



TABLE OF CONTENTS

SAMPLES SUBMITTED	
PURPOSE OF TEST4-5	
PRODUCTS EVALUATED	
SECTION A – CLEANING INTEGRALLY COLORED CMUs	
DESCRIPTION OF PRODUCTS EVALUATED	
TEST METHOD7	
TEST RESULTS	
CONCLUSIONS	
RECOMMENDATIONS	
SECTION B – SURFACE ALTERATIONS	
DESCRIPTION OF PRODUCTS EVALUATED10	
TEST METHOD10	
TEST RESULTS	
CONCLUSIONS	
RECOMMENDATIONS12	
SECTION C - PROTECTIVE WATER REPELLENTS	
DESCRIPTION OF PRODUCTS EVALUATED13	
TEST METHODS13	
TEST RESULTS14	
CONCLUSIONS	
RECOMMENDATIONS15	
SECTION D – GRAFFITI CONTROL	
DESCRIPTION OF PRODUCTS EVALUATED16	
TEST METHODS17	
TEST RESULTS	
CONCLUSIONS	
RECOMMENDATIONS	





ATTACHMENT

Attachment #1 - PHOTO A & B

Attachment #2 - PHOTO C & D

Technical Services TECH Note RILEM Test Method No. II.4

Product Data literature for all products evaluated





- FOR: Frank Werner cc: Stephen Dean Paul Tessier
- SUBJECT: Adams Concrete Products, Inc. Raleigh, NC
- DATE: January 3, 2002

PROJECT: 0110-14 BP

SAMPLES SUBMITTED:

<u>SAMPLE</u>	COLOR	SIZE
(5) Split-face	Marble White	8" x 8" x 16"
(5) Split-face	Ruby Red	8" x 8" x 16"
(5) Split-face	lvory	8" x 8" x 16"
(5) Split-face	Natural Gray	8" x 8" x 16"
(5) Split-face	Showtan	8" x 8" x 16"
(5) Split-face	Paint Grade (Gray)	8" x 8" x 16"

Submitted by: Stephen Dean





PURPOSE OF TESTING:

Six types of integrally colored split-face CMUs with large, small and fine aggregate were submitted for testing using PROSOCO's new construction cleaning and water repellent products.

A. Cleaning Concrete Masonry Units – Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Burnished Custom Masonry Cleaner were evaluated for removal of laboratory applied mortar.

To simulate new construction soiling, all CMUs are placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall are positioned on top of each CMU and filled with a wet mixture of either Ash Grove[®] Type S cementitious mortar or Ash Grove[®] Type N cementitious mortar. The wet, mortar-filled cylinder is allowed to remain in contact with the CMU for 10 minutes before removal.

Soiled CMUs are allowed to dry before test cleaning.

Heavy deposits of mortar are removed with dry scraping after 24 hours. Prepared cleaning solutions are then evaluated for their effectiveness in removing residual Ash Grove[®] Type S mortar staining after 3 days and 14 days of curing, and residual Ash Grove[®] Type N mortar staining after 7 days and 21 days of curing.

Refer to "*Note: When cleaning integrally colored CMU" in the following section, "Surface Alteration Testing."

B. Surface Alteration Testing – Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Burnished Custom Masonry Cleaner were tested at various dilutions to determine if a cleaning program implemented to remove excess mortar and related new construction soiling would otherwise alter the appearance of cleaned surfaces. Surface Alteration was evaluated visually based upon perceived discoloration or erosion/etching of the masonry unit.

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

<u>Surface Pigment Alteration/Removal*</u> is the visual examination of the CMU comparing the surface pigmentation of the untreated control to surfaces cleaned with selected product(s) at given dilutions.

<u>Matrix Erosion</u> is the visual examination comparing the untreated control surface to surfaces cleaned with selected products at given dilutions looking for any potential erosion/digestion of the cementitious matrix of the CMU.

<u>Staining</u> is the visual examination for changes that are the result of a chemical reaction that leaves a staining precipitate.

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

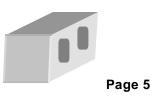
- 0 no change 3 heavy
- 1 slight 4 excessive
- 2 moderate

* NOTE: When cleaning integrally colored CMU.

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 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.





C. Protective Water Repellents – Sure Klean[®] Custom Masonry Sealer and Sure Klean[®] Weather Seal Siloxane WB Concentrate were evaluated for their ability to provide water repellency to the submitted samples. All samples were evaluated for water repellency by using RILEM method II.4.

D. Graffiti Control – Sure Klean[®] Custom Masonry Sealer and Defacer Eraser[®] Sacrificial Coating SC-1 were evaluated for their ability to control graffiti on the submitted samples. Sure Klean[®] Fast Acting Stripper and Defacer Eraser[®] Graffiti Wipe were evaluated for their ability to remove graffiti from the submitted samples.





CLEANING PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All colors of	Sure Klean [®] Custom Masonry Cleaner	1:2, 1:4, 1:6
split-face CMUs	Sure Klean [®] Burnished Custom Masonry Cleaner	1:2, 1:3

SURFACE ALTERATION PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All colors of	Sure Klean [®] Custom Masonry Cleaner	1:2, 1:4, 1:6
split-face CMUs	Sure Klean [®] Burnished Custom Masonry Cleaner	1:2, 1:3

WATER REPELLENT PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All colors of	Sure Klean [®] Weather Seal Siloxane WB Concentrate	1:9
split-face CMUs	Sure Klean [®] Custom Masonry Sealer	Concentrate

GRAFFITI CONTROL PRODUCTS EVALUATED

SAMPLE	PRODUCT
	Sure Klean [®] Custom Masonry Sealer
All colors of split-face CMUs	Defacer Eraser [®] Sacrificial Coating SC-1

GRAFFITI REMOVAL PRODUCTS EVALUATED

SAMPLE	PRODUCT
	Sure Klean [®] Fast Acting Stripper
All colors of split-face CMUs	Defacer Eraser [®] Graffiti Wipe

NOTE: Dilution ratios refer to mixtures of concentrated product : fresh water.





SECTION A - CLEANING INTEGRALLY COLORED CMUs

DESCRIPTION OF PRODUCTS EVALUATED

These cleaning trials were conducted to determine the optimal cleaning/cure time combination to most efficiently remove mortar from the submitted split-face CMU samples.

Sure Klean[®] Custom Masonry Cleaner – A general purpose, concentrated acidic cleaner for most custom masonry and colored concrete. Removes concrete splashes, excess mortar, mud, heavy efflorescence and surface soiling, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 2-6 parts water. Apply by brush or low-pressure spray.

Sure Klean[®] Burnished Custom Masonry Cleaner – A general purpose, non-etching acidic cleaner removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Liquid concentrate for dilution with 2-3 parts water. Apply by brush or low-pressure spray.

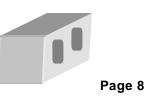
TEST METHOD – Cleaning

Dilution ratios refer to mixtures of parts concentrated cleaner : parts fresh water. Chemical cleaners were evaluated using the following procedure:

- 1. Prewet the surface with water.
- 2. Apply each cleaner at the appropriate dilution.
- 4. Reapply the products and moderately agitate with a brush.
- 5. Pressure rinse thoroughly.*
- 6. Allow the surface to dry for at least 18 hours and visually examine.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.





Test Results - Cleaning

SAMPLE	CLEANER	DILUTION	CURE	% EFFECTIVENESS	
		1:2		100%	
	Quatara	1:4	3 day	100%	
	Custom Masonry Cleaner Burnished Custom Masonry	1:6		100%	
			1:2		100%
All colors of split-face CMUs		1:4	14 day	100%	
with Ash Grove [®] Type S mortar		1:6		100%	
		1:2	3 day	98%	
		1:3	Judy	97%	
		1:2	14 day	97%	
	Cleaner	1:3	i + uay	97%	

SAMPLE	CLEANER	DILUTION	CURE	% EFFECTIVENESS
		1:2		99%
	Custom	1:4	7 day	99%
	Masonry	1:6		99%
	Cleaner	1:2		99%
All colors of split-face CMUs		1:4	21 day	99%
with Ash Grove $^{ entric{R}}$ Type N mortar		1:6		99%
	Burnished	1:2	7 day	97%
	Custom Masonry	1:3	7 uay	97%
		1:2		96%
	Cleaner	1:3	21 day	96%





CONCLUSIONS – Cleaning

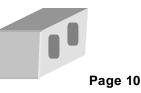
Based on the test data, all of the submitted block samples were efficiently cleaned with each dilution of the selected PROSOCO Inc.'s cleaning products. Sure Klean[®] Custom Masonry Cleaner was slightly more effective at cleaning the samples than Sure Klean[®] Burnished Custom Masonry Cleaner. Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure.

All dilutions of Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner, removing slight to moderate concentrations of pigmented matrix from the split-face CMUs, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit.

RECOMMENDED – CLEANING

Based on these evaluations, all of the dilutions of Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Burnished Custom Masonry Cleaner tested can be recommended for job-site testing on the CMUs submitted by Adams Concrete Products Inc., Raleigh, NC. They all are effective in removing excess mortar, and they all assist in improving the color and uniformity of these concrete blocks. 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.





SECTION B – Surface Alterations

DESCRIPTION OF PRODUCTS EVALUATED – Surface Alterations

Sure Klean[®] Custom Masonry Cleaner – A general purpose, concentrated acidic cleaner for most custom masonry and colored concrete. Removes concrete splashes, excess mortar, mud, heavy efflorescence and surface soiling, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 2-6 parts water. Apply by brush or low-pressure spray.

Sure Klean[®] Burnished Custom Masonry Cleaner – A general purpose, non-etching acidic cleaner removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Liquid concentrate for dilution with 2-3 parts water. Apply by brush or low-pressure spray.

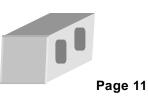
TEST METHOD – Surface Alterations

Dilution ratios refer to mixtures of parts concentrated cleaner : parts fresh water. Chemical cleaners were evaluated using the following procedure:

- 1. Prewet the surface with water.
- 2. Apply each cleaner at the appropriate dilution.
- 4. Reapply the products and moderately agitate with a brush.
- 5. Pressure rinse thoroughly.*
- 6. Allow the surface to dry for at least 18 hours and visually examine.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.





TEST RESULTS – Surface Alterations

Substrate: Split-face CMU	Pigment Color: "Marble White"				
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining
Custom Masonry Cleaner	1:2	1	1	1	0
Custom Masonry Cleaner	1:4	1	1	1	0
Custom Masonry Cleaner	1:6	1	1	1	0
Burnished Custom Masonry Clnr	1:2	1	1	1	1
Burnished Custom Masonry Clnr	1:3	1	1	1	1
Substrate: Split-face CMU	Pigment Co	olor: "Ruby Re	d"		
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining
Custom Masonry Cleaner	1:2	2	2	2	0
Custom Masonry Cleaner	1:4	2	2	2	0
Custom Masonry Cleaner	1:6	1	1	1	0
Burnished Custom Masonry Clnr	1:2	1	1	1	0
Burnished Custom Masonry Clnr	1:3	1	1	1	0
Substrate: Split-face CMU	Pigment Co	olor: "Ivory"			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining
Custom Masonry Cleaner	1:2	1	1	1	0
Custom Masonry Cleaner	1:4	1	1	1	0
Custom Masonry Cleaner	1:6	1	1	1	0
Burnished Custom Masonry Clnr	1:2	1	1	1	0
Burnished Custom Masonry Clnr	1:3	1	1	1	0
Substrate: Split-face CMU	Pigment Co	olor: "Natural (Gray"		
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining
Custom Masonry Cleaner	1:2	2	1	2	0
Custom Masonry Cleaner	1:4	2	1	2	0
Custom Masonry Cleaner	1:6	1	1	1	0
Burnished Custom Masonry Clnr	1:2	1	1	1	1
Burnished Custom Masonry Clnr	1:3	1	1	1	0

Scale used for reporting results of all categories

0 – no change

3 – heavy 4 – excessive

1 – slight

2 – moderate

PROSOCO, Inc. • 3741 Greenway Circle • Lawrence, Kansas 66046 • (785) 865-4200 • Fax: (785) 830-9176





TEST RESULTS – Surface Alterations Continued

Pigment Color: "Showtan"					
Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining	
1:2	2	2	2	0	
1:4	1	1	1	0	
1:6	1	1	1	0	
1:2	1	1	1	0	
1:3	1	1	1	0	
Pigment Color: "Paint Grade Gray"					
Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal	Matrix Erosion	Staining	
1:2	2	2	2	0	
1:4	2	2	2	0	
1:6	1	1	1	0	
1:2	1	1	1	0	
1:3	1	1	1	0	
	Dilution 1:2 1:4 1:6 1:2 1:3 Pigment Co Dilution 1:2 1:4 1:6 1:2	Aggregate Exposure 1:2 2 1:4 1 1:6 1 1:2 1 1:3 1 Pigment Color: "Paint Gra Dilution Aggregate Exposure 1:2 2 1:3 1 Pigment Color: "Paint Gra 1:2 2 1:4 2 1:4 2 1:4 2 1:6 1 1:2 1	DilutionAggregate ExposureSurface Pigment Alteration/Removal1:2221:4111:6111:2111:311Pigment Color: "Paint Grade Gray"DilutionAggregate ExposureSurface Pigment Alteration/Removal1:2221:4221:4111:2111:4111:2111:211	DilutionAggregate ExposureSurface Pigment Alteration/RemovalMatrix Erosion1:22221:41111:61111:21111:31111:3111Pigment Color: "Paint Grade Gray"Matrix ErosionMatrix Erosion1:22221:42221:42221:61111:21111:2111	

Scale used for reporting results of all categories

0 – no change 1 – slight 3 – heavy

2 – moderate

4 – excessive

CONCLUSIONS – Surface Alterations

Based on test data, all dilutions of Sure Klean[®] Custom Masonry Cleaner tested affected the split-face CMUs in a similar manner, removing slight to moderate concentrations of pigmented matrix from the CMUs, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit.

A small area of yellow staining was apparent on CMU types, "Marble White" when cleaned with Sure Klean[®] Burnished Custom Masonry Cleaner in both dilutions and "Natural Gray" when cleaned with Sure Klean[®] Burnished Custom Masonry Cleaner diluted with two parts water.

NOTE: Refer to Attachment #1 "PHOTO A & B".

RECOMMENDATIONS – Surface Alterations

Based upon laboratory evaluations, Sure Klean[®] Custom Masonry Cleaner in all dilutions are recommended for job-site testing on the split-face CMUs submitted by Adams Concrete Products, Inc., Raleigh, NC. Sure Klean[®] Burnished Custom Masonry Cleaner in all dilutions is recommended on all submitted types except for "Marble White" and "Natural Gray".

They are effective in removing excess mortar and assist in improving the color and uniformity of these CMUs. 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.





PROSOCO, Inc.

SECTION C – PROTECTIVE WATER REPELLENTS

The testing described below evaluates the suitability of water repellent treatments.

The surface treatments evaluated were selected for their suitability for application based on the following selection criteria:

- 1. Weatherproofing properties
- 2. Color change
- 3. Ease of application

DESCRIPTIONS OF PRODUCTS EVALUATED – Protective Water Repellents

Sure Klean[®] Custom Masonry Sealer – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, and concrete block without altering the natural appearance. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering as well as long-lasting protection against many types of graffiti.

Sure Klean[®] Weather Seal Siloxane WB Concentrate – A self-emulsifying water-repellent concentrate designed for dilution with fresh water at the job site. This solvent-free blend of silanes and oligomeric alkoxysiloxanes mixes easily with water to produce a penetrating water-repellent ideal for application to dense or porous masonry surfaces.

SAMPLE PREPARATION – Protective Water Repellents

The submitted blocks were scored, allowed to dry, and to reabsorb atmospheric humidity for 24 hours prior to treatment. The treatment method consisted of a wet-on-wet brush application. All treatments were allowed to cure 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 – Protective Water Repellents

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

	RESULTS				
Split-face CMU "Marble White	2 ¹¹				
Untreated Control	53 mph				
Custom Masonry Sealer	57 mph				
Siloxane WB Concentrate (1:9)	58 mph				
Split-face CMU "Ruby Red"					
Untreated Control	<40 mph				
Custom Masonry Sealer	57 mph				
Siloxane WB Concentrate (1:9)	57 mph				
Split-face CMU "Ivory"					
Untreated Control	<40 mph				
Custom Masonry Sealer	58 mph				
Siloxane WB Concentrate (1:9)	59 mph				
Split-face CMU "Natural Gray"					
Untreated Control	<40 mph				
Custom Masonry Sealer	58 mph				
Siloxane WB Concentrate (1:9)	57 mph				
Split-face CMU "Showtan'	3				
Untreated Control	<40 mph				
Custom Masonry Sealer	58 mph				
Siloxane WB Concentrate (1:9)	58 mph				
Split-face CMU "Paint Grade Gray"					
Untreated Control	<40 mph				
Custom Masonry Sealer	58 mph				
Siloxane WB Concentrate (1:9)	57 mph				





CONCLUSIONS – Protective Water Repellents

Based upon laboratory evaluations, Sure Klean[®] Custom Masonry Sealer and Sure Klean[®] Weather Seal Siloxane WB Concentrate diluted with nine parts fresh water provided above average water repellency to all colors of CMU samples submitted. Both Sure Klean[®] Custom Masonry Sealer and Sure Klean[®] Weather Seal Siloxane WB Concentrate slightly enhanced the natural color of the split-face CMUs.

NOTE: See Attachment #2 "PHOTO C" for water repellency.

RECOMMENDATIONS – Protective Water Repellents

Based on evaluations, Sure Klean[®] Custom Masonry Sealer and Sure Klean[®] Weather Seal Siloxane WB Concentrate diluted with nine parts fresh water can be recommended for job-site testing on all colors of CMUs submitted by Adams Concrete Products, Inc., Raleigh, NC.

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 water-repellent product and procedures for a particular project. See product literature for additional application and product information.





PROSOCO, Inc.

SECTION D – GRAFFITI CONTROL

DESCRIPTION OF PRODUCTS EVALUATED

These trials were conducted to determine the optimal graffiti control treatment.

Graffiti Control Treatments:

Sure Klean[®] Custom Masonry Sealer – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, and concrete block without altering the natural appearance. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering as well as long-lasting protection against many types of graffiti.

Defacer Eraser[®] Sacrificial Coating SC-1 – A clear, water-based sacrificial coating for control of graffiti on most building surfaces. SC-1 acts as a graffiti barrier by preventing spray paints, crayons and ink from penetrating and staining the underlying surface. Graffiti is removed from protected surfaces by high-pressure hot water. The coating must then be reapplied to restore the graffiti barrier.

Products Evaluated for Graffiti Removal:

Defacer Eraser[®] **Graffiti Wipe** – An easy-to-use graffiti remover that does not contain methanol, methylene chloride or other "halogenated" solvents prohibited on many projects. Graffiti Wipe removes a variety of graffiti stains from most smooth masonry, wood and metal surfaces.

Sure Klean[®] Fast Acting Stripper – A thixotropic stripping compound formulated specifically for removal of high strength paints and coatings such as epoxies, polyurethanes, and floor enamels. Additionally, Fast Acting Stripper dissolves most spray paints, marking pens, lacquers and other graffiti.

Graffiti Agents:

Krylon[®] Interior/Exterior Paint (2101 Cherry Red) Krylon[®] Interior/Exterior Paint (1601 Glossy Black) Marks-A-Lot[®] Permanent Marker (Red) Marks-A-Lot[®] Permanent Marker (Green) Marks-A-Lot[®] Permanent Marker (Black)





SAMPLE PREPARATION – Graffiti Control

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

Sections of the CMU samples were treated with one coat of Sure Klean[®] Custom Masonry Sealer or one coat of Defacer Eraser[®] Sacrificial Coating SC-1 in accordance with PROSOCO, Inc.'s Product Guide application recommendations, then allowed to cure for one week. At the end of the one-week cure period, a visual adverse effects evaluation was made, and then the graffiti agents were applied to the substrates.

Spray paint and markers were applied as graffiti agents to all treated surfaces 7 days following application of Sure Klean[®] Custom Masonry Sealer and Defacer Eraser[®] Sacrificial Coating SC-1. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using either Defacer Eraser[®] Graffiti Wipe or Sure Klean[®] Fast Acting Stripper.

TEST METHOD – Graffiti Control

Chemical cleaners were evaluated using the following procedure:

- 1. Apply the product to a dry surface, soiled with graffiti.
- 3. Pressure rinse thoroughly until water runs clear. *

4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.





TEST RESULTS – Graffiti Control

"Marble White" Split-face CMU										
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	60%	60%	10%	10%	50%	38%				
Fast Acting Stripper	60%	90%	10%	80%	80%	64%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	90%	95%	70%	70%	50%	75%				
Fast Acting Stripper	70%	80%	50%	80%	80%	72%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	95%	95%	20%	20%	30%	52%				
Fast Acting Stripper	70%	95%	10%	80%	90%	69%				
"Ruby Red" Split-face CMU										
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	80%	10%	10%	30%	10%	28%				
Fast Acting Stripper	90%	95%	30%	50%	85%	70%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	100%	100%	50%	50%	50%	70%				
Fast Acting Stripper	99%	98%	85%	90%	95%	93%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	100%	100%	60%	10%	10%	36%				
Fast Acting Stripper	100%	100%	30%	50%	85%	73%				
			plit-face CM							
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	90%	70%	10%	10%	10%	38%				
Fast Acting Stripper	80%	80%	10%	90%	50%	62%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	90%	95%	30%	30%	30%	55%				
Fast Acting Stripper	80%	93%	40%	70%	80%	73%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	99%	90%	10%	10%	10%	44%				
Fast Acting Stripper	80%	90%	10%	90%	80%	70%				





TEST RESULTS – Graffiti Control Continued

"Natural Gray" Split-face CMU										
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	30%	30%	30%	30%	30%	30%				
Fast Acting Stripper	90%	95%	30%	70%	80%	73%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	95%	99%	50%	50%	50%	69%				
Fast Acting Stripper	90%	99%	50%	80%	80%	80%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	95%	97%	30%	40%	40%	60%				
Fast Acting Stripper	80%	97%	30%	60%	80%	69%				
"Showtan" Split-face CMU										
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	20%	20%	50%	30%	30%	30%				
Fast Acting Stripper	95%	95%	60%	70%	85%	81%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	98%	98%	90%	90%	85%	84%				
Fast Acting Stripper	97%	95%	90%	95%	95%	94%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	99%	99%	30%	30%	30%	58%				
Fast Acting Stripper	93%	99%	50%	50%	70%	72%				
	"Pa	int Grade G	ray" Split-fa	ce CMU						
Untreated Control	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	20%	20%	30%	30%	30%	26%				
Fast Acting Stripper	80%	99%	40%	50%	90%	72%				
Custom Masonry Sealer	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	90%	90%	60%	60%	60%	72%				
Fast Acting Stripper	95%	99%	70%	80%	90%	87%				
SC – 1	Red Paint	Black Paint	Green Marker	Red Marker	Black Marker	Avg. Removal				
Graffiti Wipe	90%	90%	20%	20%	20%	48%				
Fast Acting Stripper	90%	99%	20%	60%	90%	72%				





CONCLUSIONS – Graffiti Control

Based upon laboratory evaluations, Sure Klean[®] Fast Acting Stripper was most effective at removing graffiti from the submitted samples except "Marble White" where Defacer Eraser[®] Graffiti Wipe was more effective in graffiti removal. Graffiti removal was improved when the surfaces were treated with either Sure Klean[®] Custom Masonry Sealer or Defacer Eraser[®] Sacrificial Coating SC-1. Sure Klean[®] Custom Masonry Sealer was most effective at graffiti protection on all submitted CMUs.

NOTE: See Attachment # 2 "PHOTO D".

RECOMMENDATIONS – Graffiti Control

Based on laboratory evaluations, Sure Klean[®] Custom Masonry Sealer and Defacer Eraser[®] Sacrificial Coating SC-1 can be recommended for graffiti protection to all CMUs submitted by Adams Concrete Products, Inc., Raleigh, NC.

Sure Klean[®] Fast Acting Stripper and Defacer Eraser[®] Graffiti Wipe can be recommended for removal of graffiti in conjunction with both of the recommended graffiti protection treatments on all samples submitted by Adams Concrete Products, Inc., Raleigh, NC.

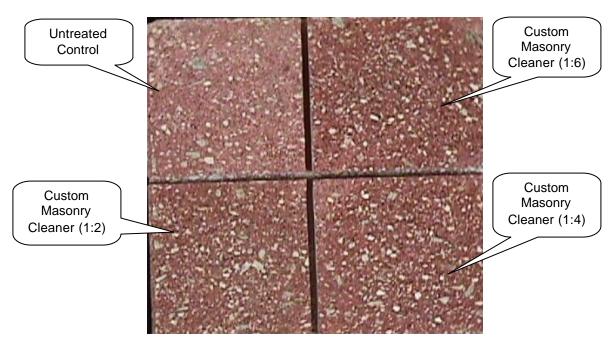
Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. On-site testing should be conducted to determine the most appropriate graffiti control product and procedures for a particular project. See product literature for additional application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

Lisa Toburen Assistant Laboratory Technician



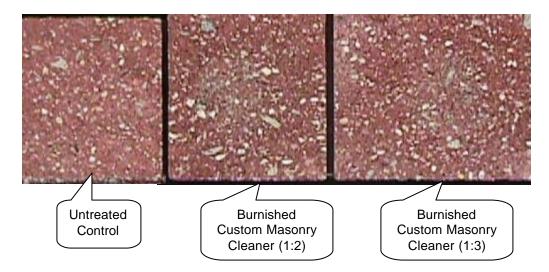


Attachment # 1





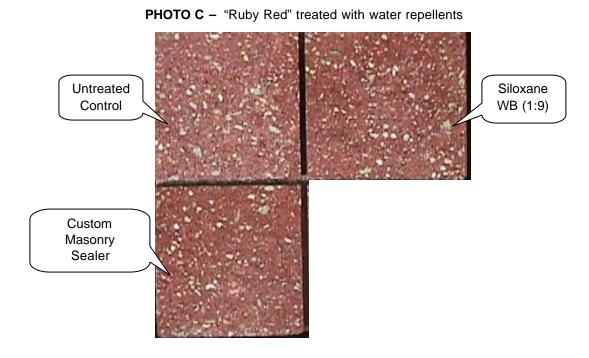




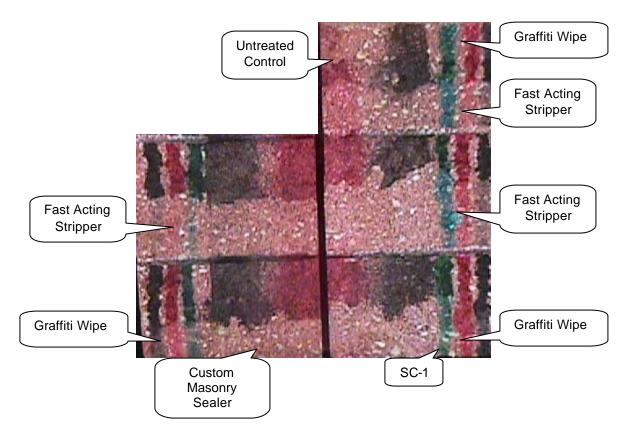


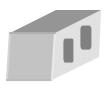


Attachment # 2









Laboratory Report

Block Program Evaluation

Adams Concrete Products, Inc. Raleigh, NC

Project No. 0110-14 BP

Prepared For:

Frank Werner Adams Concrete Products, Inc. 5701 McCrimmon Parkway Morrisville, NC 27560

Prepared By:



PROSOCO, Inc. January 2002