



*Pallet Tag Program
Laboratory Report*

**Mutual Materials – Ground Face CMU
Bellevue, WA**



Project No. 2309-02 PTP

Prepared For:



PROSOCO

Prepared By:

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Project Testing Technician
AMT Laboratories

November 2023



LABORATORY REPORT

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

FOR: Matt Herz, PROSOCO, Inc.
cc: Jake Boyer, PROSOCO, Inc.
Al Morris, PROSOCO, Inc.

SUBJECT: Mutual Materials – Ground Face CMU
Bellevue, WA
Pallet Tag Evaluation

DATE: November 13, 2023
PROJECT: 2309-02 PTP

SAMPLES SUBMITTED: 11 types of Ground Face CMUs

Type	Finish	Label	Name/Color	Integral Water Repellent	Size
(4) CMU	Ground Face	GR004	Natural	RainBloc®	8" x 8" x 16"
(4) CMU	Ground Face	GR024	Charcoal	RainBloc®	8" x 12" x 16"
(4) CMU	Ground Face	GR064	Khaki	RainBloc®	8" x 8" x 16"
(4) CMU	Ground Face	GR0X4	Onyx	RainBloc®	4" x 8" x 16"
(4) CMU	Ground Face	GR384	Castle White	RainBloc®	4" x 8" x 16"
(4) CMU	Ground Face	GR854	Sandstone	RainBloc®	4" x 8" x 16"
(4) CMU	Ground Face	GRAH4	Burgundy Red	RainBloc®	4" x 8" x 16"
(4) CMU	Ground Face	GRAL4	Mountain Brown	RainBloc®	4" x 8" x 16"
(4) CMU	Ground Face	GRDD4	Sable	RainBloc®	8" x 10" x 16"
(4) CMU	Ground Face	GRSW4	Driftwood	RainBloc®	8" x 8" x 16"
(4) CMU	Ground Face	GRWI4	Willow	RainBloc®	4" x 8" x 16"

SUBMITTED BY: Mutual Materials
605 119th Ave NE
Bellevue, WA 98005

PURPOSE OF TEST:

- To determine the most appropriate PROSOCO, Inc. new construction cleaner(s) for the submitted samples.
- To evaluate the color and sheen enhancement characteristics of the requested PROSOCO, Inc. treatments on the submitted samples.
- To determine the most appropriate PROSOCO, Inc. water repellent 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:

New Construction Cleaning – Ground Face CMU	Dilution:
Sure Klean® Light Duty Concrete Cleaner	1:2, 1:3
Sure Klean® Vana Trol®	1:6, 1:8

Color and Sheen Enhancement/Water Repellency	Dilution:
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	N/A*
PROSOCO® Saltguard®	N/A*
Sure Klean® Weather Seal Siloxane WB Concentrate	1:9

Graffiti Resistance	Dilution:
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	N/A*

Graffiti Removal	Dilution:
Enviro Klean® SafStrip® 8	N/A*
Sure Klean® Graffiti Remover	N/A*

***NOTE: Per the product data sheet instructions, only use the product in concentrate. Do not dilute.**

TEST METHODS: New Construction Cleaning

Sure Klean® Light Duty Concrete Cleaner and Sure Klean® Vana Trol® were evaluated on the submitted samples 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 compared to the natural through-body color of the CMU.

Aggregate Exposure is the visual examination comparing aggregate exposure of the interior, through-body section of the CMU 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 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
- 1 – **Slight change** compared to through-body
- 2 – **Moderate change** compared to through-body
- 3 – **Significant change** compared to through-body

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:

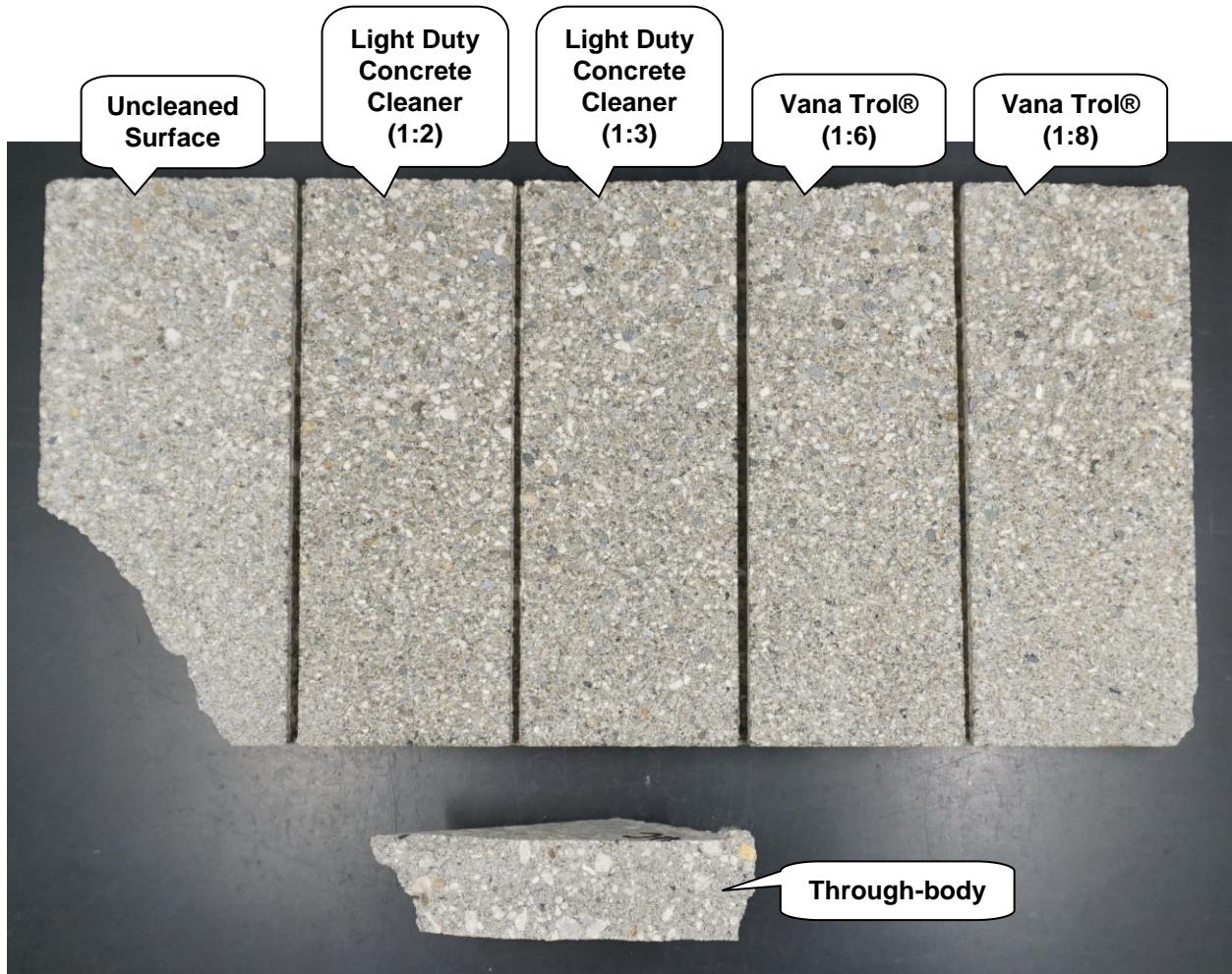
1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Guide instructions.
2. Allow for an appropriate dwell time and periodically agitate:
Light Duty Concrete Cleaner.....5 minutes
Vana Trol®.....5 minutes
3. Reapply cleaning solution; do not let cleaner dry into 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.

***Rinsing Equipment** – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 40-degree fan spray tip was used for rinsing.

TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning

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

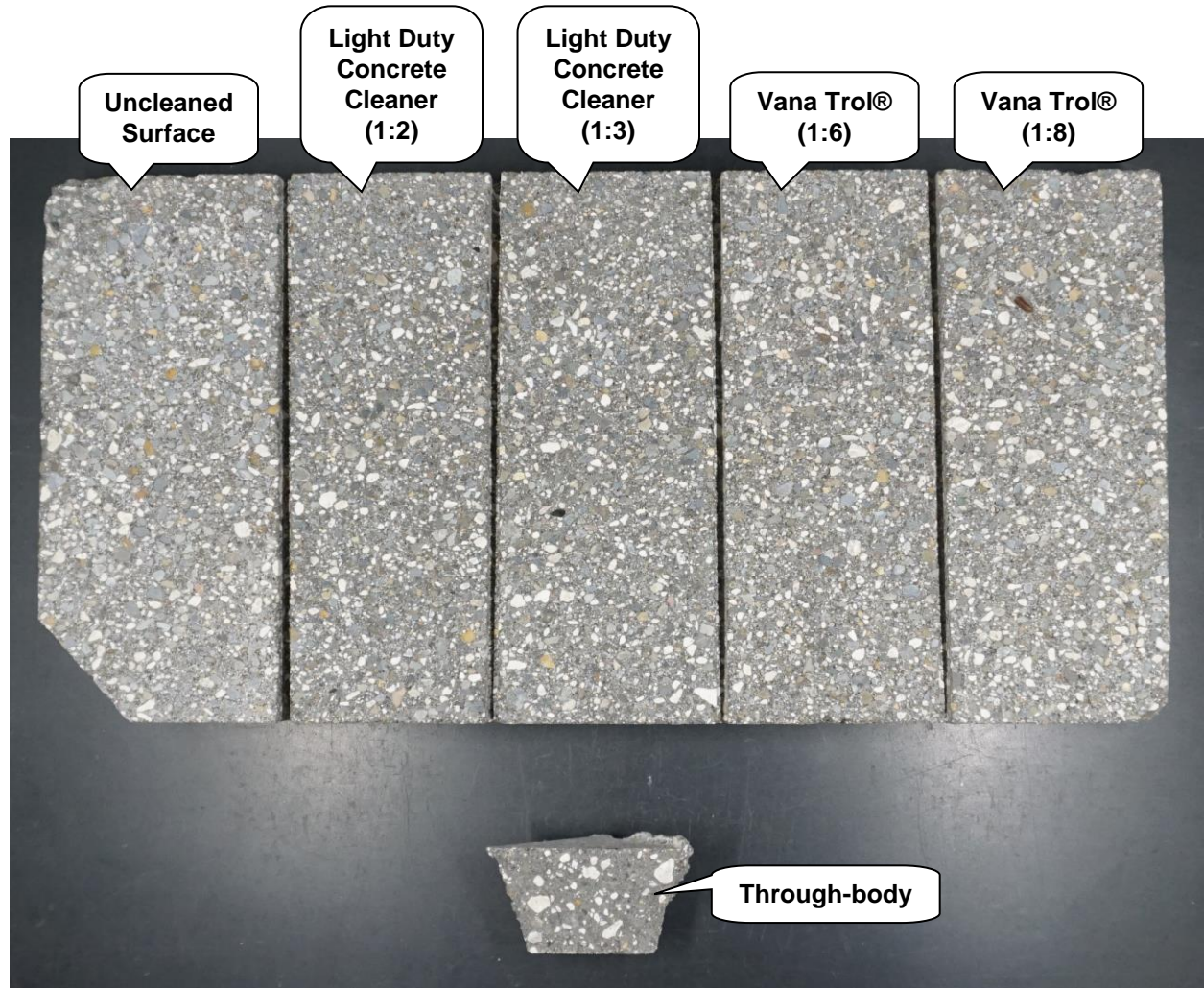
"Natural" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Charcoal" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

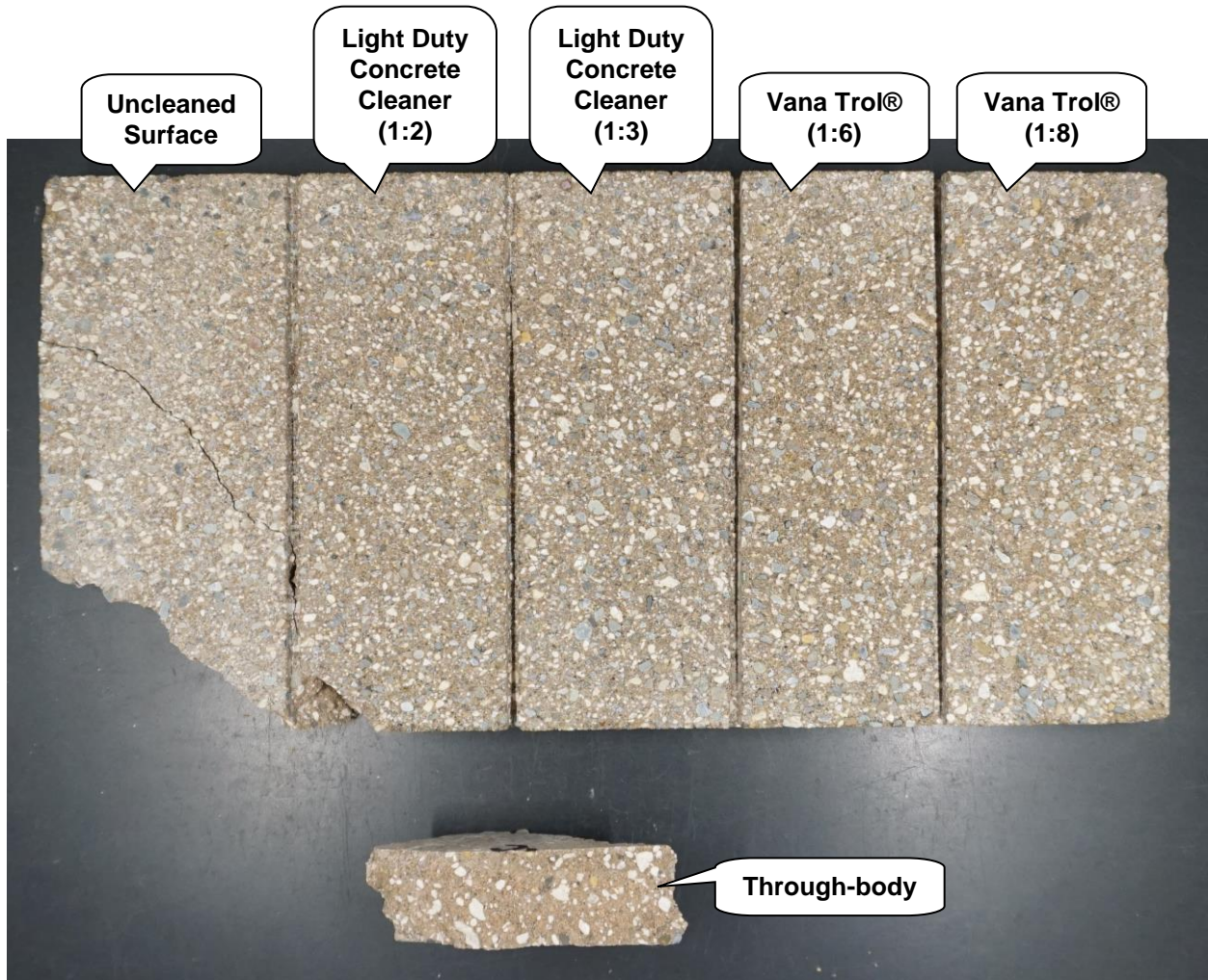
"Charcoal" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Khaki" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

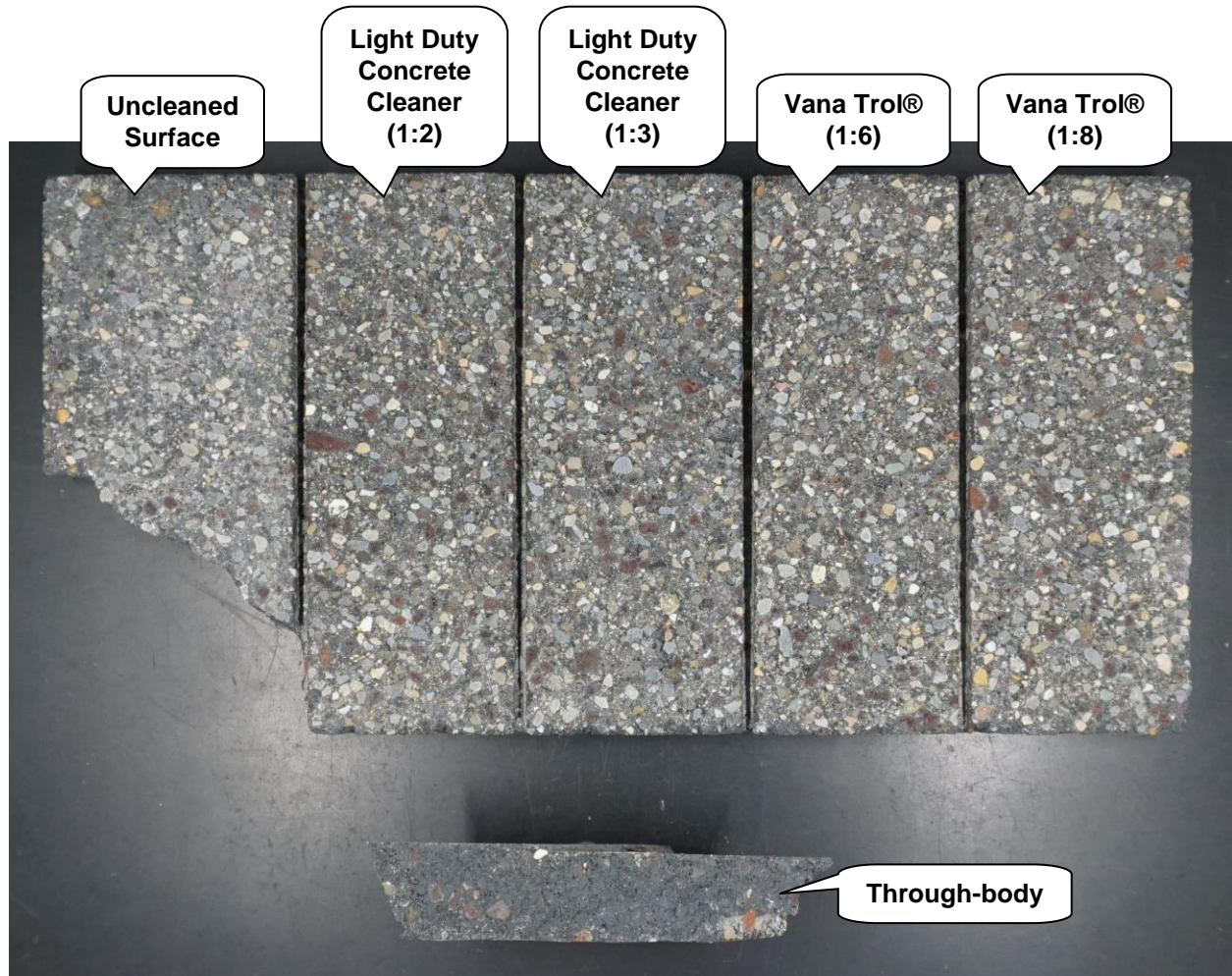
"Khaki" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Onyx" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

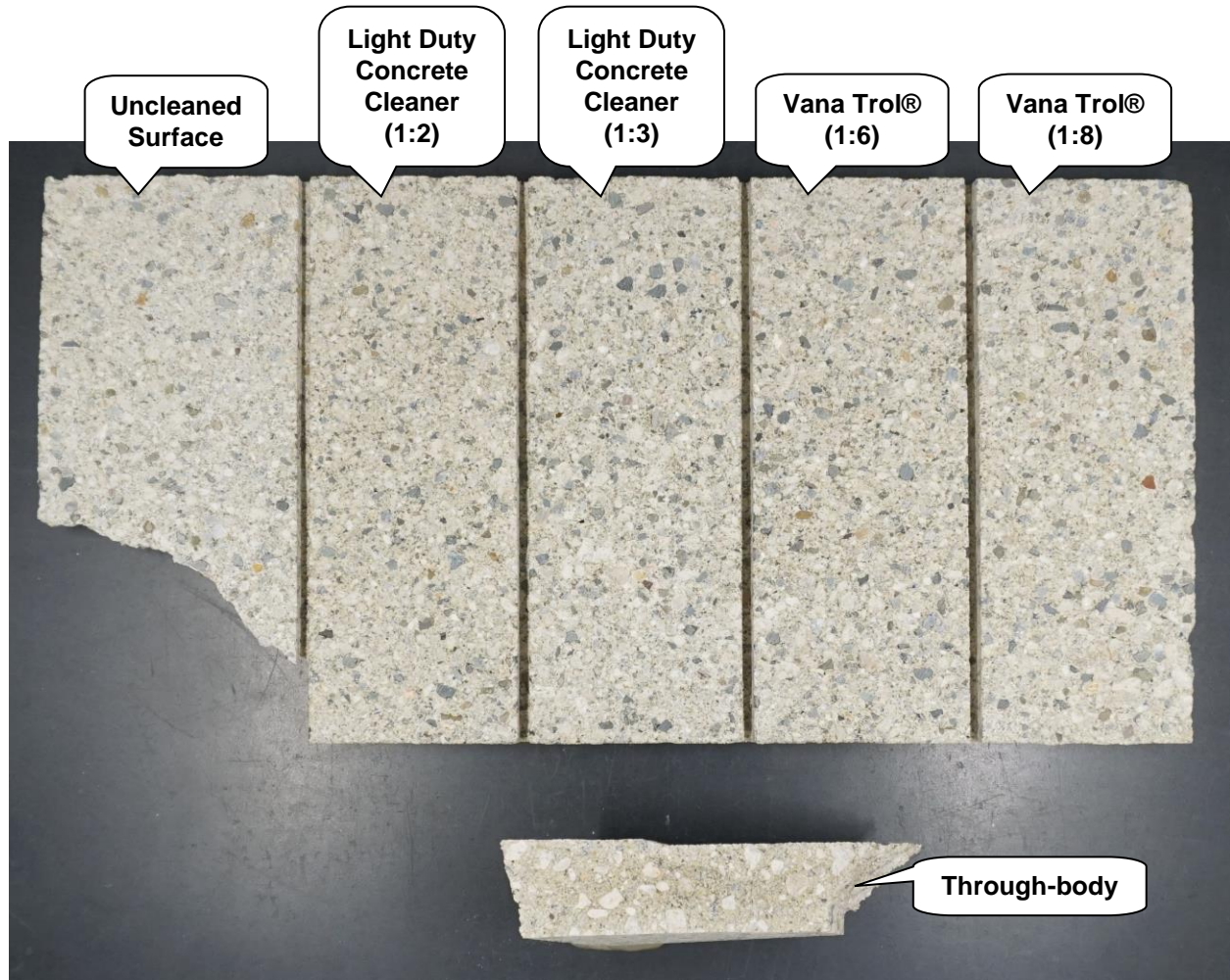
"Onyx" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Castle White" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

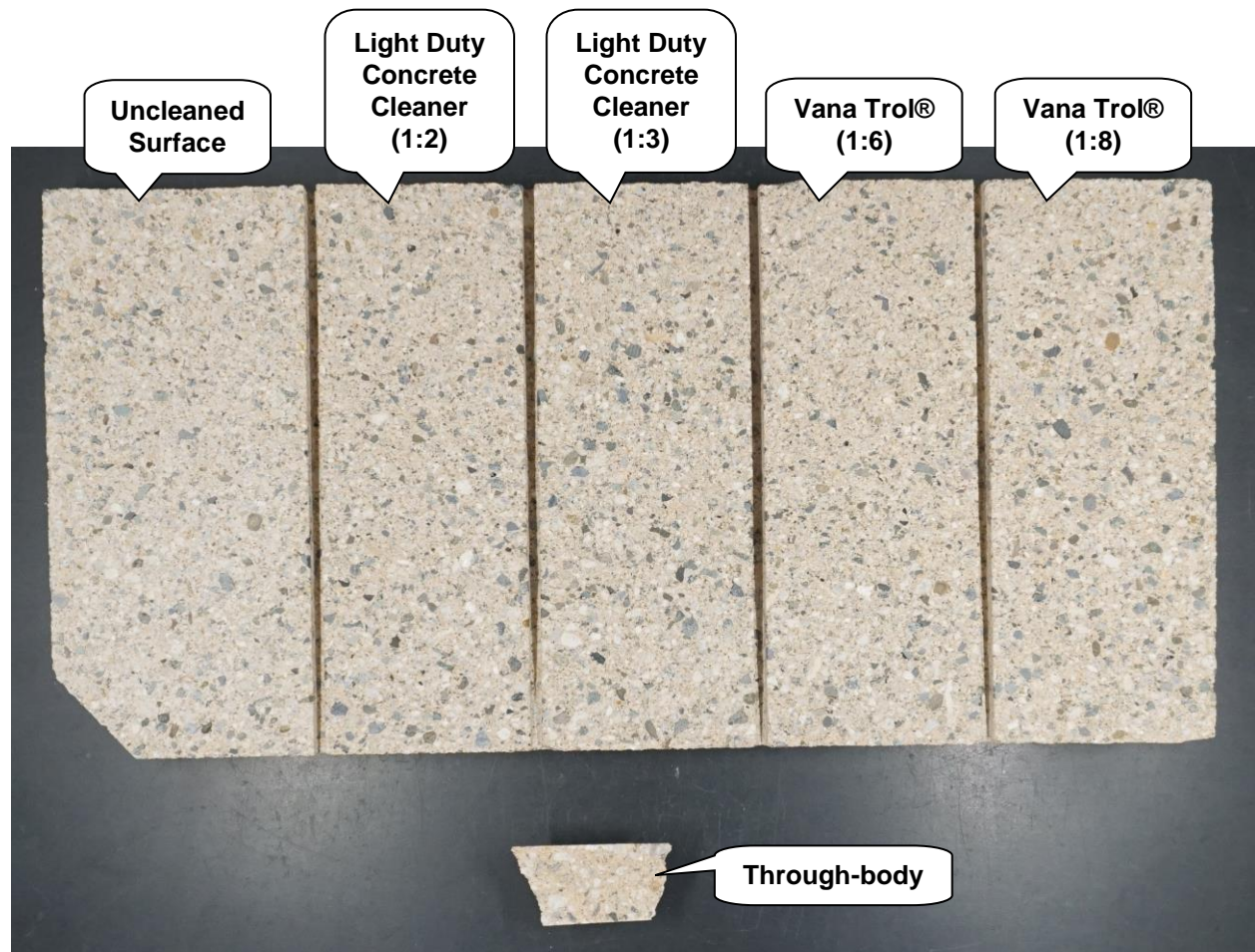
"Castle White" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Sandstone" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

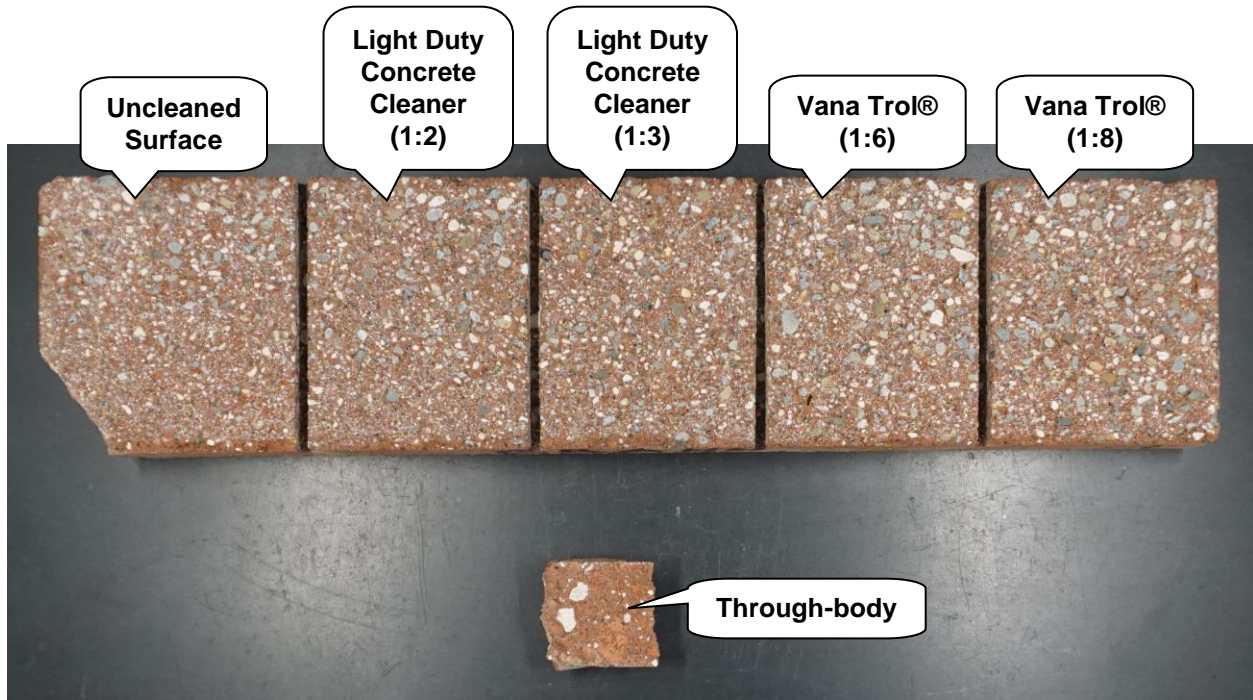
"Sandstone" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Burgundy Red" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

"Burgundy Red" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Mountain Brown" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

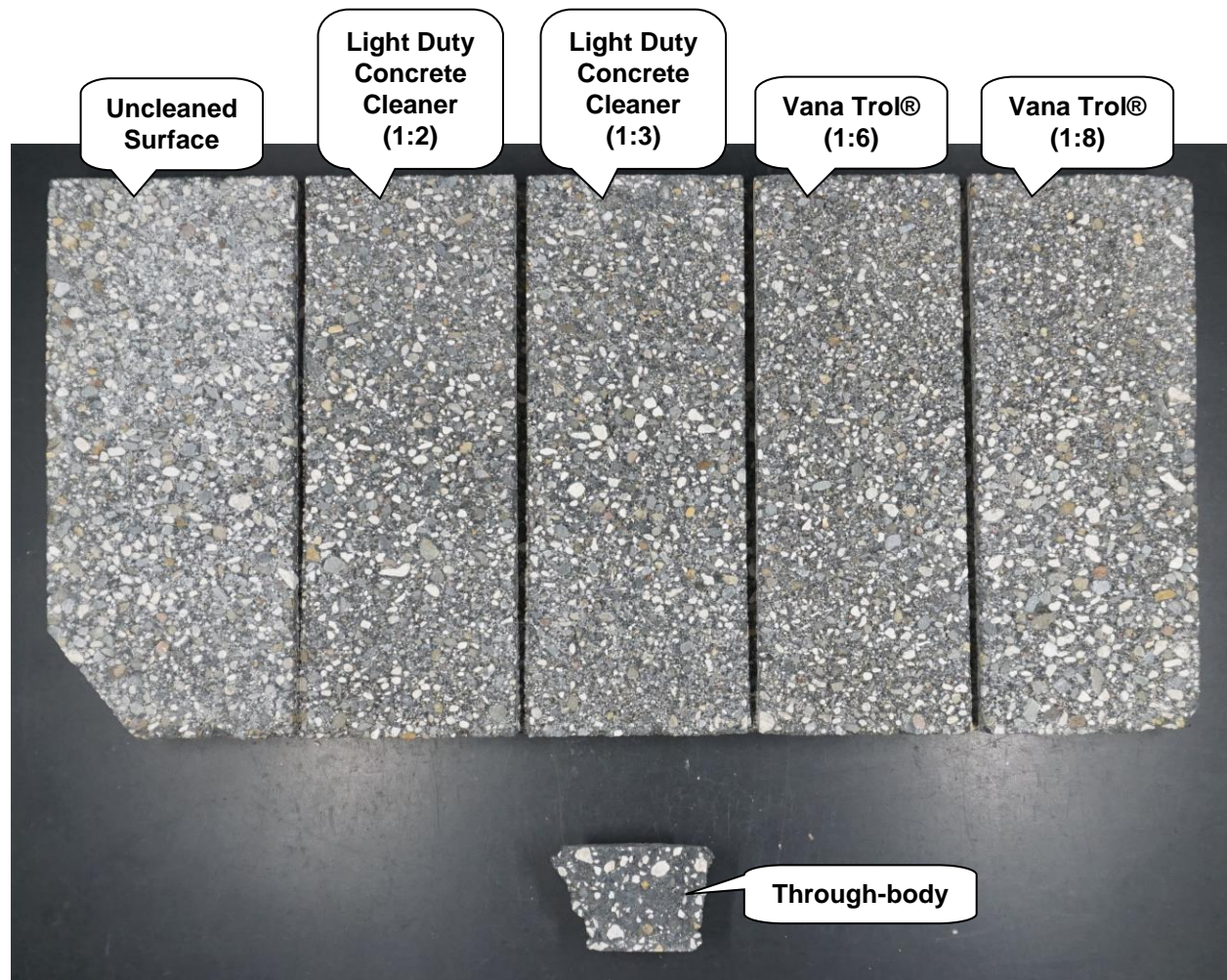
"Mountain Brown" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Sable" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

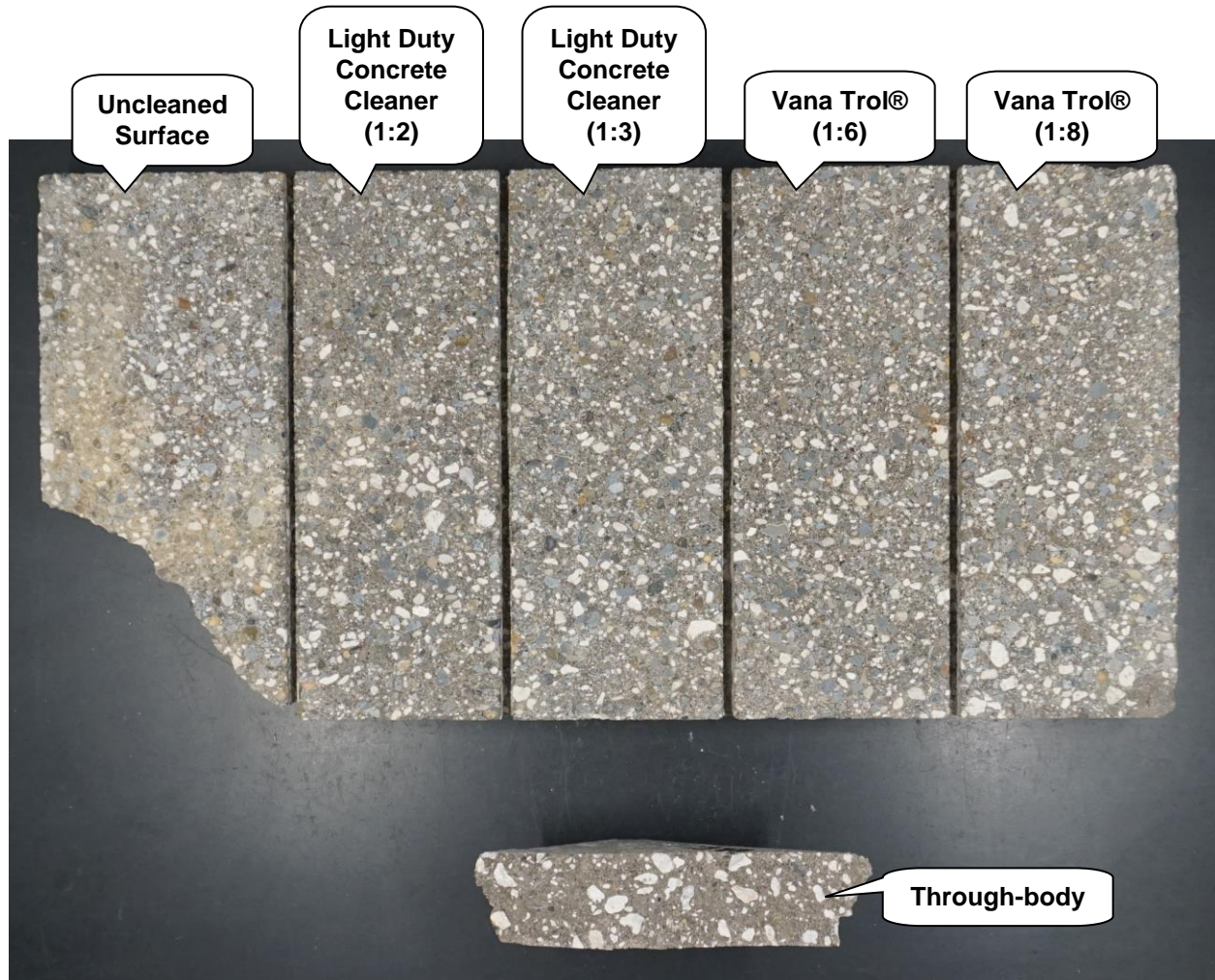
"Sable" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Driftwood" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

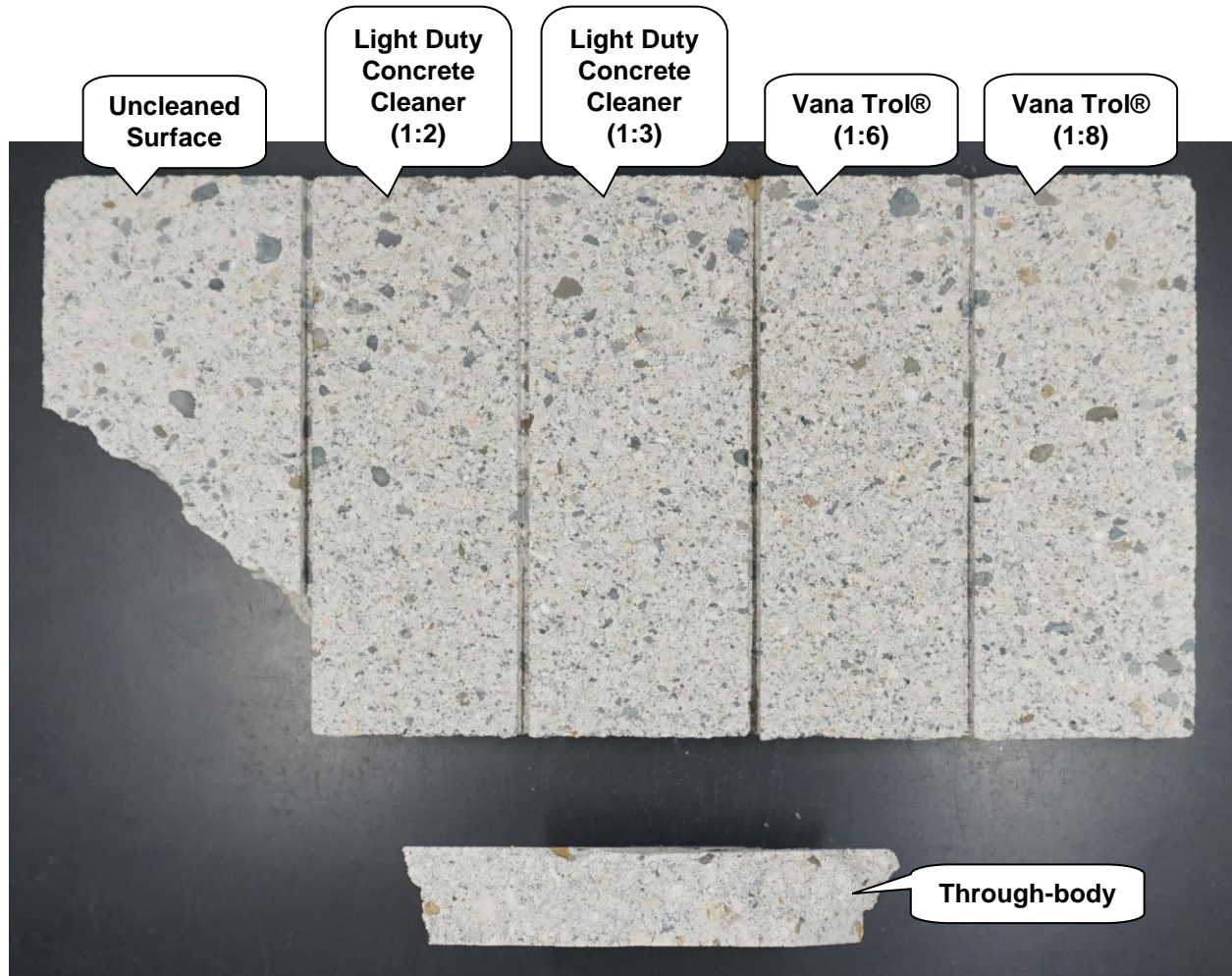
"Driftwood" Ground Face CMU After Cleaning



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Willow" Ground Face CMU			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1

"Willow" Ground Face CMU After Cleaning



CONCLUSIONS: New Construction Cleaning

In all of the cleaning tests conducted on the ground face CMUs, both dilutions of Sure Klean® Light Duty Concrete Cleaner and Sure Klean® Vana Trol® removed a slight amount of surface pigment, exposing a slight amount of aggregate.

Both cleaners, at each dilution, provided an accurate match to the through-body color of each CMU.

When choosing the most appropriate product for the desired result:

- For common construction and atmospheric staining – Test Sure Klean® Light Duty Concrete Cleaner
- For new masonry surfaces that are subject to vanadium, manganese, and other metallic stains – Test Sure Klean® Vana Trol®

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

It is recommended that the selected cleaners always be used in the lowest possible concentration. Apply all products in accordance with the manufacturer's recommendations 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.

RECOMMENDATIONS: New Construction Cleaning

Recommendations for cleaning for each type of ground face CMU submitted by Mutual Materials, Bellevue, WA are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the through-body.

Sample	New Construction Cleaning
"Natural" Ground Face CMU	Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3) OR Sure Klean® Vana Trol® (1:6) or (1:8)
"Charcoal" Ground Face CMU	
"Khaki" Ground Face CMU	
"Onyx" Ground Face CMU	
"Castle White" Ground Face CMU	
"Sandstone" Ground Face CMU	
"Burgundy Red" Ground Face CMU	
"Mountain Brown" Ground Face CMU	
"Sable" Ground Face CMU	
"Driftwood" Ground Face CMU	
"Willow" Ground Face CMU	

NOTE: "1" indicates the recommended first choice and "2" indicates the recommended second choice.

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.

SAMPLE PREPARATION: Treatment Application

Prior to treatment application, the submitted Ground Face CMUs were cleaned with Sure Klean® Light Duty Concrete Cleaner diluted with three parts water. After the samples had dried for at least 24 hours, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15, PROSOCO® Saltguard®, and Sure Klean® Weather Seal Siloxane WB Concentrate diluted with nine parts water were 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.

TEST METHODS: Color and Sheen Enhancement

After 72 hours, a visual evaluation was made comparing the untreated control surface to the treated surface to determine the effectiveness of the evaluated products in providing color and/or sheen enhancement to the submitted samples.

The following scale was used for reporting results of both categories:
0 – No enhancement compared to untreated control
1 – Slight enhancement compared to untreated control
2 – Moderate enhancement compared to untreated control
3 – Significant enhancement compared to untreated control

TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement

"Natural" Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1	0

"Natural" Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Charcoal” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1	0

“Charcoal” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

"Khaki" Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	0	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	0	0

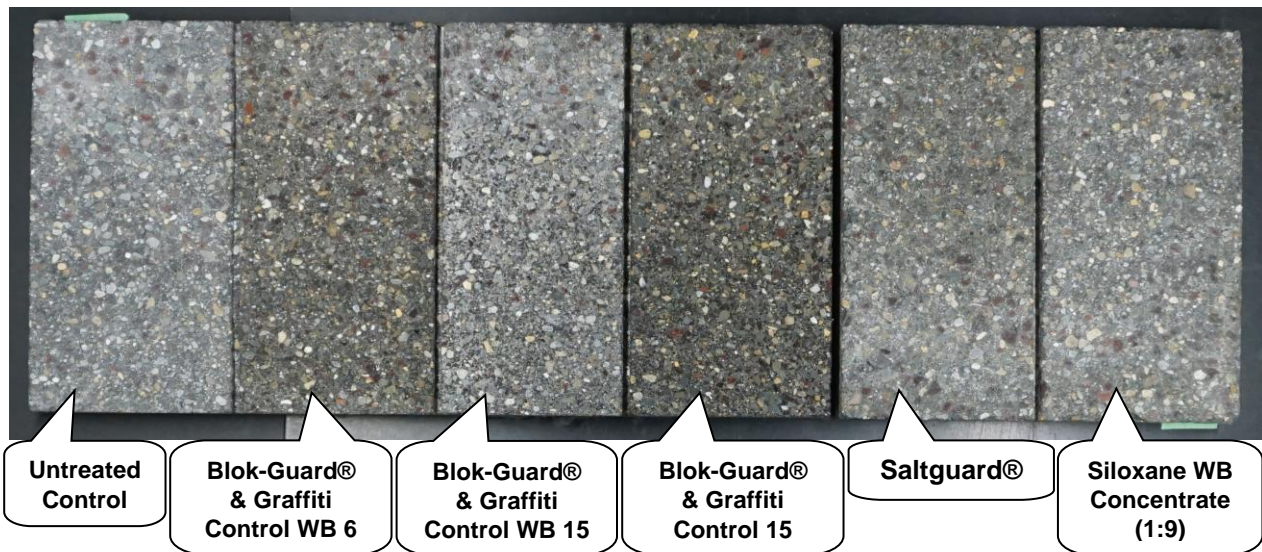
"Khaki" Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

"Onyx" Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	0	0

"Onyx" Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Castle White” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1*	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	1	0
PROSOCO® Saltguard®	1*	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1*	0

***NOTE: Very slight enhancement compared to the untreated control**

“Castle White” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Sandstone” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1	0

“Sandstone” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

"Burgundy Red" Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	0	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	0	0

"Burgundy Red" Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Mountain Brown” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1	0

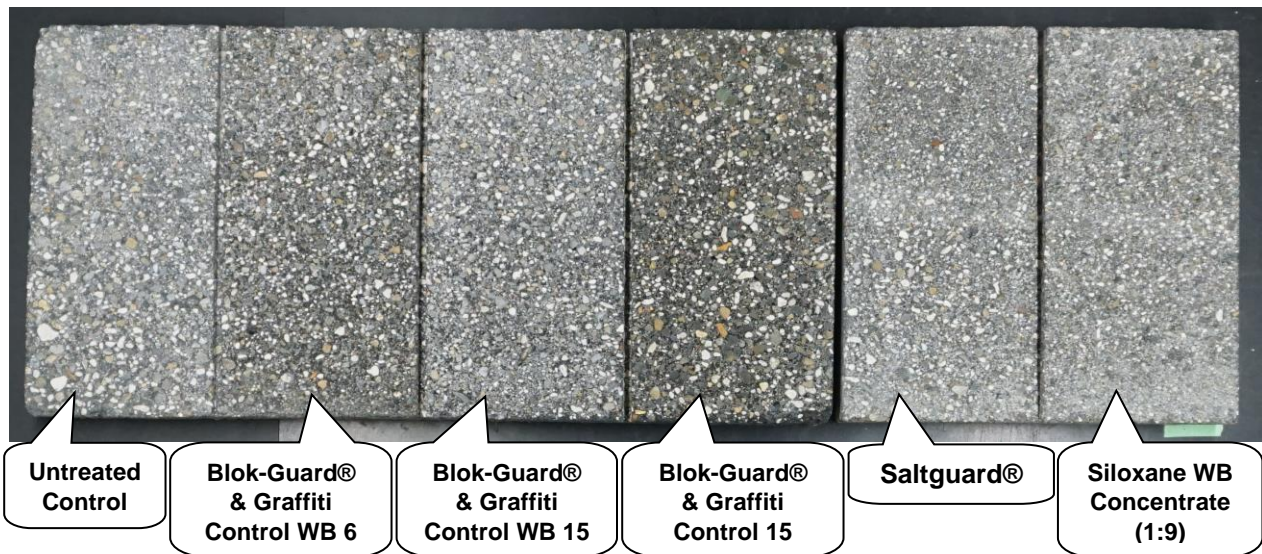
“Mountain Brown” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Sable” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	0	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	0	0

“Sable” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Driftwood” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	1	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	2	0
PROSOCO® Saltguard®	1	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	1	0

“Driftwood” Ground Face CMU with Treatments



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

“Willow” Ground Face CMU	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	0	1
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	1	0
PROSOCO® Saltguard®	0	0
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	0	0

“Willow” Ground Face CMU with Treatments



CONCLUSIONS: Color and Sheen Enhancement

The treatments evaluated provided a range of color enhancement results, from no change in appearance to a moderate change depending on the treatment.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15 provided a very slight to slight amount of sheen enhancement on some of the submitted samples. None of the other treatments provided any sheen enhancement to any of the submitted samples.

Please refer to pages 18-31 of the report for individual recommendations based on the desired result.

Enhancement levels may vary by substrate color, lighting, orientation application method, and other variables. Always test in the field to confirm intended results.

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

RECOMMENDATIONS: Color and Sheen Enhancement

Recommendations for color and sheen enhancement for each type of ground face CMU submitted by Mutual Materials, Bellevue, WA are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Color and Sheen Enhancement
"Natural" Ground Face CMU	Please refer to pages 18-31 of the report for individual recommendations based on the desired result.
"Charcoal" Ground Face CMU	
"Khaki" Ground Face CMU	
"Onyx" Ground Face CMU	
"Castle White" Ground Face CMU	
"Sandstone" Ground Face CMU	
"Burgundy Red" Ground Face CMU	
"Mountain Brown" Ground Face CMU	
"Sable" Ground Face CMU	
"Driftwood" Ground Face CMU	
"Willow" Ground Face CMU	

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.

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.

Water Absorption Tube Test of “Charcoal” Ground Face CMU



TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents

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

“Natural” Ground Face CMU	
Untreated Control	58 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

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

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

“Charcoal” Ground Face CMU	
Untreated Control	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Khaki” Ground Face CMU	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Onyx” Ground Face CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

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

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

“Castle White” Ground Face CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Sandstone” Ground Face CMU	
Untreated Control	58 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Burgundy Red” Ground Face CMU	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

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

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

“Mountain Brown” Ground Face CMU	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Sable” Ground Face CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

“Driftwood” Ground Face CMU	
Untreated Control	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

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

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

“Willow” Ground Face CMU	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	60 mph
PROSOCO® Saltguard®	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)	60 mph

CONCLUSIONS: Protective Water Repellents

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

Although some of the untreated areas in the 20 minute RILEM test did not absorb any water, the treatments will likely provide long-term water repellent protection and help to prevent water-related staining.

RECOMMENDATIONS: Protective Water Repellents

Recommendations for water repellency for each type of ground face CMU submitted by Mutual Materials, Bellevue, WA are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Water Repellency
"Natural" Ground Face CMU	Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6 OR Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15 OR Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 OR PROSOCO® Saltguard® OR Sure Klean® Weather Seal Siloxane WB Concentrate
"Charcoal" Ground Face CMU	
"Khaki" Ground Face CMU	
"Onyx" Ground Face CMU	
"Castle White" Ground Face CMU	
"Sandstone" Ground Face CMU	
"Burgundy Red" Ground Face CMU	
"Mountain Brown" Ground Face CMU	
"Sable" Ground Face CMU	
"Driftwood" Ground Face CMU	
"Willow" Ground Face CMU	

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.

TEST METHODS: Graffiti Resistance

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

Graffiti comes in many forms, many of which are low quality, readily available spray paints and markers. While those forms of graffiti are most common and may be easier to remove, the testing below was conducted with the graffiti types we have found to be the most resilient and hardest to remove in order to provide you with a “worst case scenario.” Always test in field conditions to verify intended performance.

Spray paint and marker were applied as graffiti agents to the untreated and treated surfaces five days after application of the graffiti resistant products. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Enviro Klean® SafStrip® 8 and Sure Klean® Graffiti Remover.

Chemical cleaners were evaluated using the following procedure:

1. Apply the product to a dry surface, soiled with graffiti.
2. Allow appropriate dwell time and periodically agitate:
 - SafStrip® 8..... 30 minutes
 - Graffiti Remover 5 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 40-degree fan spray tip was used for rinsing.

Graffiti removal was evaluated visually using a scale from 0 to 10, with 0 indicating no removal of the graffiti agent and 10 indicating complete removal of the graffiti agent.

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance

“Natural” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	8	5.3
Graffiti Remover	5	3	8	5.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	10	8.0
Graffiti Remover	7	8	10	8.3
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

“Charcoal” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	4	10	6.3
Graffiti Remover	5	4	8	5.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	10	8.0
Graffiti Remover	7	7	10	8.0
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Khaki” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	8	5.3
Graffiti Remover	5	3	7	5.0
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	8	10	8.3
Graffiti Remover	7	8	10	8.3
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

“Onyx” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	4	10	6.3
Graffiti Remover	6	4	9	6.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	10	10	10	10.0
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Castle White” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	5	8	6.0
Graffiti Remover	5	5	7	5.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	9	8.3
Graffiti Remover	8	9	9	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	9	10	9.3
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

“Sandstone” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	4	6	5.0
Graffiti Remover	5	4	6	5.0
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	10	8.0
Graffiti Remover	8	8	8	8.0
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	9	9	10	9.3

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Burgundy Red” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	8	5.3
Graffiti Remover	5	3	8	5.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	10	10	9.3
Graffiti Remover	8	10	10	9.3

“Mountain Brown” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	4	3	10	5.7
Graffiti Remover	4	3	9	5.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Sable” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	4	9	6.0
Graffiti Remover	6	5	8	6.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

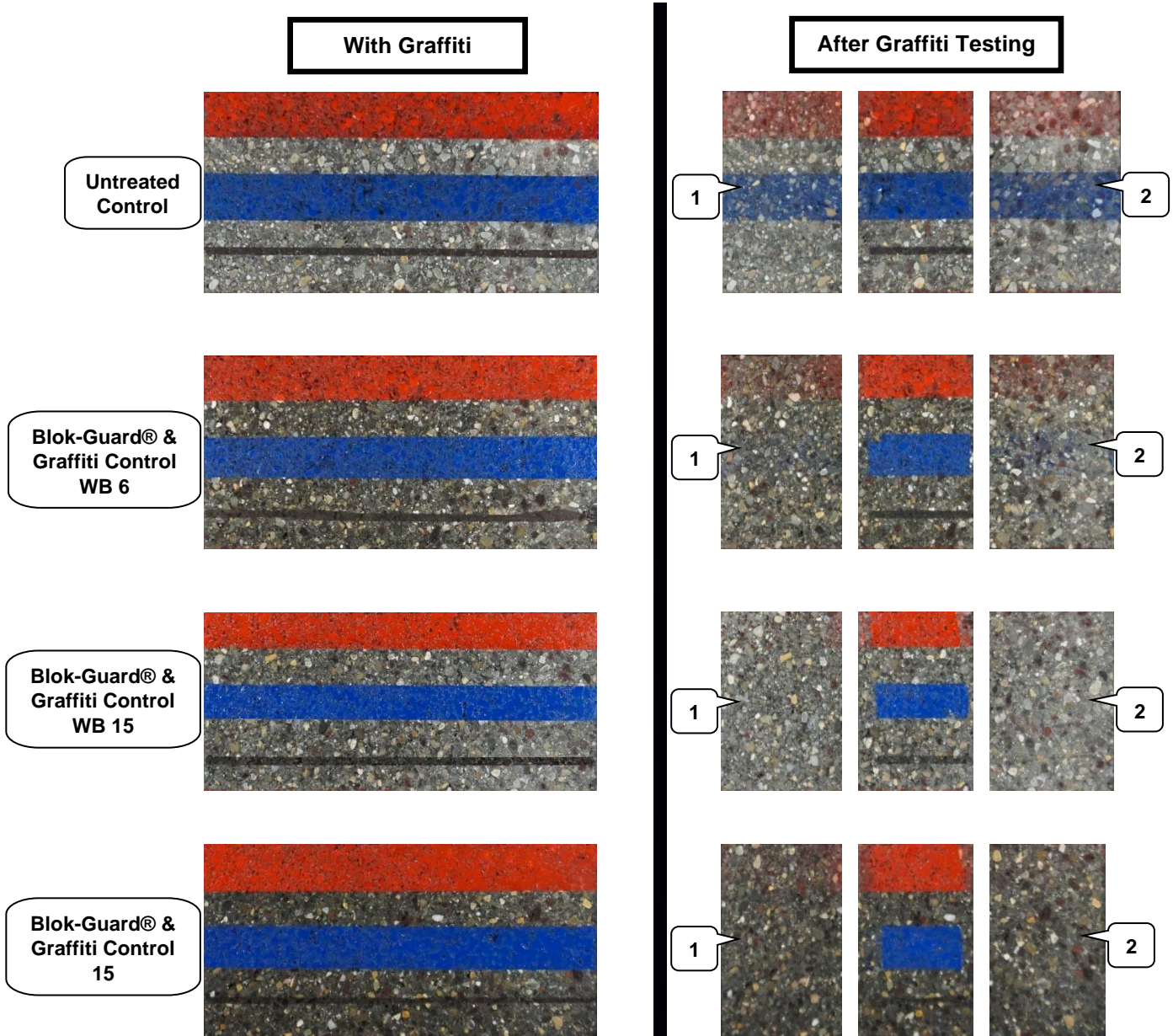
“Driftwood” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	4	9	6.0
Graffiti Remover	5	4	9	6.0
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	10	10	9.7
Graffiti Remover	9	10	10	9.7
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Willow” Ground Face CMU				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	6	3	5	4.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	6	7	10	7.7
Graffiti Remover	7	7	10	8.0
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	9	9	10	9.3
Graffiti Remover	9	9	10	9.3
Blok-Guard® & Graffiti Control 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	9	10	9.0
Graffiti Remover	8	9	10	9.0

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)


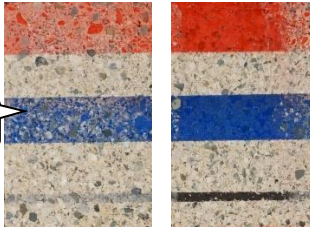






“Onyx” Ground Face CMU



KEY
1 = SafStrip® 8
2 = Graffiti Remover

TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

“Sandstone” Ground Face CMU

	With Graffiti	After Graffiti Testing		
Untreated Control		1		2
Blok-Guard® & Graffiti Control WB 6		1		2
Blok-Guard® & Graffiti Control WB 15		1		2
Blok-Guard® & Graffiti Control 15		1		2

KEY
1 = SafStrip® 8
2 = Graffiti Remover

CONCLUSIONS: Graffiti Resistance

Based on the laboratory evaluations, graffiti removal was improved with all three treatments. However, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15 was the most effective treatment.

Enviro Klean® SafStrip® 8 and Sure Klean® Graffiti Remover were both effective in removing graffiti from the submitted samples.

On-site testing is always recommended to ensure the desired result. Heavy graffiti staining may require more than one application of the graffiti remover.

RECOMMENDATIONS: Graffiti Resistance

Recommendations for graffiti resistance for each type of ground face CMU submitted by Mutual Materials, Bellevue, 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. Heavy graffiti staining may require more than one application of the graffiti remover.

Sample	Graffiti Repellents	Graffiti Removers
"Natural" Ground Face CMU	¹ Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15 OR ² Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 OR ³ Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	Enviro Klean® SafStrip® 8 OR Sure Klean® Graffiti Remover
"Charcoal" Ground Face CMU		
"Khaki" Ground Face CMU		
"Onyx" Ground Face CMU		
"Castle White" Ground Face CMU		
"Sandstone" Ground Face CMU		
"Burgundy Red" Ground Face CMU		
"Mountain Brown" Ground Face CMU		
"Sable" Ground Face CMU		
"Driftwood" Ground Face CMU		
"Willow" Ground Face CMU		

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

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
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.