CMU: Greater than 89 percent.

Medium Weight CMU: Greater than 95 percent.

###### Water Vapor Transmission per ASTM E96:

Medium Weight CMU: Greater than 86 percent.

Clay Brick: Greater than 95 percent.

###### Water Vapor Transmission WVT per ASTM D 6490: Minimum 82 percent retention.

###### Cleanability Level 2 per ASTM D7089.

##### Approved Products:

###### "[Sure Klean Weather Seal Blok-Guard & Graffiti Control VOC](https://prosoco.com/product/blok-guard-graffiti-control-voc-15/) 15"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255) (Basis of Design).

#### Graffiti Remover:

##### Product shall be manufactured and approved for use by the water and graffiti-resistant treatment manufacturer:

##### Approved Products:

###### [Enviro Klean SafStrip](https://prosoco.com/product/safstrip/); [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255).

###### [Enviro Klean SafStrip 8](https://prosoco.com/product/safstrip-8/); [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255).

###### [Sure Klean Graffiti Remover](https://prosoco.com/product/graffiti-remover/)"; [PROSOCO, Inc.](http://www.prosoco.com/) (800-255-4255).

## EXECUTION

### PREPARATION

#### Verify surfaces to receive water and graffiti-resistant treatments are clean, free of efflorescence, oil, grease, or other foreign matter detrimental to application.

#### Remove loose particles and foreign matter. Remove grease or oil with a solvent, effective alkaline cleaner, or detergent as recommended by water and graffiti-resistant treatment manufacturer.

#### Allow surfaces to dry prior to application.

#### Protect all surrounding areas as recommended by the manufacturer or as directed by the Architect.

##### Windows: Windows shall be protected from contact with materials by masking with polyethylene or other approved techniques.

##### All polished stone, metal, or non-masonry surfaces shall be protected from contact with the material by masking with polyethylene.

##### Masonry surfaces must be in good repair. All new masonry construction surfaces must be allowed to cure for a minimum of 28 days prior to application. Surfaces must be completely dry.

#### Verify all windows, exterior intakes and air conditioning vents are covered and air handling equipment is shut down during application and until vapors have dissipated.

### Water and Graffiti Resistant Treatment APPLICATION

#### Test each surface and/or material to be treated to ensure compatibility and desired water and graffiti-resistant treatment results. The surface to be treated must be clean and free of all foreign matter and as dry as possible to ensure proper penetration of water and graffiti-resistant treatment.

#### Do NOT dilute water and graffiti- resistant treatment.

#### Proceed with application of water and graffiti-resistant treatment in an orderly manner once application rate has been tested; work from bottom to top of each scaffold width and from one end of each elevation to the other.

#### Apply water and graffiti-resistant treatment to dry surfaces that comply with manufacturer's written instructions; use brush or spray application methods, at Contractor's option.

#### Preferred method of application is with low pressure, spray equipment. Use roller or brush for small scall applications or when spray applications are not appropriate. Apply in coverage rate as recommended by manufacturer for type of material.

#### Spray Application:

##### Uniformly saturate water and graffiti-resistant treatment using the “wet-on-wet” application method from bottom up, creating a 6 to 8 inch rundown below the spray contact point. Apply in accordance with manufacturer recommendation.

##### Let the first application penetrate for 2 to 3 minutes. Brush out heavy runs and drips to prevent build up. Do not spray apply at pressures exceeding 50 psi.

##### Reapply a second coat of water and graffiti-resistant treatment for heavily textured and porous surfaces.

##### Edit subparagraph below to suit product. One (1) hour for Blok-Guard & Graffiti Control WB 6 and WB 15. Two (2) hours for Blok-Guard & Graffiti Control 9, VOC 9, 15 and VOC 15.

###### Apply once first coat is dry to touch, or within [one][two] hour[s] of first coat. Allowing more than [one][two] hour[s] between coats reduces the effectiveness of the second coat.

#### Roller or Brush Application:

##### Uniformly saturate the surface with water and graffiti-resistant treatment. Avoid excessive overlapping. Brush out heavy runs and drips to prevent build up.

##### Reapply second coat of water and graffiti-resistant treatment for maximum protection.

##### Edit subparagraph below to suit product. One (1) hour for Blok-Guard & Graffiti Control WB 6 and WB 15. Two (2) hours for Blok-Guard & Graffiti Control 9, VOC 9, 15 and VOC 15.

###### Apply once first coat is dry to touch, or within [one][two] hour[s] of first coat. Allowing more than [one][two] hour[s] between coats reduces the effectiveness of the second coat.

##### Retain the below paragraph for wood applications with BGGC 9, BGGC 9 VOC, BGGC 15, and BGGC VOC 15.

#### [Vertical Wood Application:

##### Uniformly saturate the surface with water and graffiti-resistant treatment to the point of rejection.

##### Let the first application penetrate for 2 to 3 minutes.

##### Reapply a second coat of water and graffiti-resistant treatment. Apply once the first coat is dry to touch, or within two hours of the first coat.]

### GRAFFITI REMOVER APPLICATION

#### At locations indicated, clean exterior masonry and concrete surfaces to comply with the manufacturer’s recommendations designed to dissolve most spray paints, marking pens, and acrylic sealers from masonry.

### PROTECTION

#### Protect adjacent surfaces not scheduled to receive treatment. If applied on unscheduled surfaces, remove immediately, by manufacturer approved method.

#### Protect treated surfaces from rain for at least 6 hours after application.

#### Correct damage by cleaning, as approved by A/E.

##### Retain the applicable section title below to suit the project.

# END OF SECTION [07 19 00] [07 19 19.10] [09 90 00] [09 96 00] [09 96 23]