

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

Pallet Tag Program Laboratory Report Custom Cast Stone Westfield, IN



Project No. 2401-05 PTP

Prepared For:



Prepared By:

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J. Lucas Comadoll Project Testing Technician AMT Laboratories

February 2024



Laboratory Report

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

DATE: February 19, 2024

2401-05 PTP

PROJECT:

FOR: Matt Maier, Custom Cast Stone

cc: Tim Quill, Technical Marketing Services, LLC

Matt Stickler, Technical Marketing Services, LLC

Mike Starkey, PROSOCO, Inc. Ken Rathbun, PROSOCO, Inc. Jake Boyer, PROSOCO, Inc.

SUBJECT: Custom Cast Stone

Westfield, IN

Pallet Tag Evaluation

SAMPLES SUBMITTED: 13 types of cast stone

Block	Name	Color	Size
(6) Cast Stone	"Arbury Blend"	Brown/Buff	8" x 8" x 1"
(6) Cast Stone	"Bark"	Brown	8" x 8" x 1"
(6) Cast Stone	"Brick Red"	Red	8" x 8" x 1"
(6) Cast Stone	"Cotton"	Buff	8" x 8" x 1"
(6) Cast Stone	"Dark Buff"	Orange	8" x 8" x 1"
(6) Cast Stone	"Ginger"	Yellow	8" x 8" x 1"
(6) Cast Stone	"Light Buff"	Buff	8" x 8" x 1"
(6) Cast Stone	"Natural"	Buff	8" x 8" x 1"
(6) Cast Stone	"Natural White"	Buff	8" x 8" x 1"
(6) Cast Stone	"Olive Buff"	Buff	8" x 8" x 1"
(6) Cast Stone	"Sandstone"	Buff	8" x 8" x 1"
(6) Cast Stone	"Slate"	Green	8" x 8" x 1"
(6) Cast Stone	"Super Black"	Black	8" x 8" x 1"

SUBMITTED BY: Matt Maier

Custom Cast Stone 734 E 169th Street Westfield, IN 46074



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 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	
Sure Klean® Light Duty Concrete Cleaner	1:2, 1:3
Sure Klean® Vana Trol®	
Enviro Klean® Safety Klean	1:2, 1:3

Water Repellency	Dilution:
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	N/A*
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 Siloxane PD	N/A*
Sure Klean® Weather Seal Weather Seal GP	N/A*

Graffiti Resistance	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15	N/A*

Graffiti Removal	
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, Sure Klean® Vana Trol®, and Enviro Klean® Safety Klean were evaluated on the submitted samples to determine the optimal concentration of cleaner which leaves the external surface looking most like the uncleaned surface of the cast stone.

Color uniformity was evaluated by comparing aggregate exposure and surface pigment alteration/removal of each cleaned surface compared to the uncleaned surface of the cast stone.

<u>Aggregate Exposure</u> is the visual examination comparing aggregate exposure of the uncleaned surface of the cast stone to surfaces cleaned with selected product(s) at given dilutions.

<u>Surface Pigment Alteration/Removal</u> is the visual examination comparing the pigmentation of the uncleaned surface of the cast stone 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 uncleaned surface
- 1 Slight change compared to uncleaned surface
- 2 **Moderate change** compared to uncleaned surface
- 3 Significant change compared to uncleaned surface

Cleaning Procedure:

- Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Guide instructions.
- 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. Compare the uncleaned surfaces to the cleaned surfaces for the best match.

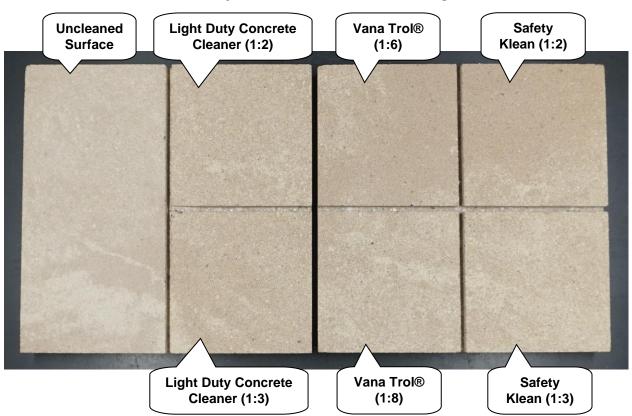
^{*}Rinsing Equipment – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 40-degree fan spray tip was used for rinsing.



Name: "Arbury Blend" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

*NOTE: Very slight change compared to uncleaned surface.

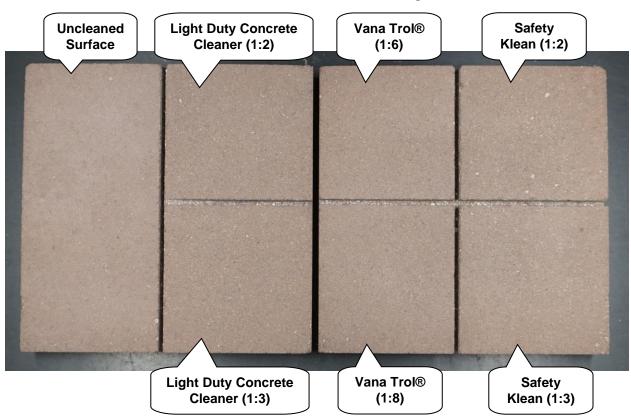
"Arbury Blend" Cast Stone After Cleaning





Name: "Bark" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

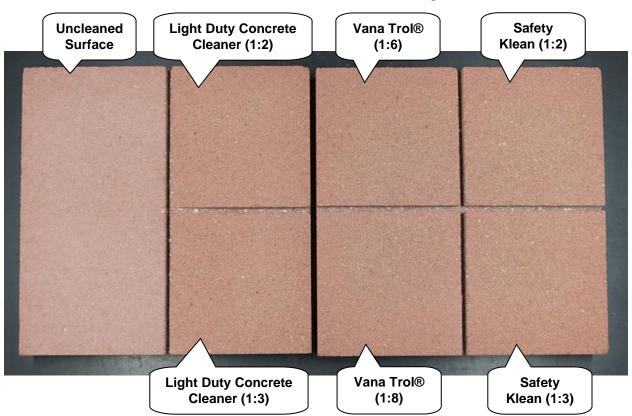
"Bark" Cast Stone After Cleaning





Name: "Brick Red" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

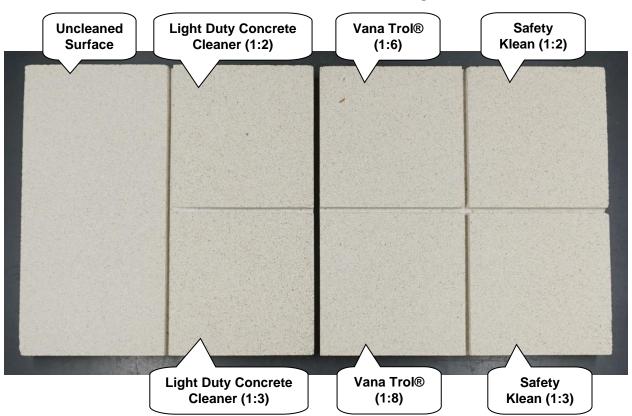
"Brick Red" Cast Stone After Cleaning





Name: "Cotton" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

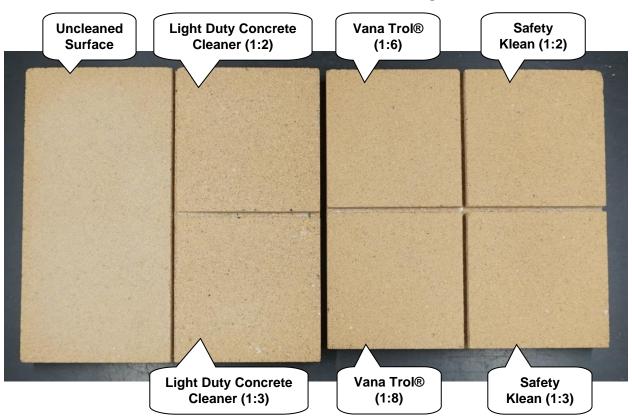
"Cotton" Cast Stone After Cleaning





Name: "Dark Buff" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

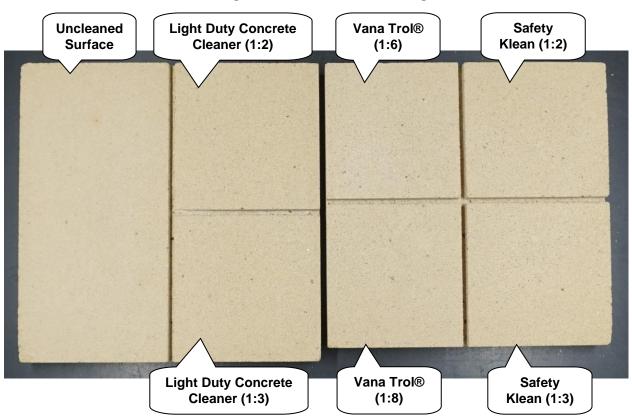
"Dark Buff" Cast Stone After Cleaning





Name: "Ginger" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

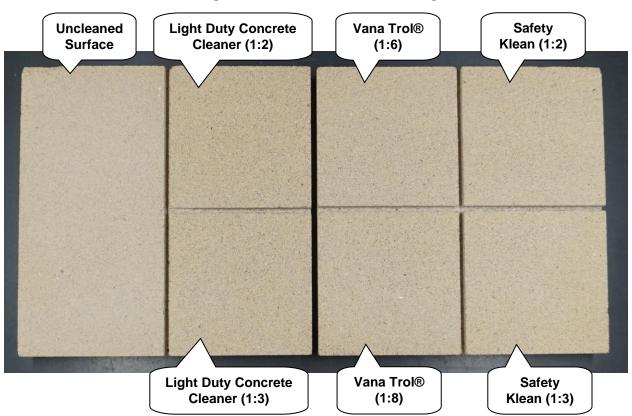
"Ginger" Cast Stone After Cleaning





Name: "Light Buff" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

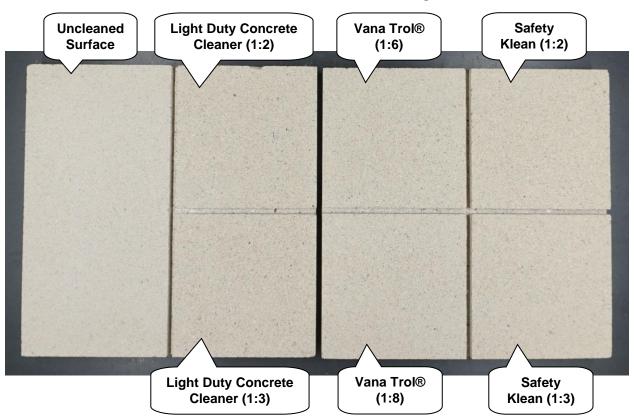
"Light Buff" Cast Stone After Cleaning





Name: "Natural" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

"Natural" Cast Stone After Cleaning

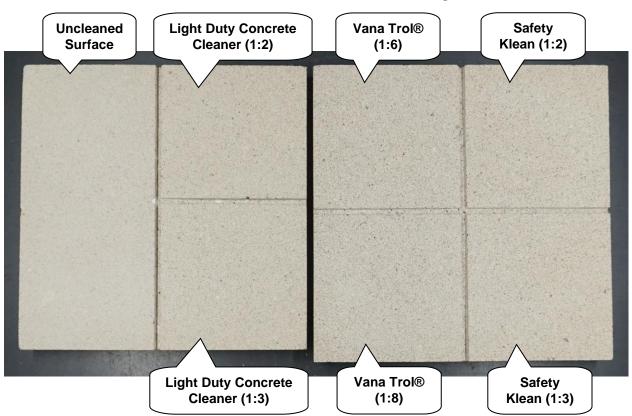




Name: "Natural White" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	1	1
Light Duty Concrete Cleaner	1:3	1	1
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

*NOTE: Very slight change compared to uncleaned surface.

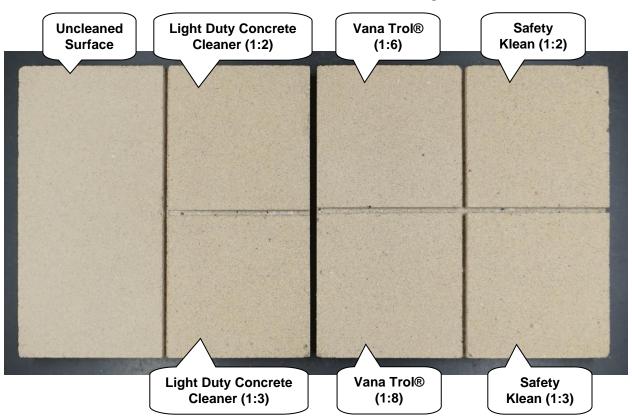
"Natural White" Cast Stone After Cleaning





Name: "Olive Buff" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

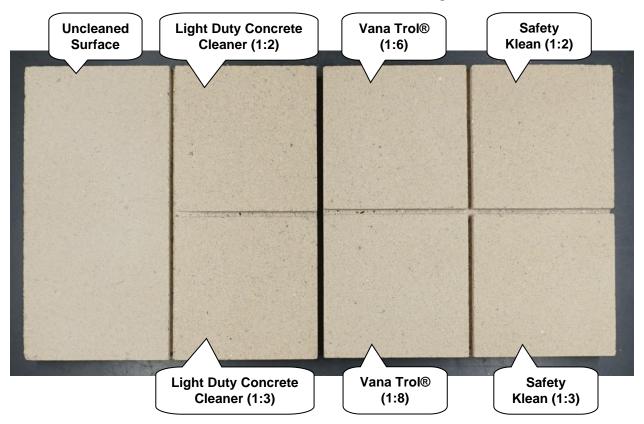
"Olive Buff" Cast Stone After Cleaning





Name: "Sandstone" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1*	1*
Vana Trol®	1:8	1*	1*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

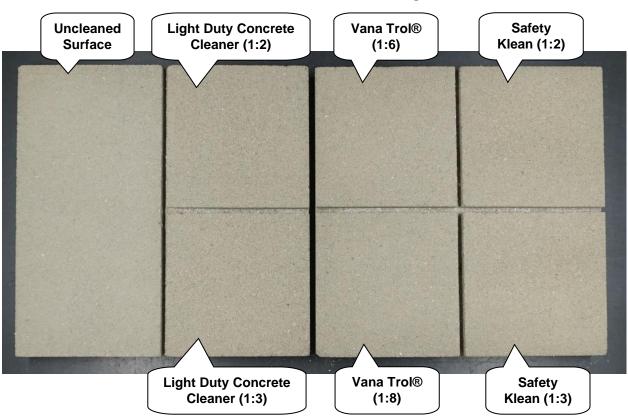
"Sandstone" Cast Stone After Cleaning





Name: "Slate" Cast Stone			
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*
Safety Klean	1:2	1	1
Safety Klean	1:3	1	1

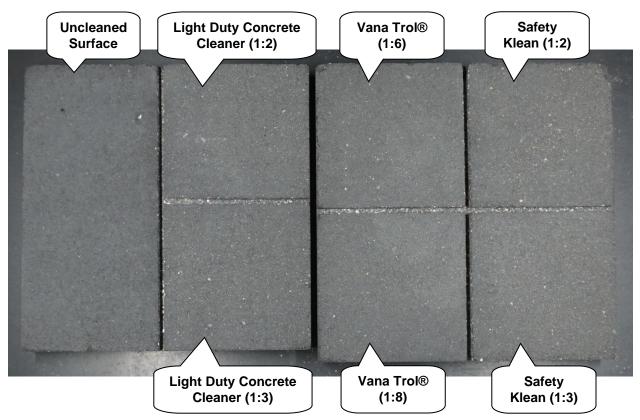
"Slate" Cast Stone After Cleaning





Name: "Super Black" Cast Stone			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Light Duty Concrete Cleaner	1:2	2	2
Light Duty Concrete Cleaner	1:3	2	2
Vana Trol®	1:6	1	1
Vana Trol®	1:8	1	1
Safety Klean	1:2	2	2
Safety Klean	1:3	2	2

"Super Black" Cast Stone After Cleaning





CONCLUSIONS: New Construction Cleaning

In the cleaning tests conducted, both dilutions of Sure Klean® Light Duty Concrete Cleaner removed a slight to moderate amount of surface pigment, exposing a slight to moderate amount of aggregate. In general, Sure Klean® Vana Trol® removed a very slight amount of surface pigment, exposing a very slight amount of aggregate. In general, Enviro Klean® Safety Klean removed a slight amount of surface pigment, exposing a slight amount of aggregate.

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®
- For an effective, safe alternative to acidic cleaning compounds Test Enviro Klean® Safety Klean

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 cast stone submitted by Custom Cast Stone, Westfield, IN are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the uncleaned surface.

Sample	New Construction Cleaning
"Arbury Blend" Cast Stone	
"Bark" Cast Stone	
"Ginger" Cast Stone	
"Natural" Cast Stone	¹ Sure Klean® Vana Trol® (1:6) or (1:8) OR
"Natural White" Cast Stone	² Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3) OR ² Enviro Klean® Safety Klean (1:2) or (1:3)
"Olive Buff" Cast Stone	
"Slate" Cast Stone	
"Super Black" Cast Stone	
"Brick Red" Cast Stone	
"Cotton" Cast Stone	¹Sure Klean® Vana Trol® (1:6) or (1:8)
"Dark Buff" Cast Stone	OR ² Enviro Klean® Safety Klean (1:2) or (1:3) OR
"Light Buff" Cast Stone	³ Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3)
"Sandstone" Cast Stone	

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

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 cast stone samples were cleaned with Sure Klean® Vana Trol® diluted with eight parts water in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. After the samples had dried for at least 24 hours, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15, Sure Klean® Weather Seal Siloxane PD, and Sure Klean® Weather Seal Weather Seal GP were applied in a brushing application in accordance with the current PROSOCO, Inc. Product Data Sheet instructions and allowed to cure for at least 72 hours prior to testing.



TEST METHODS: Protective Water Repellents

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

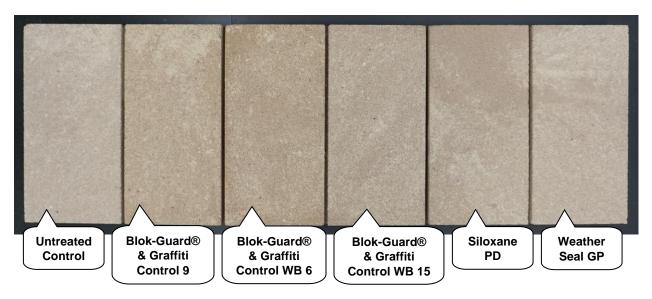
The water absorption tube test simulating wind driven rain conditions was performed. This test simulates 60 mile per hour wind driven rain conditions for a period of 20 minutes.

TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents

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

"Arbury Blend" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Arbury Blend" Cast Stone - With Treatments





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

"Bark" Cast Stone	
Untreated Control	49 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Bark" Cast Stone - With Treatments

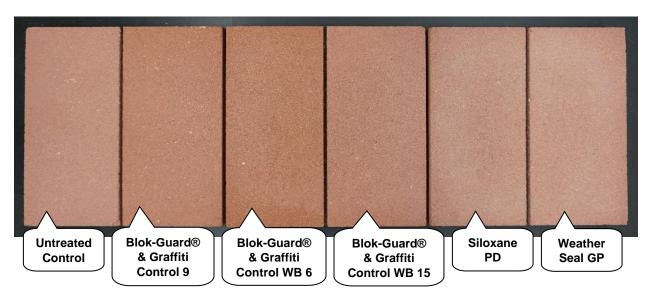




Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"Brick Red" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Brick Red" Cast Stone - With Treatments





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

"Cotton" Cast Stone	
Untreated Control	56 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Cotton" Cast Stone - With Treatments

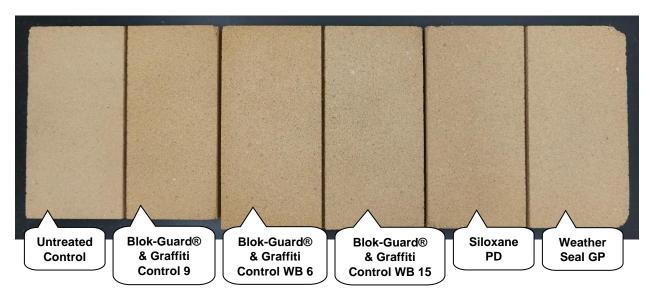




Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"Dark Buff" Cast Stone	
Untreated Control	55 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Dark Buff" Cast Stone - With Treatments





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

"Ginger" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Ginger" Cast Stone - With Treatments





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

"Light Buff" Cast Stone	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Light Buff" Cast Stone - With Treatments

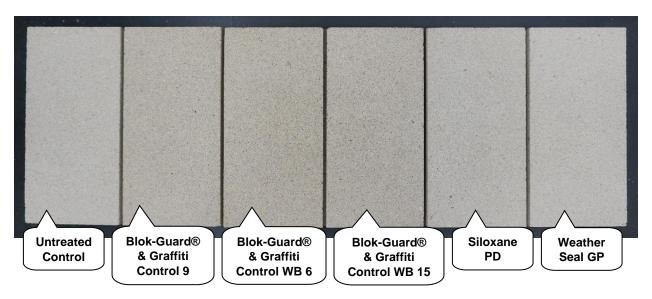




Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"Natural" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Natural" Cast Stone - With Treatments





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

"Natural White" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Natural White" Cast Stone - With Treatments





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

"Olive Buff" Cast Stone	
Untreated Control	59 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Olive Buff" Cast Stone - With Treatments





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

"Sandstone" Cast Stone	
Untreated Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Sandstone" Cast Stone - With Treatments





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

"Slate" Cast Stone	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Slate" Cast Stone - With Treatments

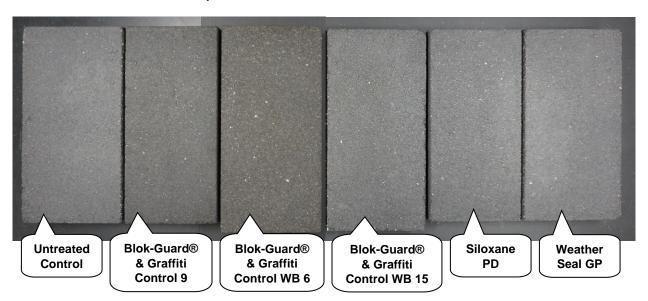




Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"Super Black" Cast Stone	
Untreated Control	<40 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9	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 Siloxane PD	60 mph
Sure Klean® Weather Seal Weather Seal GP	60 mph

"Super Black" Cast Stone - With Treatments





CONCLUSIONS: Protective Water Repellents

Based on the laboratory evaluations, all of the treatments provided good water repellent protection to the submitted cast stone. Although some of the untreated areas in the 20 minute RILEM test absorbed no water, the treatments will likely provide long-term water repellent protection and help to prevent water-related staining.

Application of Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9 and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 6 provided slight to moderate color enhancement to the submitted cast stone.

Application of Sure Klean® Weather Seal Blok-Guard® & Graffiti Control WB 15 provided slight color enhancement to the submitted cast stone.

Application of Sure Klean® Weather Seal Siloxane PD and Sure Klean® Weather Seal Weather Seal GP provided zero to slight color enhancement to the submitted cast stone.

None of the treatments provided any sheen enhancement to the submitted samples.



RECOMMENDATIONS: Protective Water Repellents

Recommendations for water repellency for each type of cast stone submitted by Custom Cast Stone, Westfield, IN are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Water Repellency
"Arbury Blend" Cast Stone	
"Bark" Cast Stone	
"Brick Red" Cast Stone	
"Cotton" Cast Stone	Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 9 OR 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 Siloxane PD OR Sure Klean® Weather Seal Weather Seal GP
"Dark Buff" Cast Stone	
"Ginger" Cast Stone	
"Light Buff" Cast Stone	
"Natural" Cast Stone	
"Natural White" Cast Stone	
"Olive Buff" Cast Stone	
"Sandstone" Cast Stone	
"Slate" Cast Stone	
"Super Black" Cast Stone	

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:

- 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.



"Arbury Blend" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	6	3	6	5.0
Graffiti Remover	6	3	5	4.7
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	10	8.7
Graffiti Remover	8	9	10	9.0
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	8	8	7.7
Graffiti Remover	7	8	8	7.7
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

"Bark" Cast Stone					
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	7	3	8	6.0	
Graffiti Remover	7	3	3	4.3	
Blok-Guard® & Graffiti Control 9	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 6	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	6	7	9	7.3	
Graffiti Remover	7	7	8	7.3	
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	



"Brick Red" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	3	8	6.0
Graffiti Remover	7	3	5	5.0
Blok-Guard® & Graffiti Control 9	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 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	8	8	9	8.3
Graffiti Remover	8	8	9	8.3
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	10	10	10	10.0
Graffiti Remover	10	10	10	10.0

"Cotton" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	6	3	3	4.0
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	7	10	7.3
Graffiti Remover	7	7	10	8.0
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	7	7	6.3
Graffiti Remover	7	7	6	6.7
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



"Dark Buff" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	6	4.7
Graffiti Remover	5	3	5	4.3
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	8	10	8.3
Graffiti Remover	8	8	10	8.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	6	5	7	6.0
Graffiti Remover	6	5	5	5.3
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

"Ginger" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	6	3	3	4.0
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	9	7.7
Graffiti Remover	7	7	9	7.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	9	7.7
Graffiti Remover	7	7	8	7.3
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



"Light Buff" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	5	3	3	3.7
Blok-Guard® & Graffiti Control 9	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 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	8	7.3
Graffiti Remover	7	7	7	7.0
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

"Natural" Cast Stone					
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 9	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 6	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	7	7	8	7.3	
Graffiti Remover	7	7	8	7.3	
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	



"Natural White" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	5	3	3	3.7
Blok-Guard® & Graffiti Control 9	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 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	8	7	7.3
Graffiti Remover	7	8	6	7.0
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

"Olive Buff" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	5	3	3	3.7
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	9	7.7
Graffiti Remover	7	7	9	7.7
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	9	7.7
Graffiti Remover	7	7	9	7.7
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



"Sandstone" Cast Stone				
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	5	3	5	4.3
Graffiti Remover	5	3	3	3.7
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	8	7.3
Graffiti Remover	7	7	8	7.3
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating
SafStrip® 8	7	7	8	7.3
Graffiti Remover	7	7	8	7.3
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

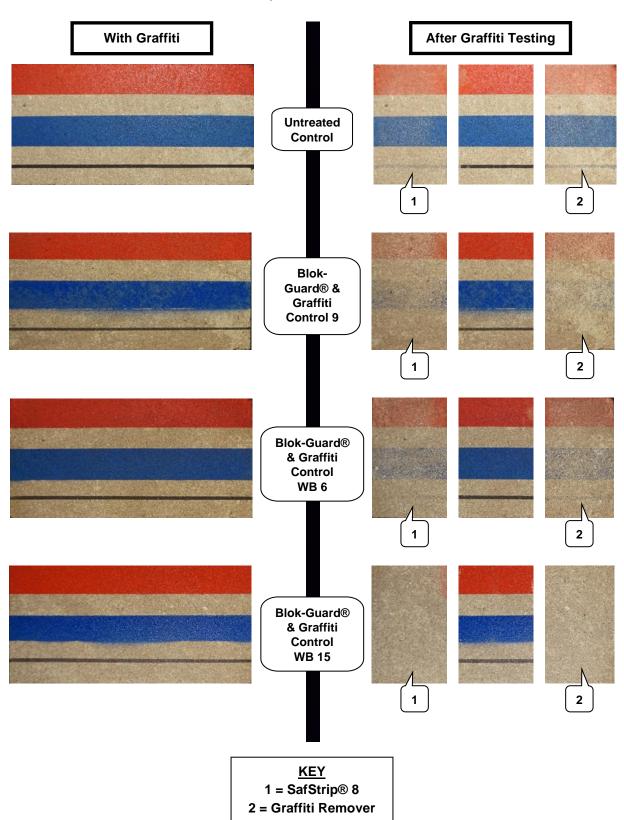
"Slate" Cast Stone					
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	5	3	5	4.3	
Graffiti Remover	7	3	5	5.0	
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	7	7	10	8.0	
Graffiti Remover	7	7	10	8.0	
Blok-Guard® & Graffiti Control WB 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	



"Super Black" Cast Stone					
Untreated Control	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	5	3	8	5.3	
Graffiti Remover	7	3	5	5.0	
Blok-Guard® & Graffiti Control 9	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	8	7	10	8.3	
Graffiti Remover	8	7	10	8.3	
Blok-Guard® & Graffiti Control WB 6	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	7	7	10	8.0	
Graffiti Remover	7	7	10	8.0	
Blok-Guard® & Graffiti Control WB 15	Red Paint	Blue Paint	Black Marker	Avg. Rating	
SafStrip® 8	10	10	10	10.0	
Graffiti Remover	10	10	10	10.0	

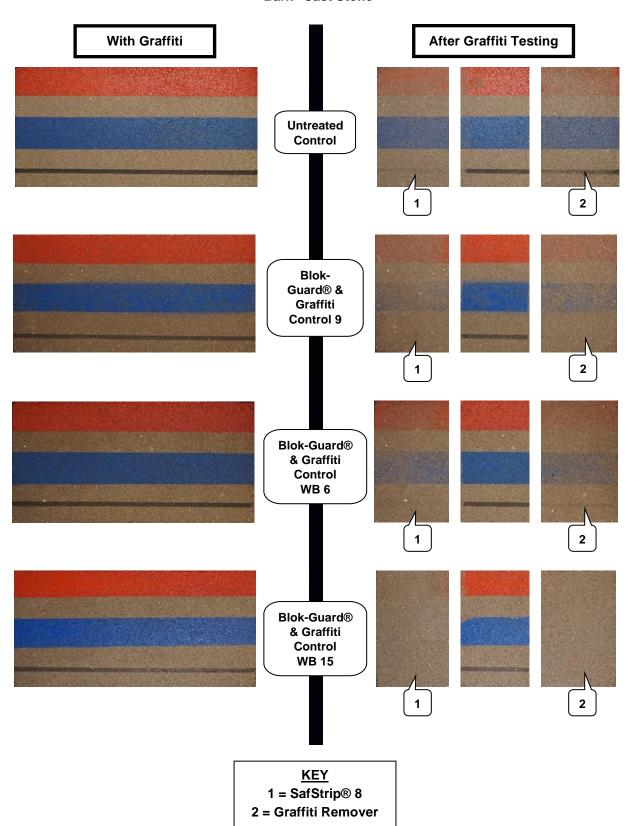


"Arbury Blend" Cast Stone



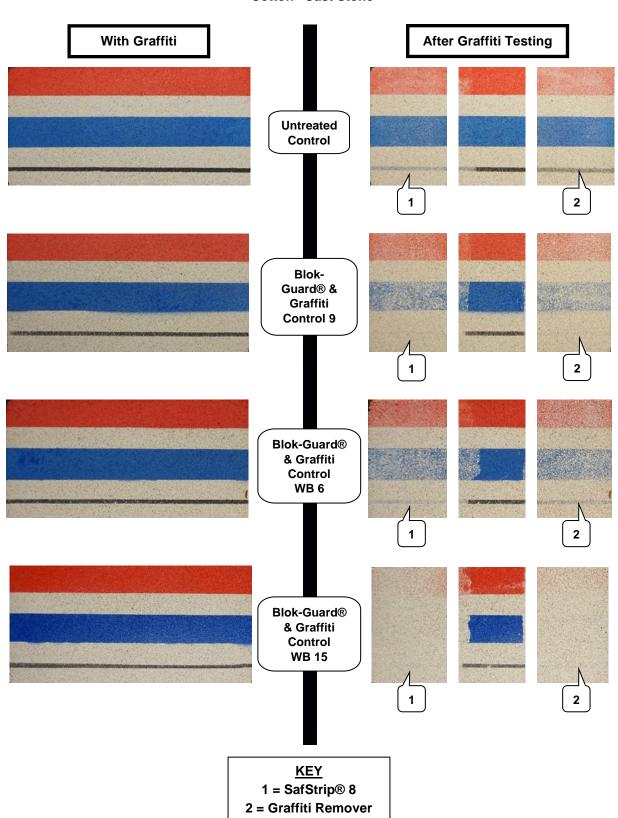


"Bark" Cast Stone





"Cotton" Cast Stone





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 cast stone submitted by Custom Cast Stone, Westfield, IN 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
"Arbury Blend" Cast Stone	¹ Sure Klean® Weather Seal Blok- Guard® & Graffiti Control WB 15 OR ² Sure Klean® Weather Seal Blok- Guard® & Graffiti Control 9 OR ³ Sure Klean® Weather Seal Blok- Guard® & Graffiti Control WB 6	Enviro Klean® SafStrip® 8 OR Sure Klean® Graffiti Remover
"Bark" Cast Stone		
"Brick Red" Cast Stone		
"Cotton" Cast Stone		
"Dark Buff" Cast Stone		
"Ginger" Cast Stone		
"Light Buff" Cast Stone		
"Natural" Cast Stone		
"Natural White" Cast Stone		
"Olive Buff" Cast Stone		
"Sandstone" Cast Stone		
"Slate" Cast Stone		
"Super Black" Cast Stone		

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

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.