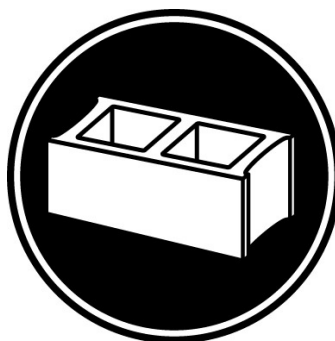




# *Pallet Tag Program Laboratory Report*

## Basalite Concrete Products DuPont, WA



*Project No. 1807-01 PTP*

***Prepared For:***



***Prepared By:***

*J. Lucas Comadoll*

J. Lucas Comadoll  
QC/Project Testing Technician  
AMT Laboratories

August 2018



# LABORATORY REPORT

AMT Laboratories • 3741 Greenway Circle • Lawrence, Kansas 66046 • (888) 376-3600

**FOR:** Zach Dunham, Basalite Concrete Products  
**cc:** Jake Boyer, PROSOCO, Inc.  
Parker Sloan, PROSOCO, Inc.  
Al Morris, PROSOCO, Inc.

**SUBJECT:** Basalite Concrete Products  
DuPont, WA  
Pallet Tag Evaluation

**DATE:** August 16, 2018  
**PROJECT:** 1807-01 PTP

**SAMPLES SUBMITTED:** 10 CMUs (4 Smooth, 4 Ground Face, and 2 Split Face) and 1 concrete brick

Block	Name	Color	Integral Water Repellent	Size
(2) Smooth CMU	"Glacier"	White	No	15.5" x 7.5" x 1.5"
(2) Ground Face CMU	"Glacier"	White	No	
(2) Smooth CMU	"Cream"	Buff	No	
(2) Ground Face CMU	"Cream"	Buff	No	
(2) Smooth CMU	"Natural"	Light Grey	No	
(2) Ground Face CMU	"Natural"	Light Grey	No	
(2) Split Face CMU	"Natural"	Light Grey	No	
(2) Smooth CMU	"Ebony"	Dark Grey	No	
(2) Ground Face CMU	"Ebony"	Dark Grey	No	
(2) Split Face CMU	"Ebony"	Dark Grey	No	
(4) Concrete Brick	"Spec-Brik®"	Dark Grey	No	15.5" x 3.5" x 1.5"

**SUBMITTED BY:** Zach Dunham  
Basalite Concrete Products  
3299 International Place  
DuPont, WA 98327

**PURPOSE OF TEST:**

- To determine the most appropriate PROSOCO, Inc. new construction cleaner(s) for the submitted samples.
- To determine the most appropriate PROSOCO, Inc. water repellent(s) for the submitted samples.
- To determine the effectiveness of appropriate PROSOCO, Inc. products in preventing the penetration of, and simplifying the removal of, graffiti staining on the submitted samples.

**PRODUCTS EVALUATED:**

<b>New Construction Cleaning</b>	<b>Dilution:</b>
Sure Klean® Custom Masonry Cleaner	1:4; 1:6
Sure Klean® Vana Trol®	1:6; 1:8
Sure Klean® Light Duty Concrete Cleaner	1:2; 1:3

<b>Water Repellency</b>	<b>Dilution:</b>
Sure Klean® Weather Seal Siloxane WB Concentrate	1:9
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	Concentrate
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	Concentrate
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	Concentrate

<b>Graffiti Resistance</b>	<b>Dilution:</b>
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	Concentrate
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	Concentrate
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	Concentrate

<b>Graffiti Removal</b>	<b>Dilution:</b>
Defacer Eraser® Graffiti Remover	Concentrate
Enviro Klean® SafStrip® 8	Concentrate

## TEST METHODS: New Construction Cleaning

Sure Klean® Custom Masonry Cleaner, Sure Klean® Vana Trol®, and Sure Klean® Light Duty Concrete Cleaner were evaluated to determine the optimal concentration of cleaner which leaves the external surface looking most like the natural through-body color of the CMU.

Color uniformity was evaluated by comparing aggregate exposure and surface pigment alteration/removal of each cleaned surface to the natural through-body color of the CMU and to the uncleaned surface of the concrete brick.

Aggregate Exposure is the visual examination comparing aggregate exposure of the interior, through-body section of the CMU and the uncleaned surface of the concrete brick to surfaces cleaned with selected product(s) at given dilutions.

Surface Pigment Alteration/Removal is the visual examination comparing the pigmentation of the interior, through-body section of the CMU and the uncleaned surface of the concrete brick to surfaces cleaned with selected product(s) at given dilutions.

The following is the scale used for reporting results of both categories:

- 0 – No change** compared to through-body or uncleaned surface of the concrete brick.
- 1 – Slight change** compared to through-body or uncleaned surface of the concrete brick.
- 2 – Moderate change** compared to through-body or uncleaned surface of the concrete brick.
- 3 – Significant change** compared to through-body or uncleaned surface of the concrete brick.

### NOTE: When cleaning integrally colored CMUs.

Integrally colored concrete masonry units (CMUs) frequently have high amounts of pigments concentrated on the surface of the cured concrete unit. Variation of surface pigment concentrations from one CMU to the next creates a blotchy appearance in the completed wall. Allowed to remain on the surface of the CMU, the weakly bound pigment will weather and streak, further detracting from the appearance of the completed CMU wall.

In addition to removing excess mortar and construction related soiling, the goal of any cleaning operation undertaken on an integrally colored CMU should include removal of unnaturally high concentrations of surface pigment. By revealing the natural through-body color on the integrally colored unit, the overall color uniformity and weathering resistance of the completed CMU wall is improved.

### Cleaning Procedure:

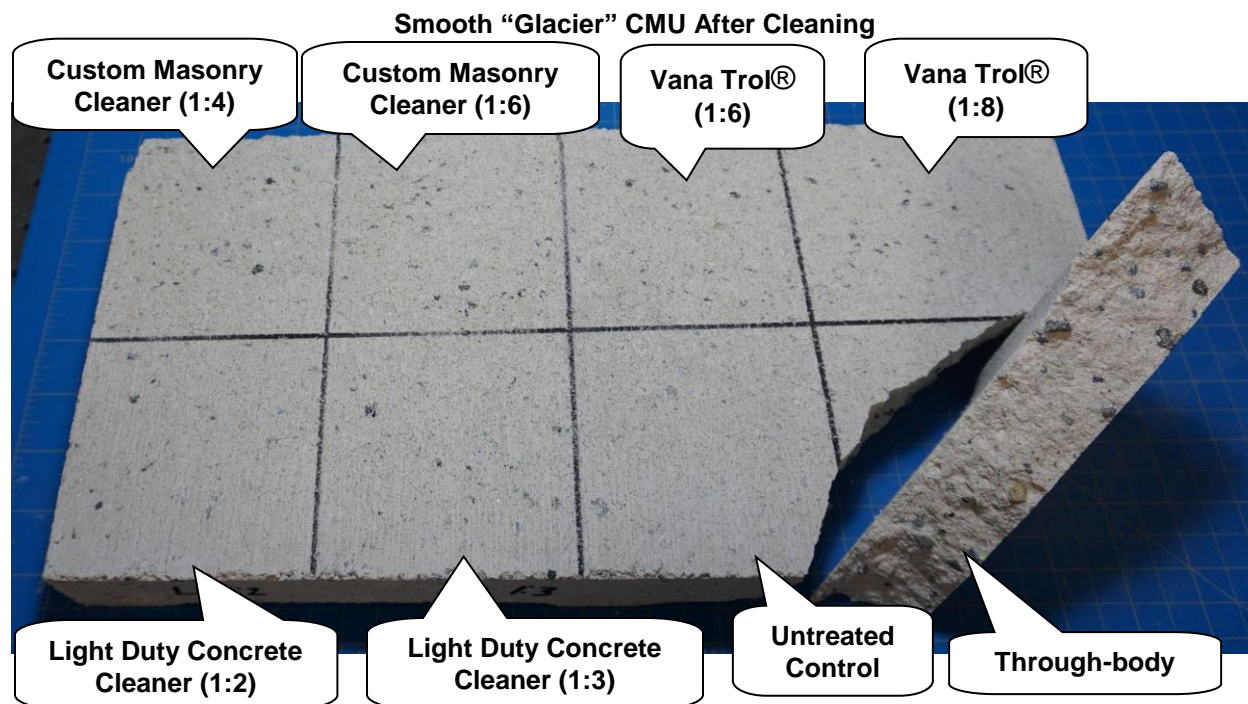
1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Guide instructions.
2. Allow for an appropriate dwell time:  
Custom Masonry Cleaner .....5 minutes  
Vana Trol®.....5 minutes  
Light Duty Concrete Cleaner.....5 minutes
3. Reapply cleaning solution; do not let cleaner dry into masonry.
4. Rinse thoroughly with plenty of fresh water.\*
5. Allow the sample to dry for at least 18 hours and visually examine.
6. Break the sample and compare the through-body surfaces to the cleaned surfaces for the best match and to the uncleaned surface of the concrete brick.

**\*Rinsing Equipment** – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 45 degree fan spray tip was used for rinsing.

## TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity

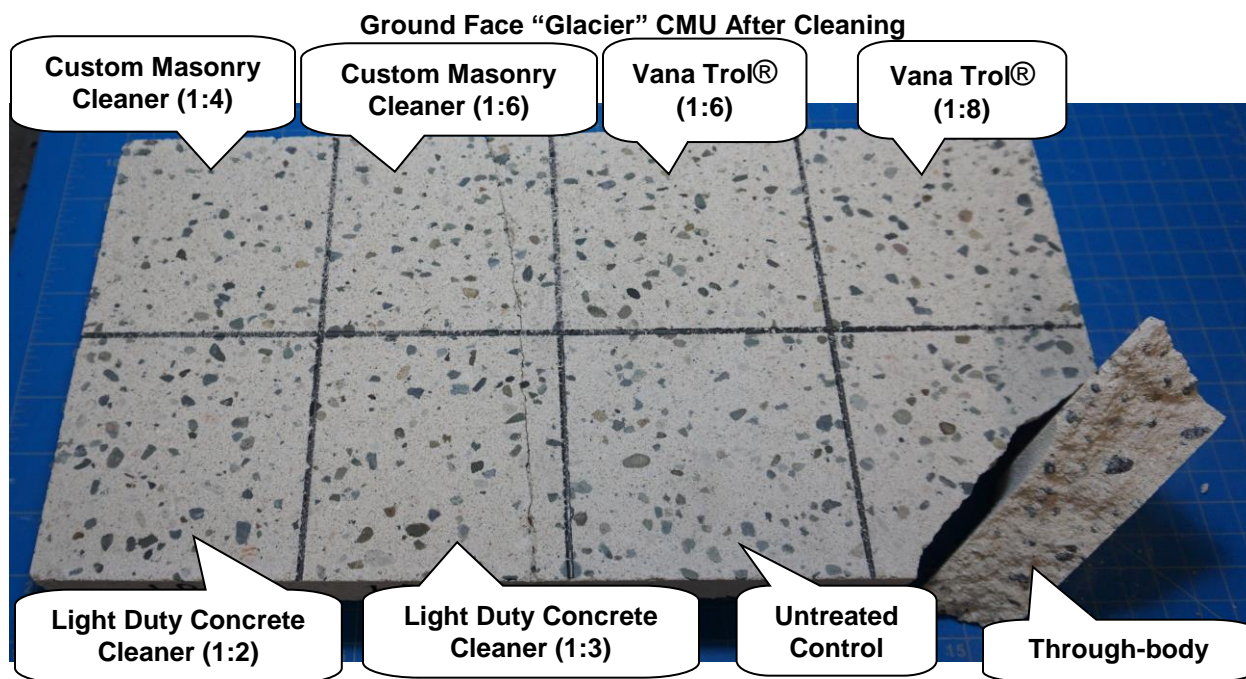
Scale used for reporting results of both categories:
0 – <b>No change</b> compared to through-body or uncleaned surface of the concrete brick.
1 – <b>Slight change</b> compared to through-body or uncleaned surface of the concrete brick.
2 – <b>Moderate change</b> compared to through-body or uncleaned surface of the concrete brick.
3 – <b>Significant change</b> compared to through-body or uncleaned surface of the concrete brick.

<b>Substrate:</b> Smooth CMU	<b>Name:</b> "Glacier"		
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

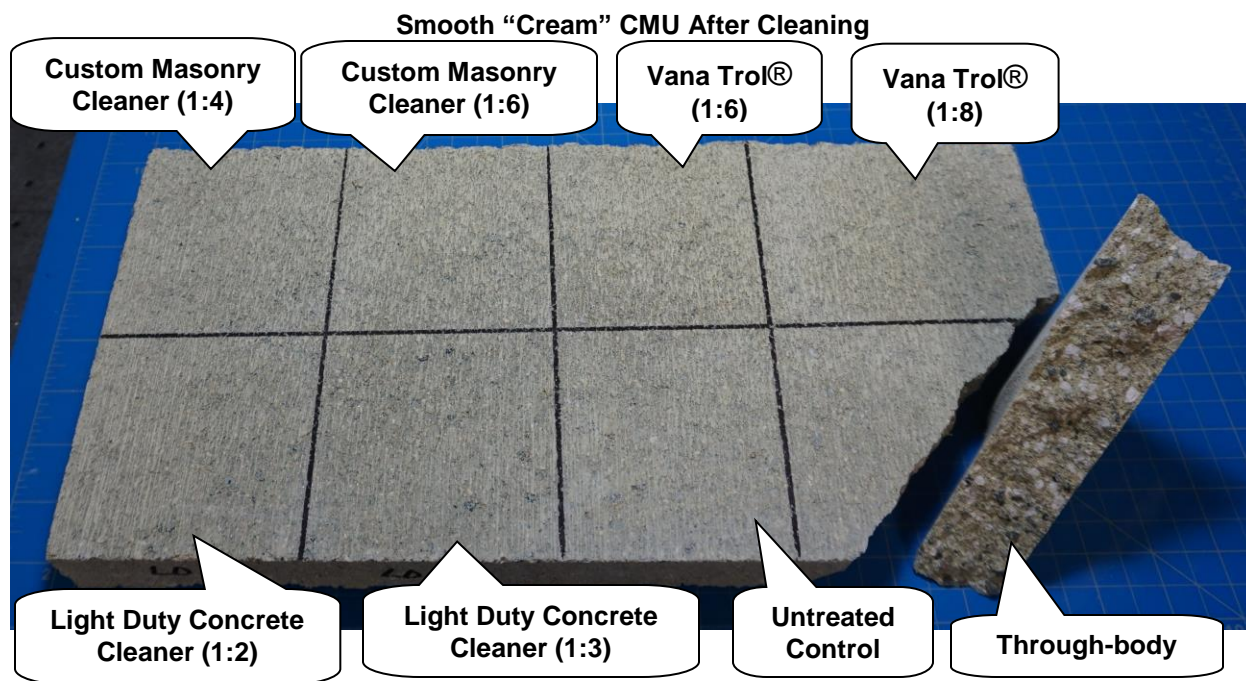
<b>Substrate:</b> Ground Face CMU		<b>Name:</b> "Glacier"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	1	1
Custom Masonry Cleaner	1:6	1	1
Vana Trol®	1:6	0	0
Vana Trol®	1:8	0	0
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1





**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

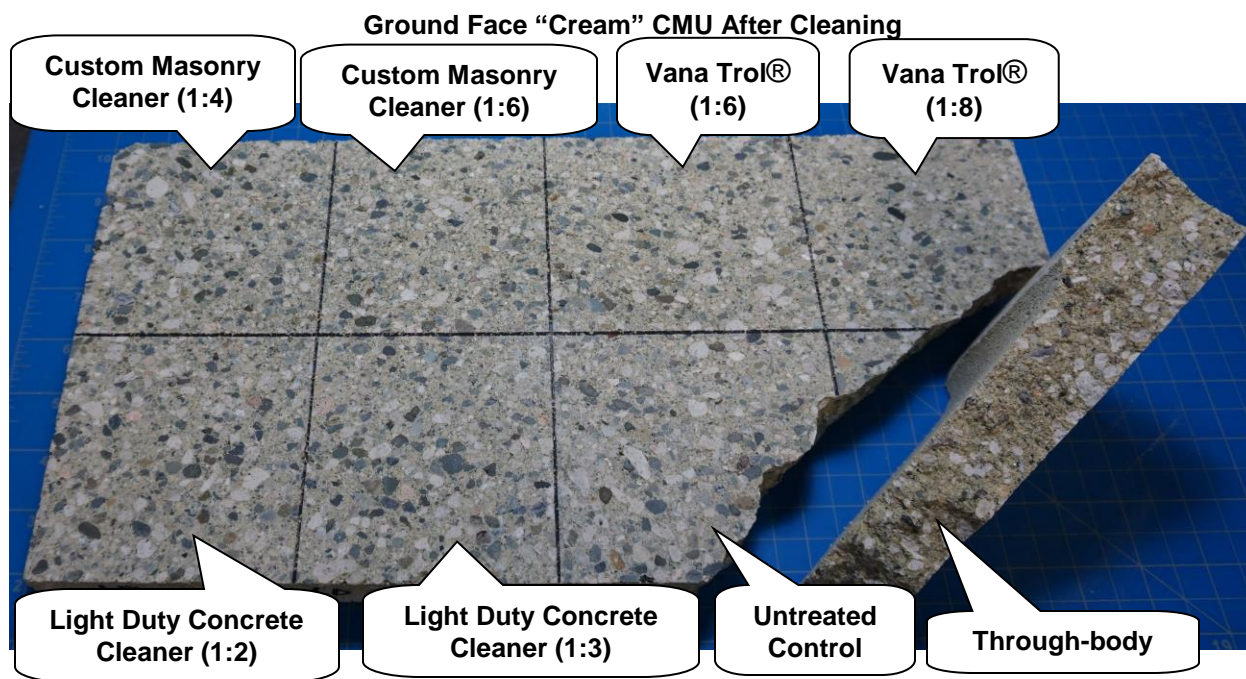
<b>Substrate:</b> Smooth CMU		<b>Name:</b> "Cream"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	1	1
Custom Masonry Cleaner	1:6	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1





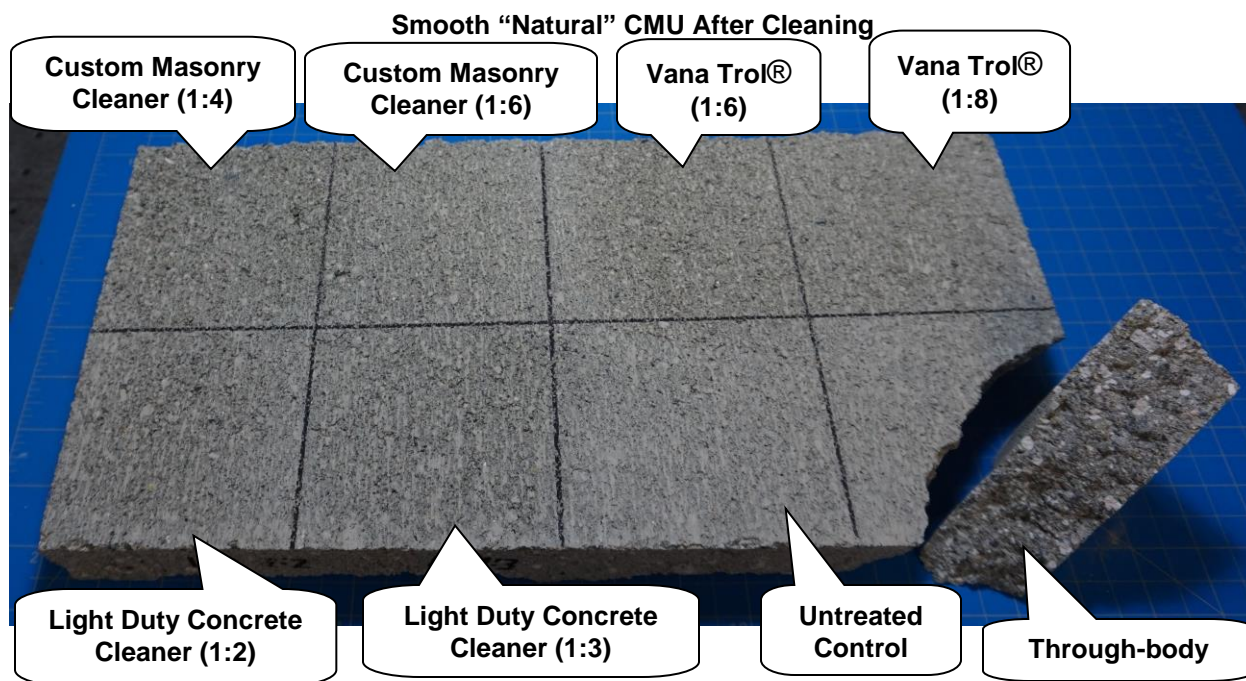
**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

<b>Substrate:</b> Ground Face CMU		<b>Name:</b> "Cream"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



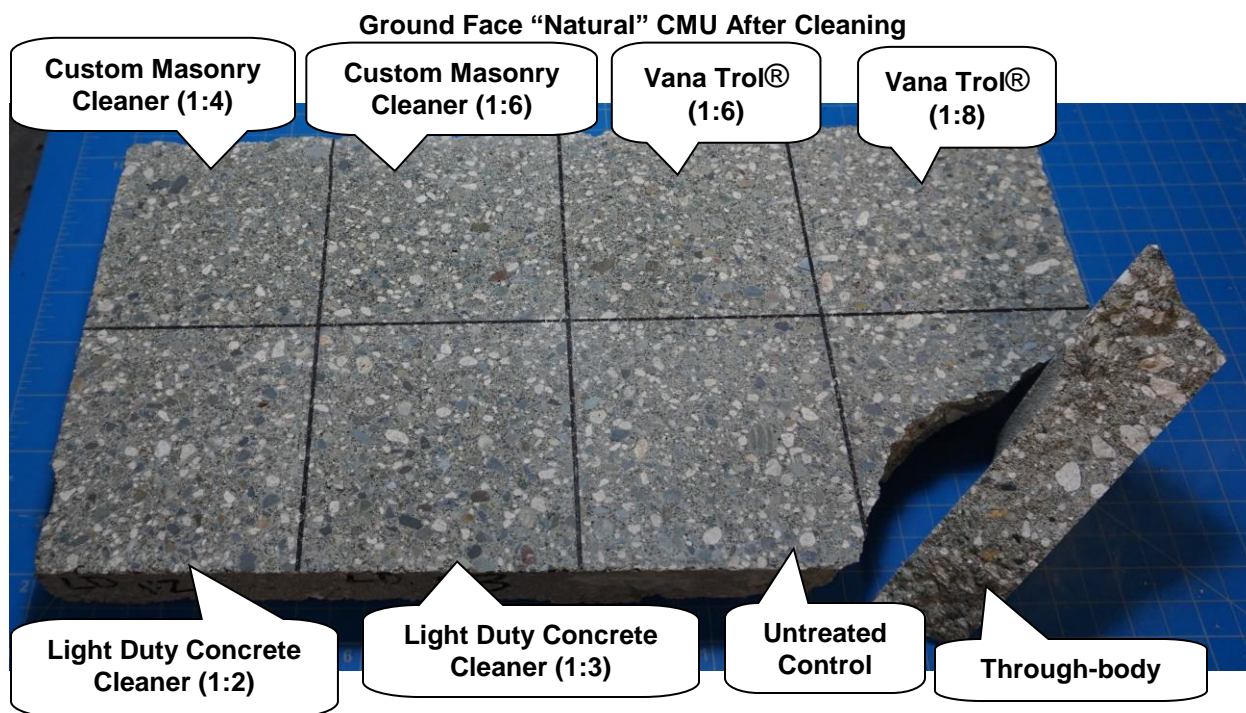
**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

<b>Substrate:</b> Smooth CMU		<b>Name:</b> "Natural"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	1	1
Custom Masonry Cleaner	1:6	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

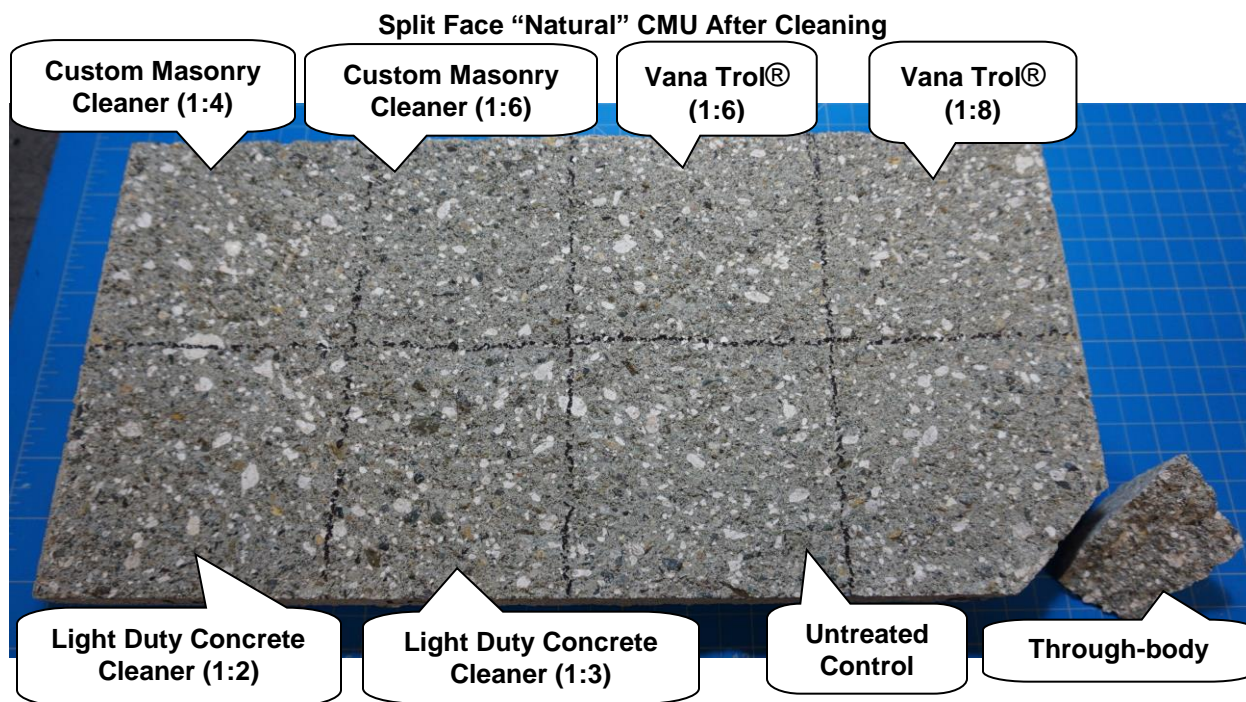
<b>Substrate:</b> Ground Face CMU		<b>Name:</b> "Natural"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1





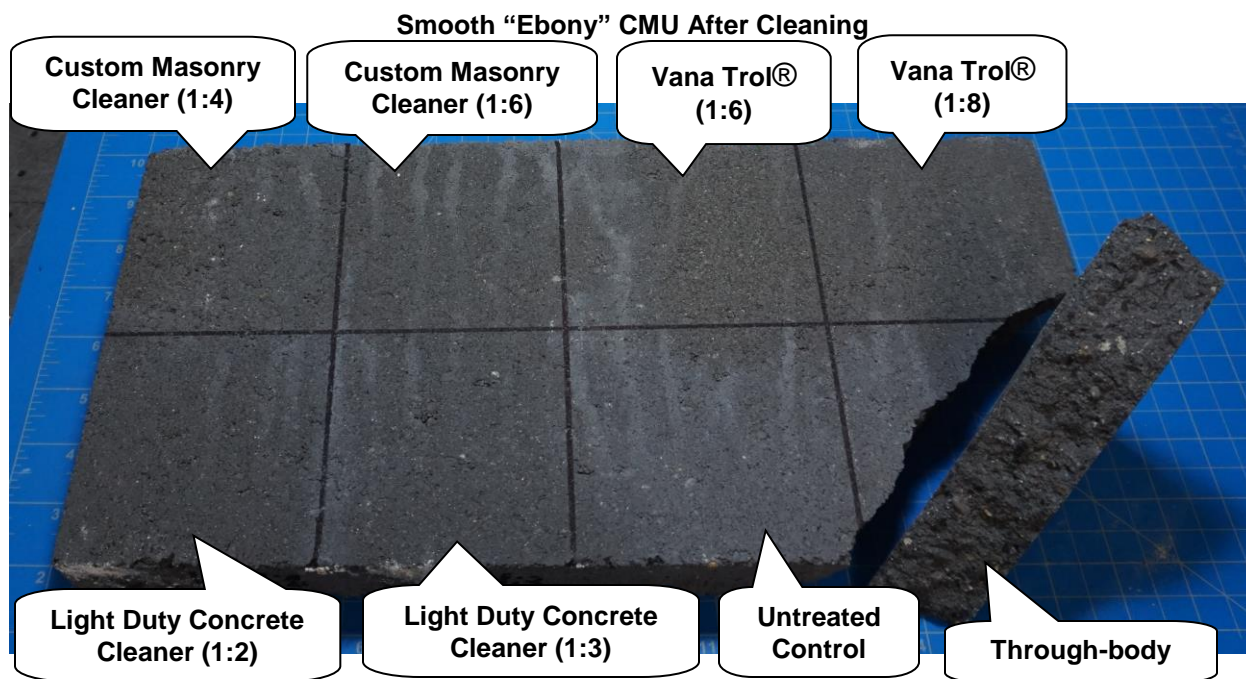
**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

<b>Substrate:</b> Split Face CMU		<b>Name:</b> "Natural"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

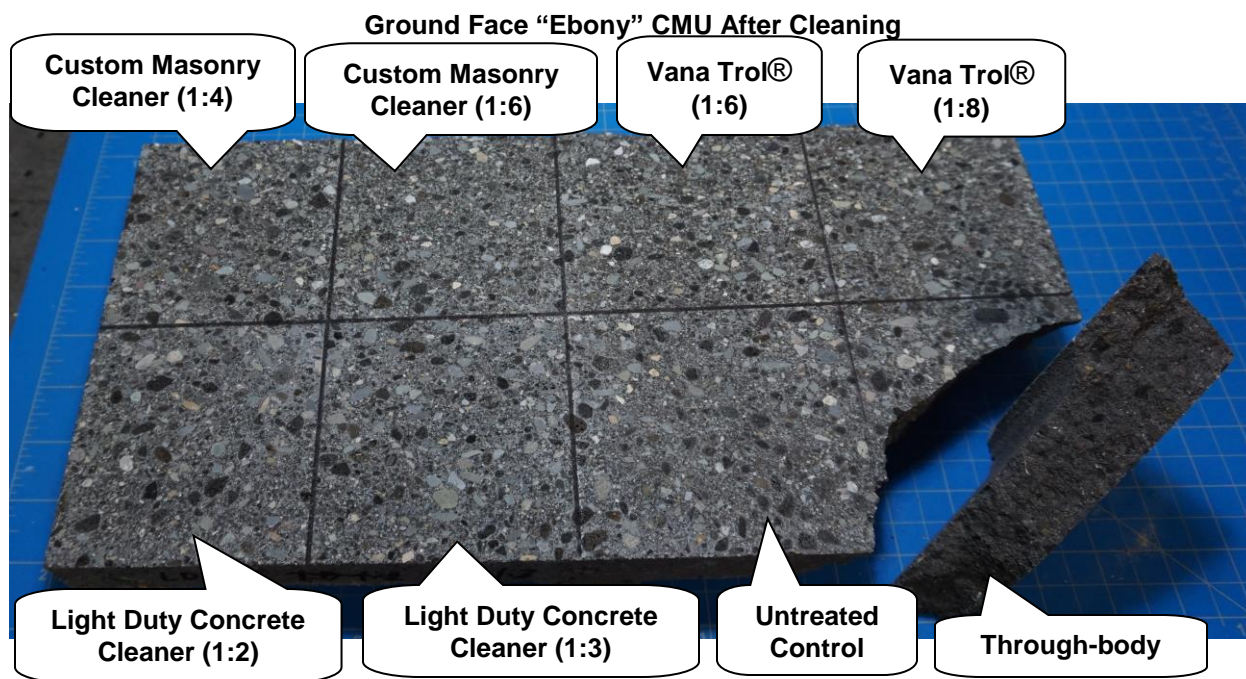
<b>Substrate:</b> Smooth CMU		<b>Name:</b> "Ebony"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	2	2
Vana Trol®	1:8	2	2
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



NOTE: The smooth "Ebony" CMU was submitted with white drip marks across the surface. The cleaners removed most but not all of those marks.

**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

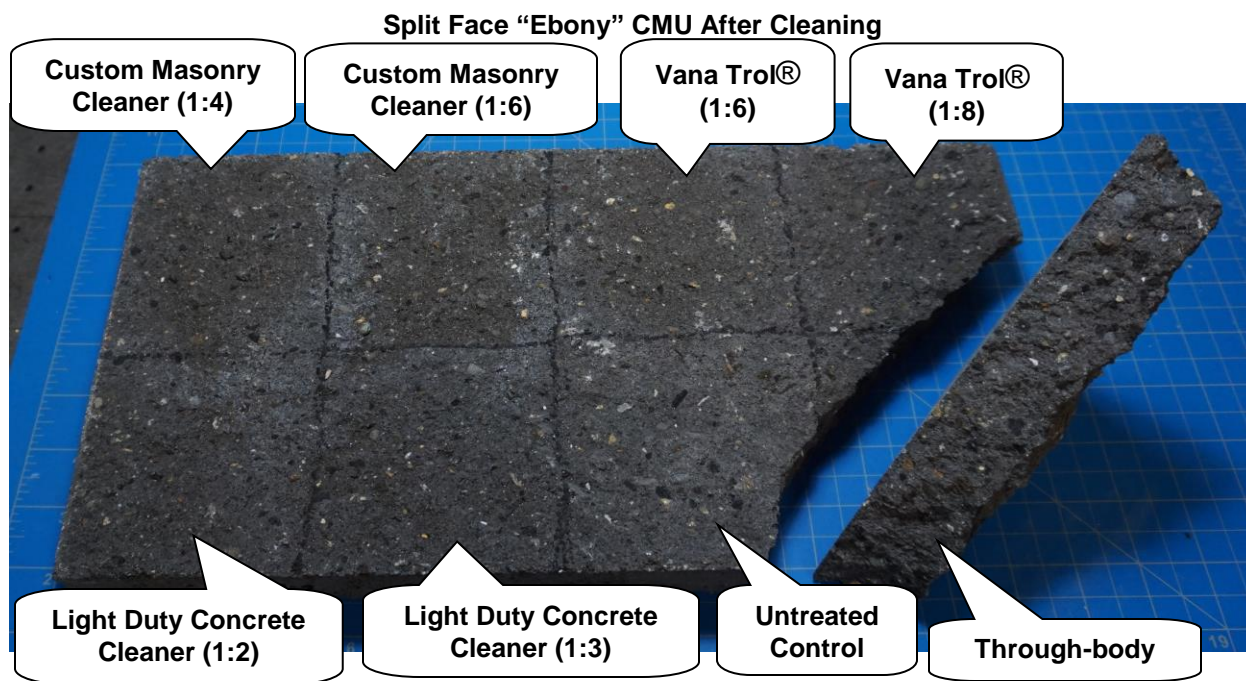
<b>Substrate:</b> Ground Face CMU		<b>Name:</b> "Ebony"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	2	2
Vana Trol®	1:8	2	2
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1





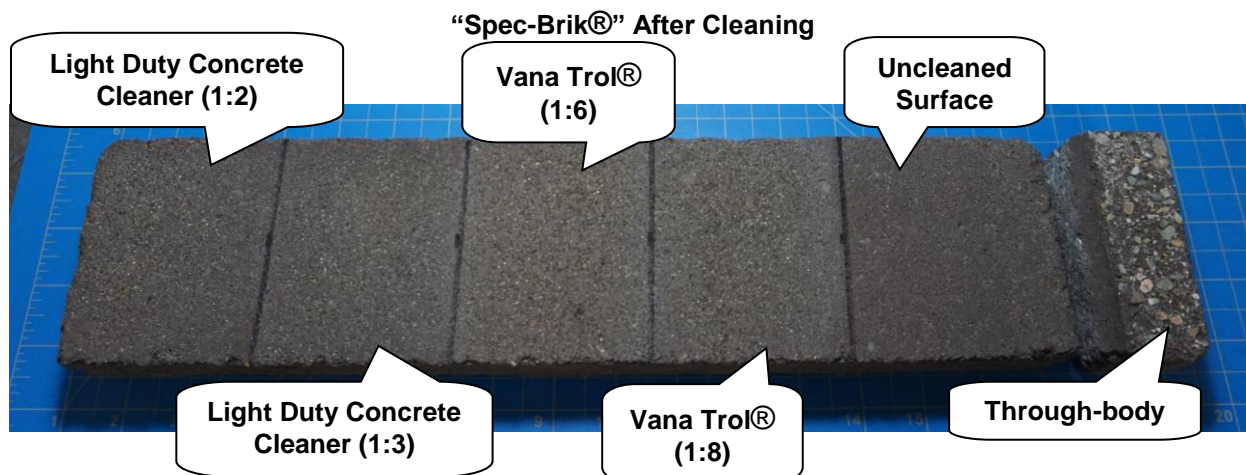
**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

<b>Substrate:</b> Split Face CMU		<b>Name:</b> "Ebony"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:4	2	2
Custom Masonry Cleaner	1:6	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1



**TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning / Color Uniformity (cont.)**

<b>Substrate:</b> Concrete Brick	<b>Name:</b> "Spec-Brik®"		
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2



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## **CONCLUSIONS – New Construction Cleaning**

In most of the cleaning tests conducted, Sure Klean® Custom Masonry Cleaner diluted with both four and six parts water removed a moderate amount of surface pigment, exposing a moderate amount of aggregate. Sure Klean® Vana Trol®, diluted with both six and eight parts water, and Sure Klean® Light Duty Concrete Cleaner, diluted with both two and three parts water, removed only a slight amount of surface pigment, exposing a slight amount of aggregate.

Sure Klean® Vana Trol® and Sure Klean® Light Duty Concrete Cleaner provided the best match to the through-body color of the CMU.

Sure Klean® Vana Trol® provided the best match to the uncleaned surface of the “Spec-Brik®”.

The smooth “Ebony” CMU was submitted with white drip marks across the surface. The cleaners removed most but not all of those marks. An additional application of the selected cleaner may be required for the complete removal of the marks.

When choosing the most appropriate product for the desired result, use Sure Klean® Light Duty Concrete Cleaner when minimal aggregate exposure is desired and Sure Klean® Custom Masonry Cleaner when additional aggregate exposure is desired. Use Sure Klean® Vana Trol® for new masonry surfaces that are subject to vanadium, manganese, and other metallic stains. Additionally, Sure Klean® Vana Trol® is designed for use with colored mortar.

Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure.

### **NOTE: When cleaning integrally colored CMUs.**

**Integrally colored concrete masonry units (CMUs) frequently have high amounts of pigments concentrated on the surface of the cured concrete unit. Variation of surface pigment concentrations from one CMU to the next creates a blotchy appearance in the completed wall. Allowed to remain on the surface of the CMU, the weakly bound pigment will weather and streak, further detracting from the appearance of the completed CMU wall.**

**In addition to removing excess mortar and construction related soiling, the goal of any cleaning operation undertaken on an integrally colored CMU should include removal of unnaturally high concentrations of surface pigment. By revealing the natural through-body color on the integrally colored unit, the overall color uniformity and weathering resistance of the completed CMU wall is improved.**

## RECOMMENDATIONS: New Construction Cleaning

Recommendations for cleaning for each type of CMU and concrete brick submitted by Basalite Concrete Products, DuPont, WA are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the through-body color of the CMU and the uncleaned surface of the concrete brick.

Sample	New Construction Cleaning
Smooth "Glacier" CMU	Sure Klean® Vana Trol® (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Ground Face "Glacier" CMU	Sure Klean® Vana Trol® (1:6) or (1:8)
Smooth "Cream" CMU	Sure Klean® Custom Masonry Cleaner (1:4) or (1:6) OR Sure Klean® Vana Trol® (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Ground Face "Cream" CMU	Sure Klean® Vana Trol® (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Smooth "Natural" CMU	Sure Klean® Custom Masonry Cleaner (1:4) or (1:6) OR Sure Klean® Vana Trol® (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Ground Face "Natural" CMU	Sure Klean® Vana Trol® (1:6) or (1:8) OR
Split Face "Natural" CMU	Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Smooth "Ebony" CMU	Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
Ground Face "Ebony" CMU	
Split Face "Ebony" CMU	Sure Klean® Vana Trol® (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
"Spec-Brik®"	Sure Klean® Vana Trol® (1:6) or (1:8)

The most appropriate cleaner and dilution should be determined on the specific job-site, and will be dependent primarily on the nature and severity of soiling present at that location.

Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. On-site testing should be conducted to determine the most appropriate cleaning product and procedures for a particular project. See product literature for additional application and product information.

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### **SAMPLE PREPARATION: Treatment Application**

Prior to treatment application, the submitted Smooth CMUs, Ground Face CMUs, and Concrete Brick were cleaned with Sure Klean® Light Duty Concrete Cleaner at a dilution of 1:2 in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. The submitted Split Face CMUs were cleaned with Sure Klean® Custom Masonry Cleaner at a dilution of 1:4 in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. After the samples had at least 24 hours of drying time, Sure Klean® Weather Seal Siloxane WB Concentrate, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15, and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra were then applied in a brushing application in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. The treatments were allowed to cure for at least 72 hours prior to testing.

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### **TEST METHODS: Protective Water Repellents**

#### **Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes**

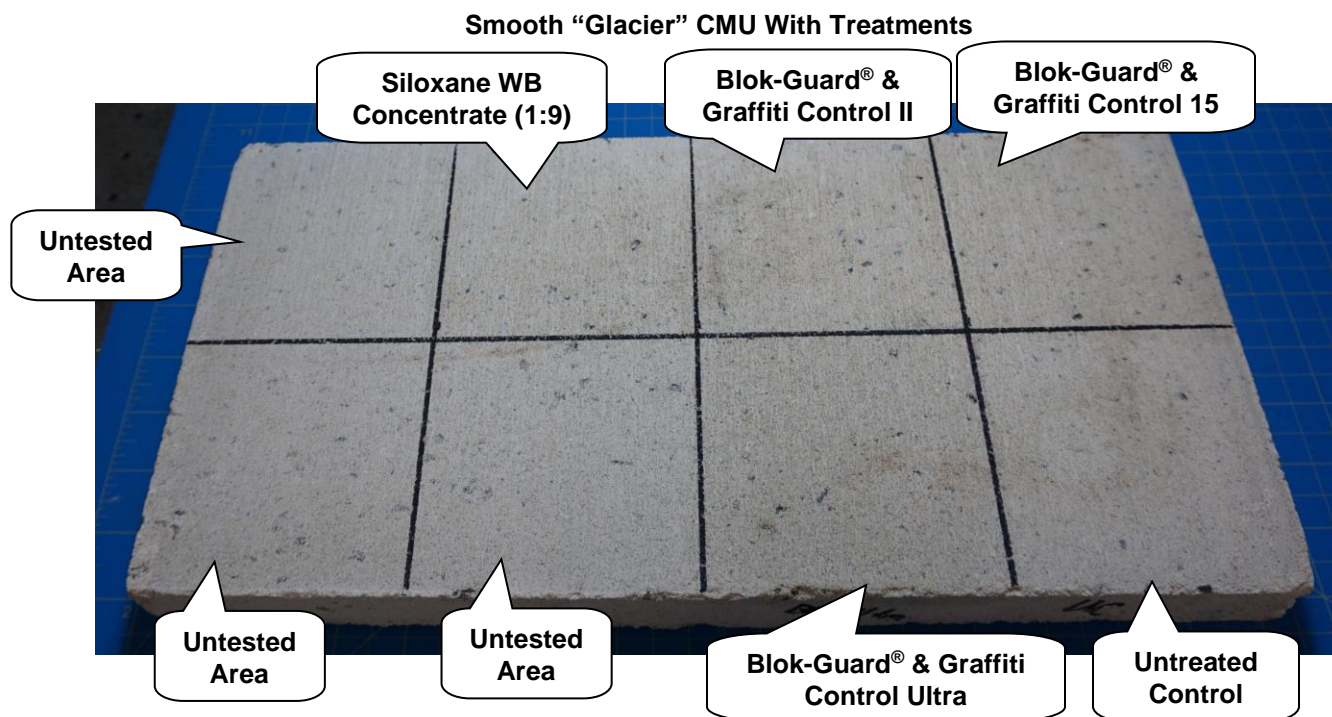
The water absorption tube test simulating wind driven rain conditions was performed. This test simulates 60 mile per hour wind driven rain conditions for a period of 20 minutes.

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## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Smooth "Glacier" CMU	
Untreated Control	58 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph

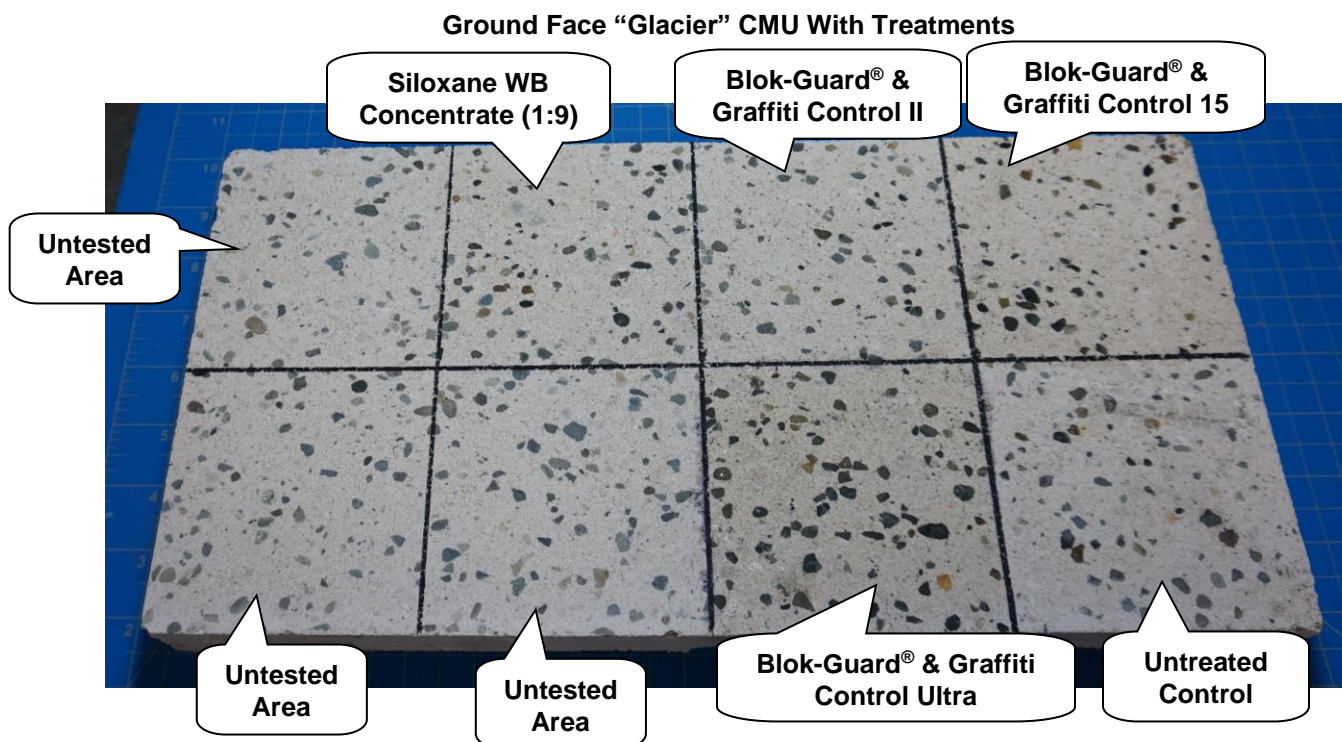




## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

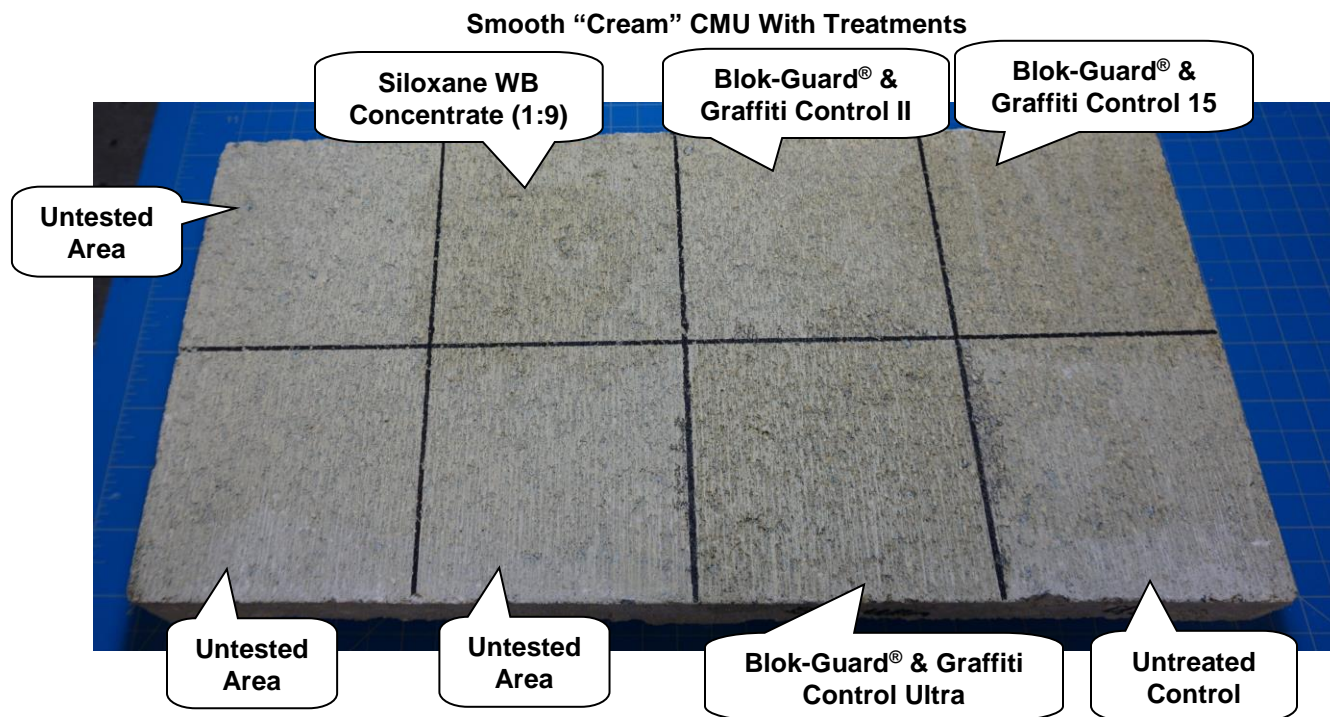
Ground Face "Glacier" CMU	
Untreated Control	57 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph



## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Smooth "Cream" CMU	
Untreated Control	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph

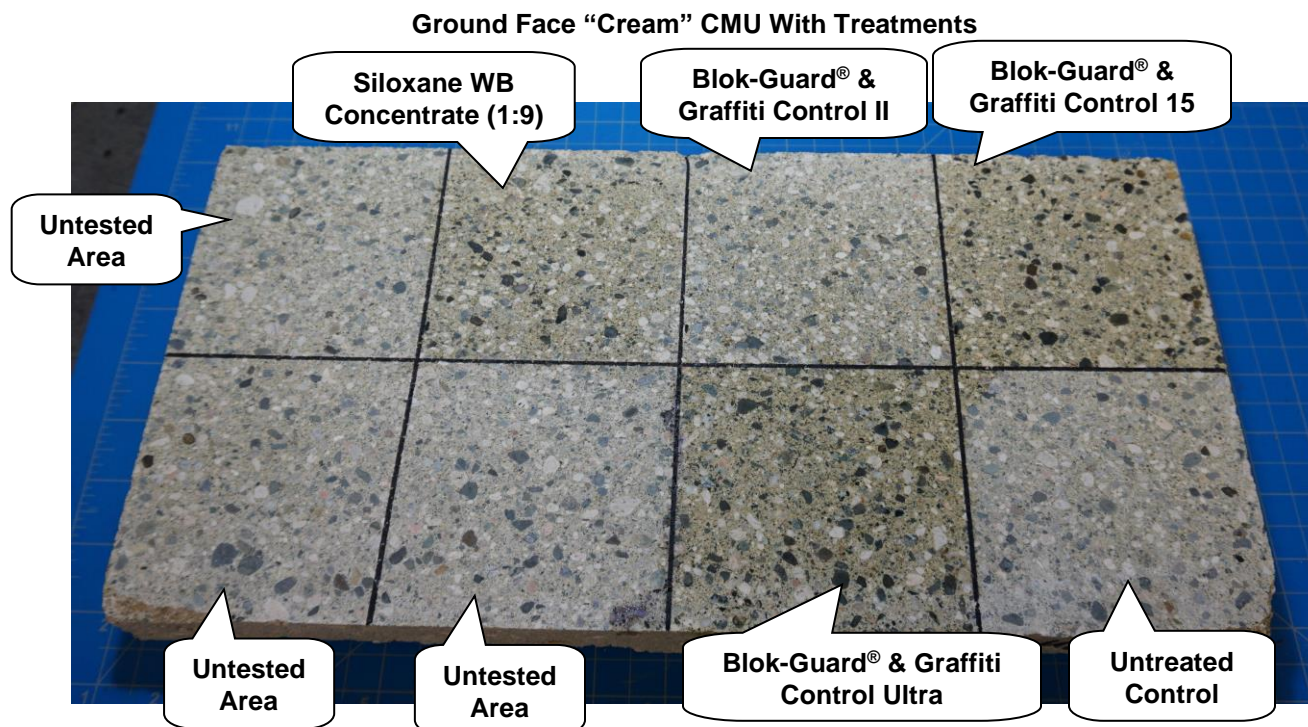


NOTE: Circular discolorations visible on the submitted CMUs are due to the putty used during RILEM tube testing.

**TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)**

**Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes**

Ground Face "Cream" CMU	
Untreated Control	58 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph

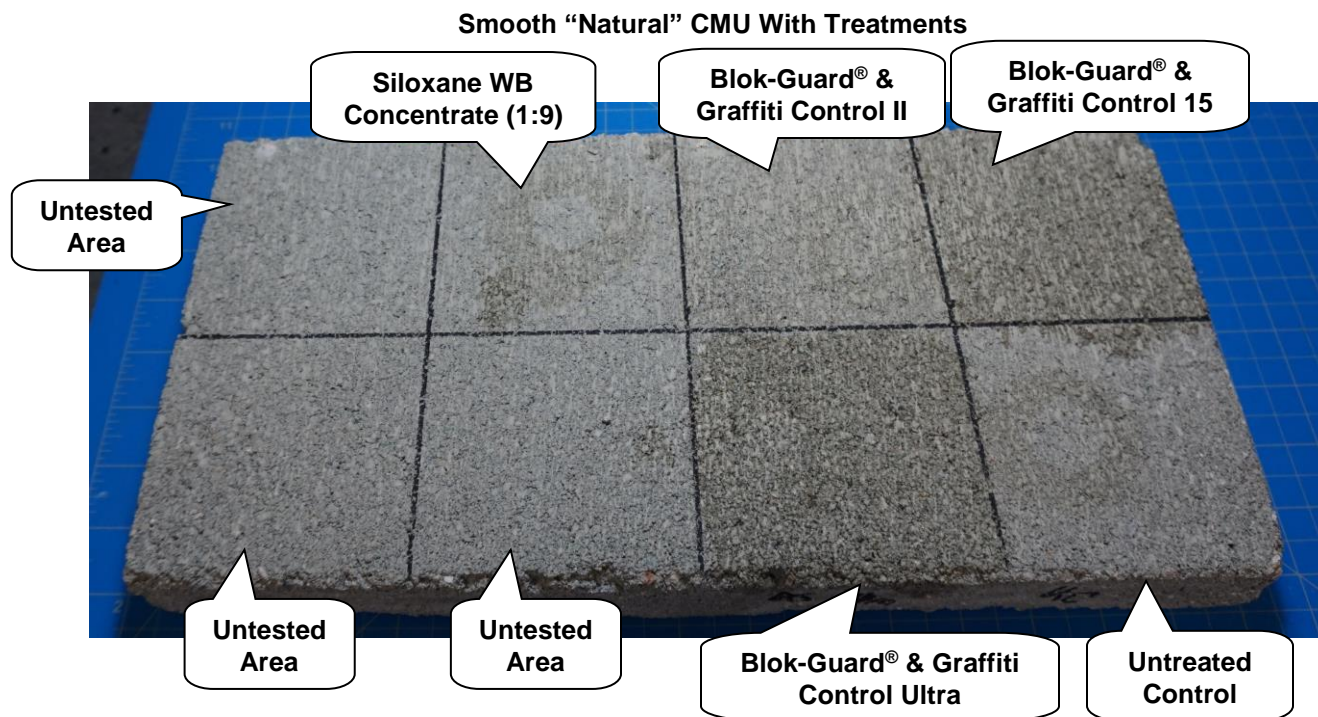




## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Smooth "Natural" CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph



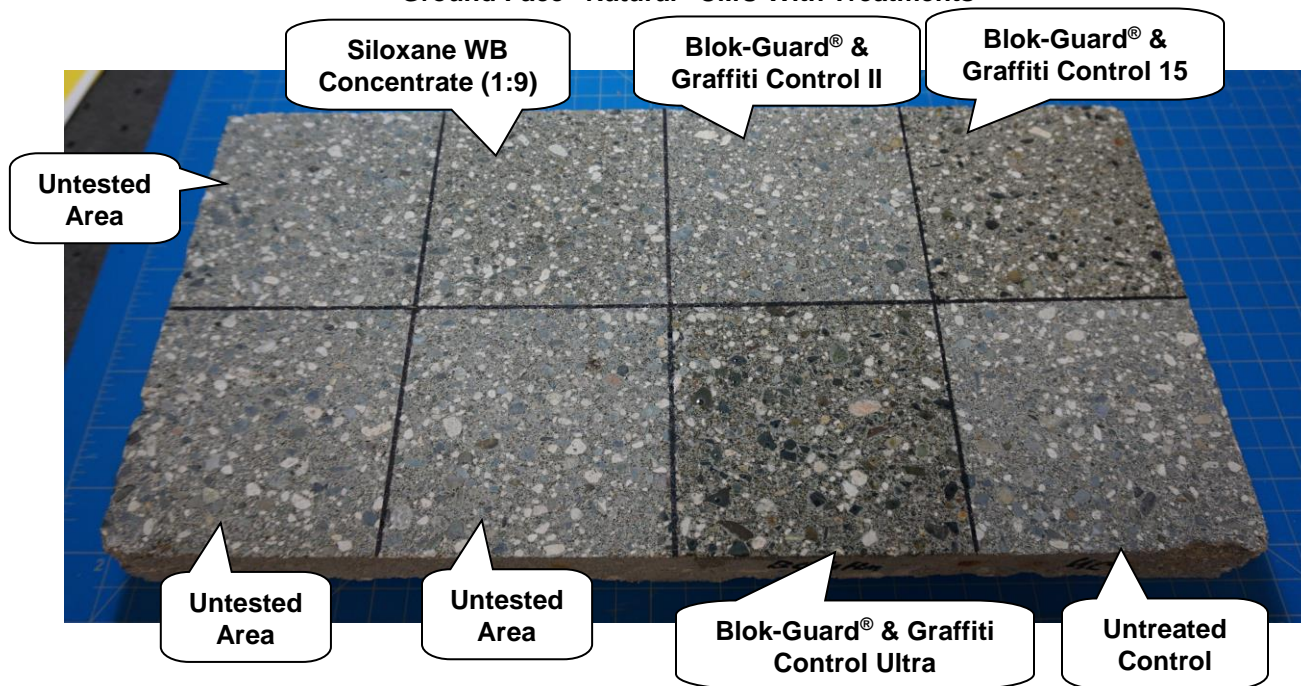
NOTE: Circular discolorations visible on the submitted CMUs are due to the putty used during RILEM tube testing.

## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Ground Face "Natural" CMU	
Untreated Control	49 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	56 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph

### Ground Face "Natural" CMU With Treatments

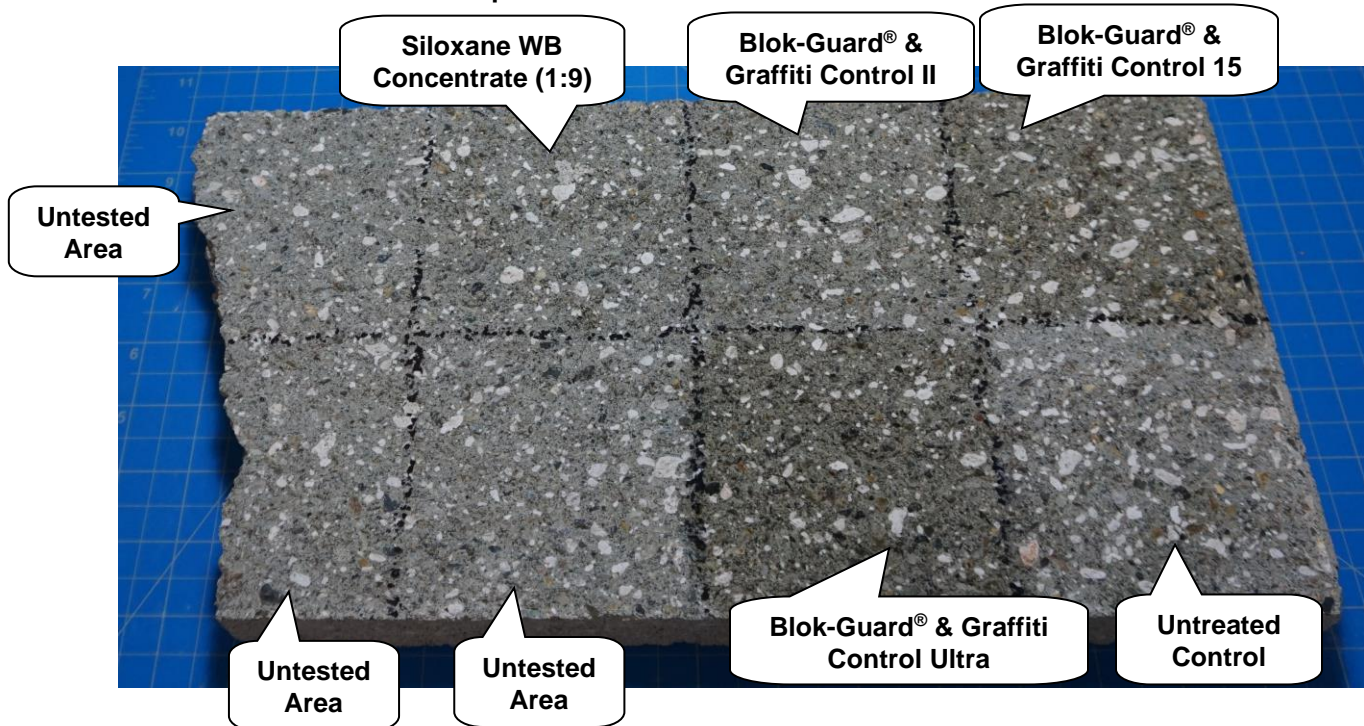


## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Split Face "Natural" CMU	
Untreated Control	52 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	58 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	55 mph

### Split Face "Natural" CMU With Treatments

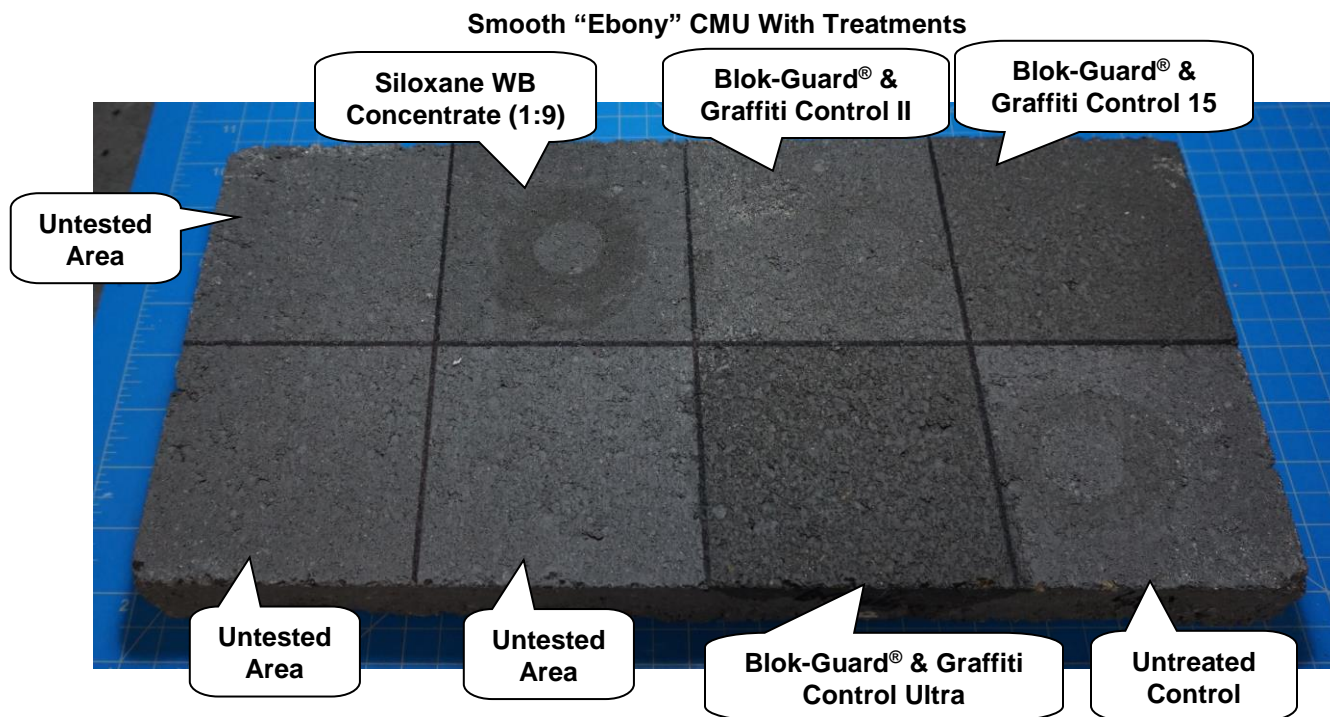




## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Smooth "Ebony" CMU	
Untreated Control	41 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph

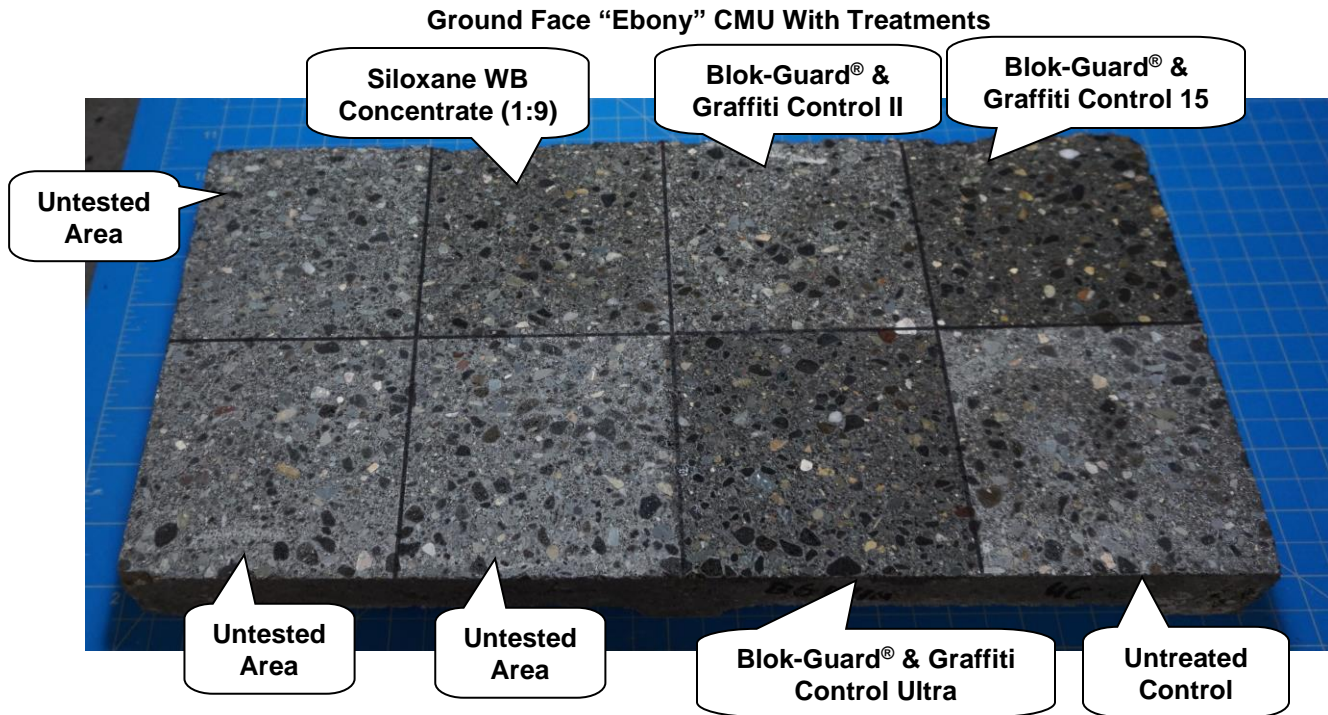


NOTE: Circular discolorations visible on the submitted CMUs are due to the putty used during RILEM tube testing.

## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Ground Face "Ebony" CMU	
Untreated Control	57 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	56 mph

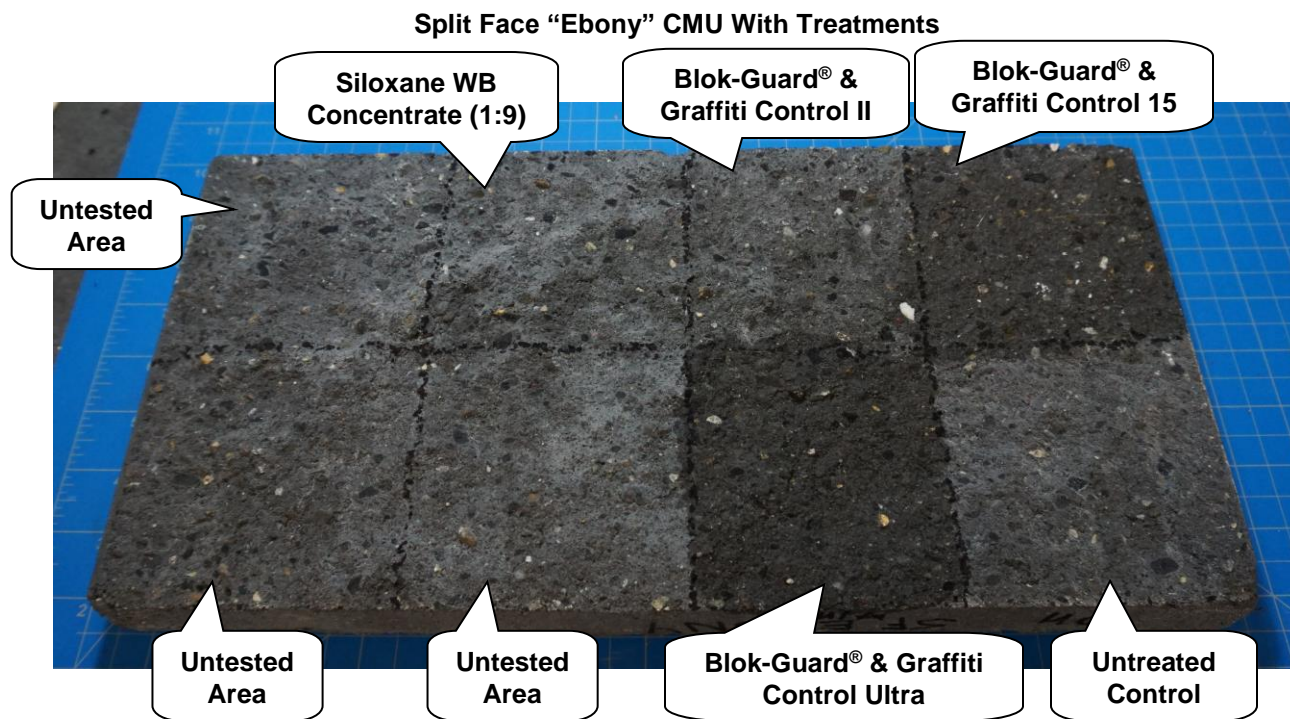


NOTE: Circular discolorations visible on the submitted CMUs are due to the putty used during RILEM tube testing.

## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

Split Face "Ebony" CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	58 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	60 mph



## TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents (cont.)

### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"Spec-Brik®"	
Untreated Control	<40 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	55 mph



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## **CONCLUSIONS: Protective Water Repellents**

Based on the laboratory evaluations, all of the treatments provided good water repellent protection to the submitted CMUs and concrete brick.

Sure Klean® Weather Seal Siloxane WB Concentrate and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II provided a slight color enhancement to each CMU.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra provided a moderate color enhancement to each CMU.

None of the treatments provided any color enhancement for the concrete brick.



## RECOMMENDATIONS: Water Repellency

Recommendations for water repellency for each type of CMU and “Spec-Brik®” submitted by Basalite Concrete Products, DuPont, WA are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Water Repellency
Smooth “Glacier” CMU	<p>Sure Klean® Weather Seal Siloxane WB Concentrate (1:9) (Recommended if slight color enhancement is desired) OR Sure Klean® Weather Seal Blok-Guard® &amp; Graffiti Control II (Recommended if slight color enhancement is desired) OR Sure Klean® Weather Seal Blok-Guard® &amp; Graffiti Control 15 (Recommended if moderate color enhancement is desired) OR Sure Klean® Weather Seal Blok-Guard® &amp; Graffiti Control Ultra (Recommended if moderate color enhancement is desired)</p>
Ground Face “Glacier” CMU	
Smooth “Cream” CMU	
Ground Face “Cream” CMU	
Smooth “Natural” CMU	
Ground Face “Natural” CMU	
Split Face “Natural” CMU	
Smooth “Ebony” CMU	
Ground Face “Ebony” CMU	
Split Face “Ebony” CMU	
“Spec-Brik®”	

Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. On-site testing should be conducted to determine the most treatment and procedures for a particular project. See product literature for additional application and product information.



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## TEST METHODS: Graffiti Resistance

This evaluation compares the effectiveness of graffiti control treatments in preventing staining of enamel spray paint and permanent markers.

Spray paint and markers were applied as graffiti agents to the treated surfaces 72 hours after application of the treatments. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Defacer Eraser® Graffiti Remover and Enviro Klean® SafStrip® 8.

Chemical cleaners were evaluated using the following procedure:

1. Apply the product to a dry surface, soiled with graffiti.
2. Allow appropriate dwell time:  
    Graffiti Remover ..... 5 minutes  
    SafStrip® 8..... 30 minutes
3. Rinse thoroughly until water runs clear. \*
4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.

**\*Pressure Rinsing Equipment** – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 45-degree fan spray tip was used for rinsing.

**TEST RESULTS: Graffiti Resistance**

Smooth "Glacier" CMU					
Untreated Control	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	20%	60%	50%	50%	<b>45%</b>
Graffiti Remover	50%	20%	10%	20%	<b>25%</b>
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	70%	70%	60%	60%	<b>65%</b>
Graffiti Remover	98%	95%	80%	80%	<b>88%</b>
Blok-Guard® & Graffiti Control 15	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	80%	100%	90%	90%	<b>90%</b>
Graffiti Remover	98%	100%	90%	90%	<b>95%</b>
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	80%	95%	85%	85%	<b>86%</b>
Graffiti Remover	98%	95%	98%	98%	<b>97%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Ground Face "Glacier" CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	5%	50%	50%	50%	<b>39%</b>
Graffiti Remover	10%	55%	55%	55%	<b>44%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	80%	55%	55%	<b>60%</b>
Graffiti Remover	80%	80%	70%	70%	<b>75%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	55%	98%	98%	98%	<b>87%</b>
Graffiti Remover	70%	100%	95%	95%	<b>90%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	20%	100%	100%	95%	<b>79%</b>
Graffiti Remover	80%	100%	98%	95%	<b>93%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

Smooth "Cream" CMU					
Untreated Control	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	50%	70%	70%	70%	<b>65%</b>
Graffiti Remover	40%	60%	60%	60%	<b>55%</b>
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	50%	60%	60%	60%	<b>58%</b>
Graffiti Remover	60%	60%	60%	60%	<b>60%</b>
Blok-Guard® & Graffiti Control 15	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	90%	100%	98%	98%	<b>97%</b>
Graffiti Remover	70%	100%	98%	98%	<b>92%</b>
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	50%	100%	98%	98%	<b>87%</b>
Graffiti Remover	90%	100%	98%	98%	<b>97%</b>



**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Ground Face "Cream" CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	20%	80%	80%	80%	<b>65%</b>
Graffiti Remover	60%	80%	80%	80%	<b>75%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	75%	90%	90%	90%	<b>86%</b>
Graffiti Remover	80%	90%	90%	90%	<b>88%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	85%	100%	98%	98%	<b>95%</b>
Graffiti Remover	95%	100%	100%	100%	<b>99%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	90%	100%	100%	100%	<b>98%</b>
Graffiti Remover	95%	100%	100%	100%	<b>99%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

Smooth "Natural" CMU					
Untreated Control	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	70%	70%	70%	70%	<b>70%</b>
Graffiti Remover	80%	50%	50%	50%	<b>58%</b>
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	85%	90%	80%	80%	<b>84%</b>
Graffiti Remover	95%	100%	90%	90%	<b>94%</b>
Blok-Guard® & Graffiti Control 15	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	95%	100%	98%	98%	<b>98%</b>
Graffiti Remover	90%	98%	95%	95%	<b>95%</b>
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	85%	100%	95%	95%	<b>94%</b>
Graffiti Remover	98%	100%	95%	95%	<b>97%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Ground Face "Natural" CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	100%	90%	90%	<b>83%</b>
Graffiti Remover	50%	98%	90%	90%	<b>82%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	98%	95%	95%	<b>85%</b>
Graffiti Remover	80%	98%	95%	95%	<b>92%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	100%	98%	98%	<b>87%</b>
Graffiti Remover	80%	100%	98%	98%	<b>94%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	100%	100%	100%	<b>88%</b>
Graffiti Remover	80%	100%	100%	100%	<b>95%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Split Face "Natural" CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	10%	50%	50%	50%	<b>40%</b>
Graffiti Remover	0%	50%	50%	50%	<b>38%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	20%	95%	90%	95%	<b>75%</b>
Graffiti Remover	20%	95%	90%	95%	<b>75%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	80%	100%	95%	95%	<b>93%</b>
Graffiti Remover	85%	98%	95%	95%	<b>93%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	85%	100%	100%	100%	<b>96%</b>
Graffiti Remover	90%	100%	100%	100%	<b>98%</b>



**TEST RESULTS: Graffiti Resistance (cont.)**

Smooth "Ebony" CMU					
Untreated Control	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	60%	95%	90%	90%	<b>84%</b>
Graffiti Remover	90%	90%	80%	80%	<b>85%</b>
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	60%	98%	95%	95%	<b>87%</b>
Graffiti Remover	95%	98%	95%	95%	<b>96%</b>
Blok-Guard® & Graffiti Control 15	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	90%	98%	98%	98%	<b>96%</b>
Graffiti Remover	98%	98%	95%	95%	<b>97%</b>
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Blue Marker	Red Marker	% Avg. Removal
SafStrip® 8	50%	100%	100%	100%	<b>88%</b>
Graffiti Remover	100%	100%	100%	100%	<b>100%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Ground Face “Ebony” CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	100%	95%	95%	<b>85%</b>
Graffiti Remover	50%	100%	95%	95%	<b>85%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	70%	100%	98%	98%	<b>92%</b>
Graffiti Remover	80%	100%	98%	98%	<b>94%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	90%	100%	100%	100%	<b>98%</b>
Graffiti Remover	90%	100%	100%	100%	<b>98%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	90%	100%	100%	100%	<b>98%</b>
Graffiti Remover	98%	100%	100%	100%	<b>100%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>Split Face “Ebony” CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	10%	90%	90%	90%	<b>70%</b>
Graffiti Remover	10%	95%	95%	95%	<b>74%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	10%	98%	98%	98%	<b>76%</b>
Graffiti Remover	90%	98%	98%	98%	<b>96%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	90%	100%	100%	100%	<b>98%</b>
Graffiti Remover	90%	100%	100%	100%	<b>98%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	80%	100%	100%	100%	<b>95%</b>
Graffiti Remover	95%	100%	100%	100%	<b>99%</b>

**TEST RESULTS: Graffiti Resistance (cont.)**

<b>“Spec-Brik®”</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	98%	95%	95%	<b>85%</b>
Graffiti Remover	50%	98%	95%	95%	<b>85%</b>
<b>Blok-Guard® &amp; Graffiti Control II</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	20%	98%	95%	95%	<b>77%</b>
Graffiti Remover	80%	98%	50%	95%	<b>81%</b>
<b>Blok-Guard® &amp; Graffiti Control 15</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	60%	98%	90%	95%	<b>86%</b>
Graffiti Remover	70%	98%	90%	95%	<b>88%</b>
<b>Blok-Guard® &amp; Graffiti Control Ultra</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Blue Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
SafStrip® 8	50%	98%	95%	95%	<b>85%</b>
Graffiti Remover	60%	98%	95%	95%	<b>87%</b>



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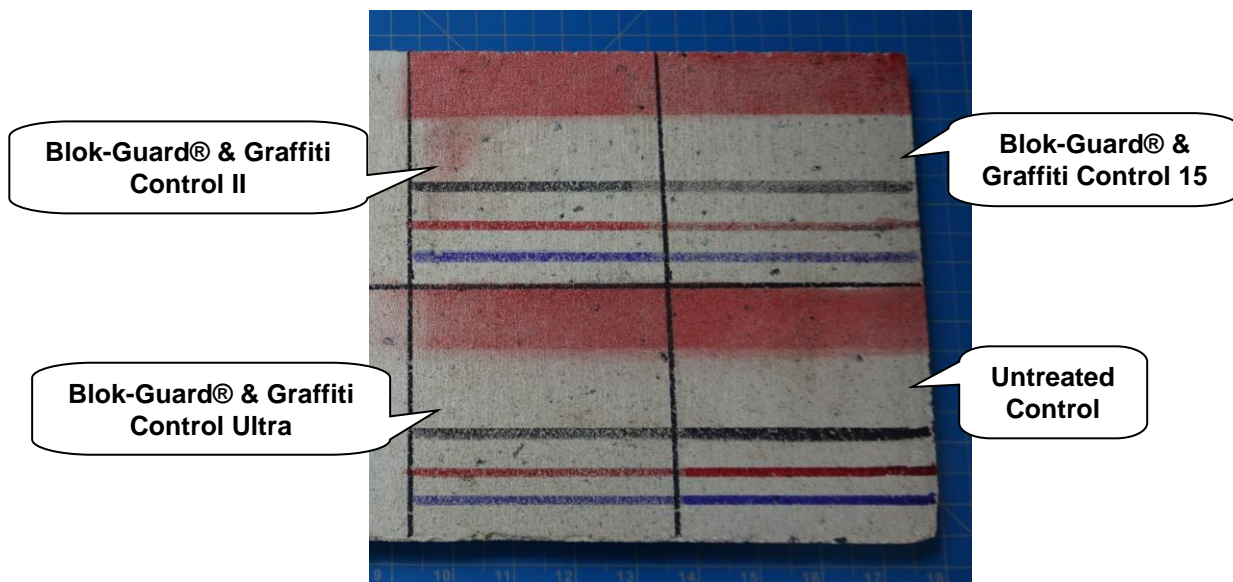
## CONCLUSIONS: Graffiti Resistance

Based upon laboratory evaluations, graffiti removal was improved when the submitted CMUs were treated with Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15, and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra, although Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra was the most effective treatment on most of the samples.

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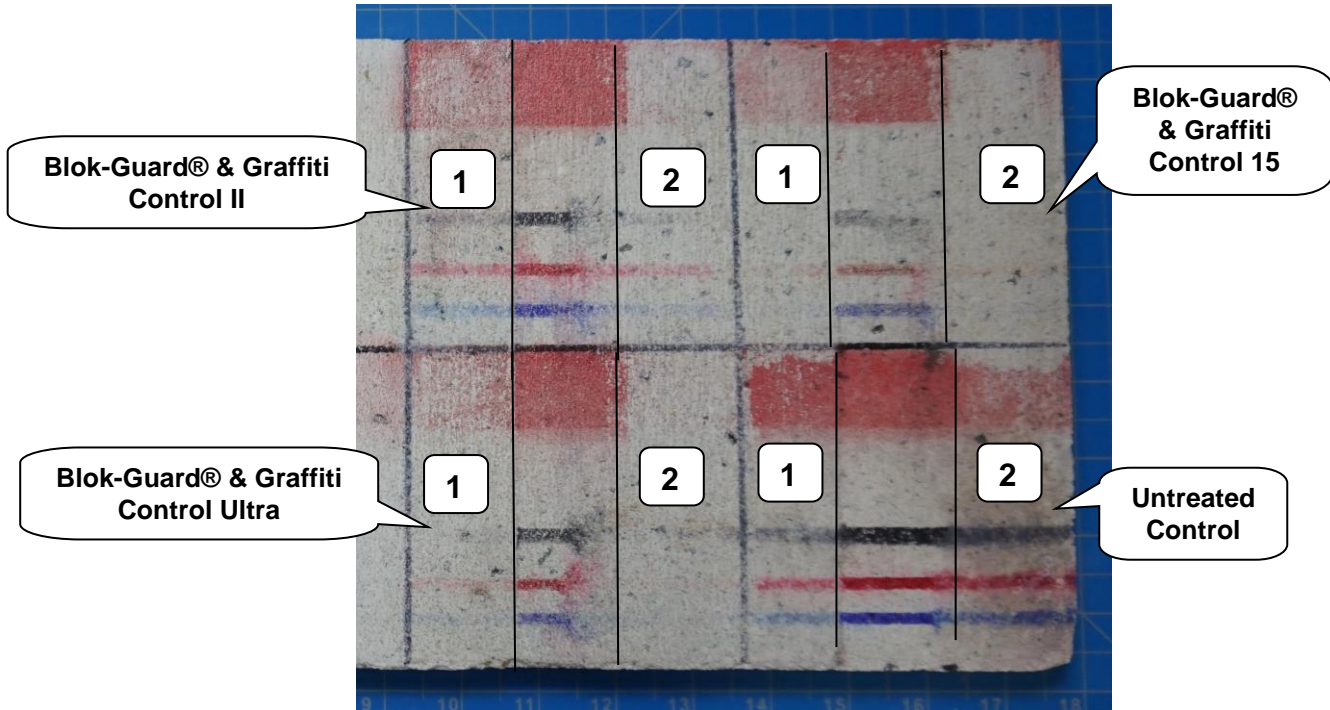
## PHOTOGRAPHS: Graffiti Resistance

Smooth “Glacier” CMU With Graffiti



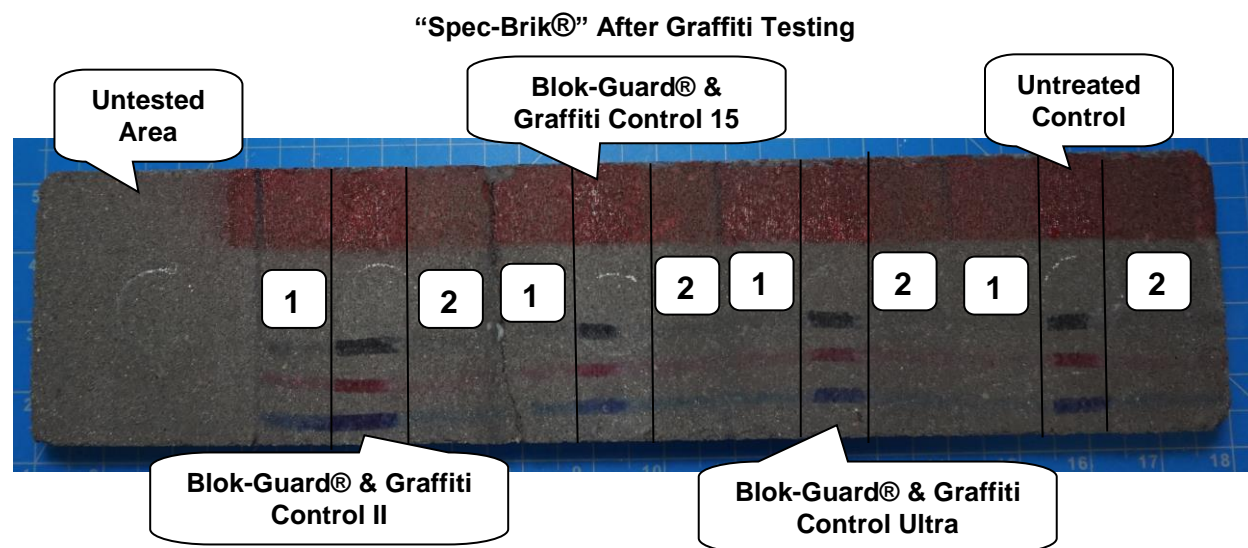
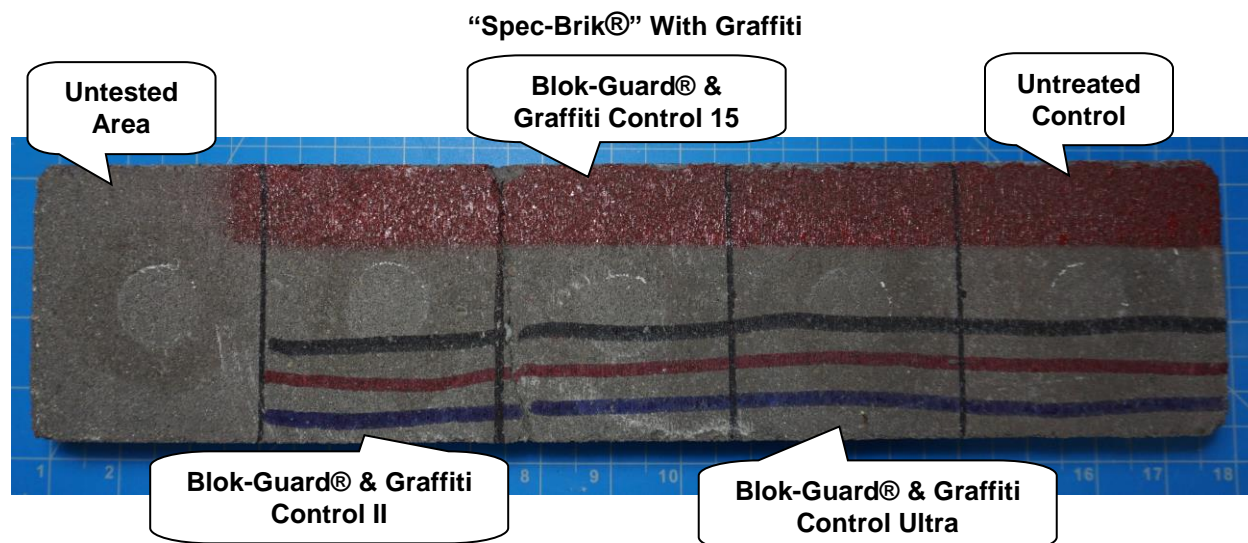
**PHOTOGRAPHS: Graffiti Resistance (cont.)**

**Smooth "Glacier" CMU After Graffiti Testing**



<u>KEY</u>	
1	= SafStrip® 8
2	= Graffiti Remover

**PHOTOGRAPHS: Graffiti Resistance (cont.)**



<u>KEY</u>
1 = SafStrip® 8
2 = Graffiti Remover

NOTE: Circular discolorations visible on the submitted CMUs are due to the putty used during RILEM tube testing.

## RECOMMENDATIONS: Graffiti Control

Recommendations for graffiti control for each CMU and concrete brick submitted by Basalite Concrete Products, DuPont, WA are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective on average for providing graffiti repellency and the product that was most effective on average at removing the graffiti on all types submitted.

Sample	Graffiti Repellents	Graffiti Removers
All Submitted CMUs and Concrete Brick	<sup>1</sup> Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra (Recommended if moderate color enhancement is desired) OR <sup>2</sup> Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 (Recommended if moderate color enhancement is desired) OR <sup>3</sup> Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II (Recommended if slight color enhancement is desired)	<sup>1</sup> Defacer Eraser® Graffiti Remover OR <sup>2</sup> Enviro Klean® SafStrip® 8

NOTE: "1" indicates the most effective treatment, "2" indicates the second most effective treatment, and "3" indicates the third most effective treatment.

Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. Because the severity of graffiti varies from location to location, on-site testing should be conducted to determine the most appropriate graffiti control product and procedure for a particular project.



J. Lucas Comadoll  
QC/Project Testing Technician

**ALL SAMPLES SUPPLIED FOR THE ABOVE EVALUATION WILL BE DISPOSED OF THIRTY (30) DAYS AFTER THE ISSUE DATE OF THIS REPORT. IF SAMPLES ARE TO BE RETAINED FOR ADDITIONAL TESTING OR RETURNED TO THE SENDER, PROVIDE WRITTEN INSTRUCTIONS TO THE LABORATORY WITHIN THIRTY (30) DAYS OF THE ISSUE DATE OF THIS REPORT.**

Recommendations made within this report are based on laboratory test applications and observations. Final determination of the suitability of a product and/or procedure should be made only after thorough job testing on actual surfaces.