Table of Contents

Attachments

Technical Services TECH Note RILEM Tube Test Procedures Product Data literature for all products evaluated

Submitted Information

For: Matt Henderson cc: Brian Koenings

Subject: County Materials Corporation

Roberts, WI

Date: May 30, 2007

Project: 0704-01 PTP

Samples Submitted: 18 types of split face CMUs

Name	Color	Size
"Natural Gray"	Gray	7½" x 15½" x 1"
"Brick Rose"	Red	7½" x 15½" x 1"
"Forest Berry"	Red	7½" x 15½" x 1"
"Phoenix Sun"	Orange	7½" x 15½" x 1"
"Deerfield"	Orange	7½" x 15½" x 1"
"Red Dust"	Red	7½" x 15½" x 1"
"Washed Suede"	Brown	7½" x 15½" x 1"
"Hershey Chocolate"	Brown	7½" x 15½" x 1"
"Tumble Weed"	Yellow	7½" x 15½" x 1"
"Tobacco Road"	Brown	7½" x 15½" x 1"
"Mushroom"	Brown	7½" x 15½" x 1"
"Desert Castle"	Brown	7½" x 15½" x 1"
"Autumn Glow"	Brown	7½" x 15½" x 1"
"October Oak"	Brown	7½" x 15½" x 1"
"Taupe"	Brown	7½" x 15½" x 1"
"Pacific Beach"	Brown	7½" x 15½" x 1"
"Blackened Ash"	Black	7½" x 15½" x 1"
"Smokey Mountain"	Black	7½" x 15½" x 1"

Submitted by: Matt Henderson

Introduction

Architectural Materials Testing (AMT) Laboratories is a Boyer Industries company that provides laboratory testing and consulting services for the construction industry. Laboratory testing includes evaluating chemical cleaning products and protective treatments for a variety of new and existing architectural materials.

This report includes descriptions of the PROSOCO, Inc. products and test methods that were used. Following test results and conclusions, the report provides recommendations for the most effective products and procedures.

Purpose of Testing

Eighteen types of integrally colored CMUs, all with large, small and fine aggregate were submitted for testing to AMT Laboratories by PROSOCO, Inc. to determine the optimum cleaning/cure time combination for complete removal of mortar and related new construction soiling. The effectiveness of protective water repellents and graffiti control products suitable for CMUs was also evaluated.

New Construction Cleaning – Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Burnished Custom Masonry Cleaner were evaluated to determine the optimal concentration of cleaner for removal of laboratory applied mortar which also leaves the external surface looking most like the natural through-body color of the CMU.

To simulate new construction soiling all samples were placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall were positioned on top of each sample and filled with a wet mixture of Type S mortar. The wet, mortar-filled cylinder was allowed to remain in contact with the samples for 10 minutes before removal.

Heavy deposits of mortar were removed with dry scraping after 24 hours. Prepared cleaning solutions were then evaluated for their effectiveness in removing residual Type S mortar staining after 3 days, 7 days, and 14 days of curing.

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.

<u>Aggregate Exposure</u> 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.

<u>Surface Pigment Alteration/Removal</u> 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 - Worst match to through-body

1 – **Poor** match to through-body

2 - Fair match to through-body

3 – **Good** match to through-body

4 - Best match 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.

Protective Water Repellents – Sure Klean[®] Custom Masonry Sealer, Sure Klean[®] Weather Seal Siloxane WB Concentrate, Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control II were evaluated for their ability to provide water repellency to the submitted samples.

Graffiti Control – Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control II 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.

Products Evaluated

New Construction Cleaning Products Evaluated

Sample	Product	Dilution
All Submitted CMUs	Sure Klean [®] Custom Masonry Cleaner	1:2, 1:4, 1:6
All Submitted Civios	Sure Klean [®] Burnished Custom Masonry Cleaner	1:2, 1:3

Protective Water Repellent Products Evaluated

Sample	Product	Dilution
	Sure Klean [®] Custom Masonry Sealer	Concentrate
All Submitted CMUs	Sure Klean [®] Weather Seal Siloxane WB Concentrate	(1:9)
All Submitted Civios	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	Concentrate
	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	Concentrate

Graffiti Control Products Evaluated

Sample	Product	Dilution
All Submitted CMUs	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	Concentrate
All Submitted Civios	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	Concentrate

Graffiti Removal Products Evaluated

Sample	Product	Dilution
All Submitted CMUs	Sure Klean [®] Fast Acting Stripper	Concentrate
All Submitted Civios	Defacer Eraser® Graffiti Wipe	Concentrate

New Construction Cleaning

These cleaning trials were conducted to determine the optimal cleaning/cure time combination to most efficiently remove Type S mortar from the submitted samples while providing the best color uniformity when compared to the through-body color of the submitted CMUs.

<u>Description of Products Evaluated</u> - New Construction Cleaning

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 – Removes common construction and atmospheric staining from custom masonry and other architectural concrete surfaces. This general-purpose, non-etching, acidic cleaner removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Burnished Custom Masonry Cleaner adds depth to colors and brightens white matrices and exposed aggregate.

Sample Preparation - New Construction Cleaning

Type S mortar was prepared in compliance with the manufacturer's instructions, applied to the samples and allowed to cure for 3, 7, and 14 days. Mortar removal was accomplished using chemical assistance and a high-pressure water rinse with pressure rinsing equipment. The removal of Type S masonry mortar was visually evaluated after 3, 7, and 14 days of curing. A visual examination was also made to determine the optimal dilution of the tested cleaners that provides the best color uniformity when compared to the throughbody color of the CMUs.

Test Method – New Construction Cleaning

Chemical cleaners were evaluated using the following procedure:

- Pre-wet the surface with water.
- 2. Apply at the appropriate dilutions.
- 3. Allow appropriate dwell time, as specified.

 Sure Klean[®] Custom Masonry Cleaner......3 minutes
- 4. Reapply the product and moderately agitate with a brush.
- 5. Pressure rinse thoroughly.*
- 6. Allow the sample to dry for at least 18 hours and visually examine.
- 7. Break the sample in half and compare the through-body surfaces to the cleaned surfaces for the best match.

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

"Natura	l Gray" Split Fa	nce CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%
"Brick	Rose" Split Fac	ce CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	98%
Custom Masonry Cleaner	1:4	100%	100%	98%
Custom Masonry Cleaner	1:6	100%	99%	98%
Burnished Custom Masonry Cleaner	1:2	98%	98%	98%
Burnished Custom Masonry Cleaner	1:3	98%	95%	100%
"Forest	Berry" Split Fa	ice CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	99%	98%	100%
Burnished Custom Masonry Cleaner	1:3	95%	100%	100%
"Phoen	ix Sun" Split Fa	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	99%	100%	100%
Burnished Custom Masonry Cleaner	1:3	99%	100%	100%
"Deer	field" Split Fac	e CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	98%	100%
Burnished Custom Masonry Cleaner	1:3	98%	100%	100%

"Red	Dust" Split Fac	e CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	99%
Burnished Custom Masonry Cleaner	1:3	100%	98%	99%
"Washed	l Suede" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	98%	98%
Burnished Custom Masonry Cleaner	1:3	100%	98%	99%
"Hershey C	Chocolate" Spli	t Face CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%
"Tumble	Weed" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	98%	100%	100%
Burnished Custom Masonry Cleaner	1:3	98%	98%	100%
"Tobacc	o Road" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%

"Mushi	room" Split Fac	ce CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%
"Desert	Castle" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	98%
Burnished Custom Masonry Cleaner	1:3	99%	100%	100%
"Autumr	Glow" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%
"Octobe	er Oak" Split Fa	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	98%
Burnished Custom Masonry Cleaner	1:3	100%	100%	98%
"Tau	pe" Split Face	CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	98%	100%	100%

"Pacific Bea	ach" Split F	ace CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	98%
Burnished Custom Masonry Cleaner	1:3	98%	100%	98%
"Blackened	Ash" Split	Face CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	99%
Burnished Custom Masonry Cleaner	1:3	99%	99%	99%
"Smokey Mou	ıntain" Spli	t Face CMU		
Product	Dilution	3 day	7 day	14 day
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	100%	100%
Custom Masonry Cleaner	1:6	100%	100%	100%
Burnished Custom Masonry Cleaner	1:2	100%	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%	100%

Substrate: Split Face CMU	Pigment Color: "Natural Gray"				
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal		
Custom Masonry Cleaner	1:2	4	4		
Custom Masonry Cleaner	1:4	4	4		
Custom Masonry Cleaner	1:6	3	4		
Burnished Custom Masonry Cleaner	1:2	3	4		
Burnished Custom Masonry Cleaner	1:3	3	4		
Substrate: Split Face CMU	Pigment (Color: "Brick Rose"			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal		
Custom Masonry Cleaner	1:2	4	4		
Custom Masonry Cleaner	1:4	4	4		
Custom Masonry Cleaner	1:6	3	4		
Burnished Custom Masonry Cleaner	1:2	3	4		
Burnished Custom Masonry Cleaner	1:3	3	4		
Substrate: Split Face CMU	Pigment (Color: "Forest Berry"			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal		
Custom Masonry Cleaner	1:2	4	4		
Custom Masonry Cleaner	1:4	4	4		
Custom Masonry Cleaner	1:6	3	4		
Burnished Custom Masonry Cleaner	1:2	3	4		
Burnished Custom Masonry Cleaner	1:3	3	4		
Substrate: Split Face CMU	Pigment (Color: "Phoenix Sun"			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal		
Custom Masonry Cleaner	1:2	4	4		
Custom Masonry Cleaner	1:4	4	4		
Custom Masonry Cleaner	1:6	3	4		
Burnished Custom Masonry Cleaner	1:2	3	4		
Burnished Custom Masonry Cleaner	1:3	3	4		
Substrate: Split Face CMU	Pigment (Color: "Deerfield"			
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal		
Custom Masonry Cleaner	1:2	4	4		
Custom Masonry Cleaner	1:4	4	4		
Custom Masonry Cleaner	1:6	3	4		
Burnished Custom Masonry Cleaner	1:2	3	4		
Burnished Custom Masonry Cleaner	1:3	3	4		

Scale used for reporting results of both categories

0 – **Worst** match to through-body

3 – **Good** match to through-body

1 – **Poor** match to through-body

4 - **Best** match to through-body

Substrate: Split Face CMU	Pigment (Color: "Red Dust"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Washed Suede"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Hershey Chocolate	"
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Tumble Weed"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Tobacco Road"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4

Scale used for reporting results of both categories

0 – **Worst** match to through-body

3 – **Good** match to through-body

1 – **Poor** match to through-body

4 – **Best** match to through-body

Substrate: Split Face CMU	Pigment (Color: "Mushroom"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Desert Castle"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Autumn Glow"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "October Oak"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4
Substrate: Split Face CMU	Pigment (Color: "Taupe"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	4
Burnished Custom Masonry Cleaner	1:2	3	4
Burnished Custom Masonry Cleaner	1:3	3	4

Scale used for reporting results of both categories

0 – **Worst** match to through-body

3 – **Good** match to through-body

1 – **Poor** match to through-body

4 – **Best** match to through-body

Substrate: Split Face CMU Pigment Color: "Pacific Beach"						
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal			
Custom Masonry Cleaner	1:2	4	4			
Custom Masonry Cleaner	1:4	4	4			
Custom Masonry Cleaner	1:6	3	4			
Burnished Custom Masonry Cleaner	1:2	3	4			
Burnished Custom Masonry Cleaner	1:3	3	4			
Substrate: Split Face CMU	Pigment (Color: "Blackened Ash"				
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal			
Custom Masonry Cleaner	1:2	4	4			
Custom Masonry Cleaner	1:4	4	4			
Custom Masonry Cleaner	1:6	3	4			
Burnished Custom Masonry Cleaner	1:2	3	4			
Burnished Custom Masonry Cleaner	1:3	3	4			
Substrate: Split Face CMU	Pigment (Color: "Smokey Mountain"				
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal			
Custom Masonry Cleaner	1:2	4	4			
Custom Masonry Cleaner	1:4	4	4			
Custom Masonry Cleaner	1:6	3	4			
Burnished Custom Masonry Cleaner	1:2	3	4			
Burnished Custom Masonry Cleaner	1:3	3	4			

Scale used for reporting results of both categories

0 – **Worst** match to through-body

3 – **Good** match to through-body

1 – **Poor** match to through-body

4 - **Best** match to through-body

Photographs - New Construction Cleaning

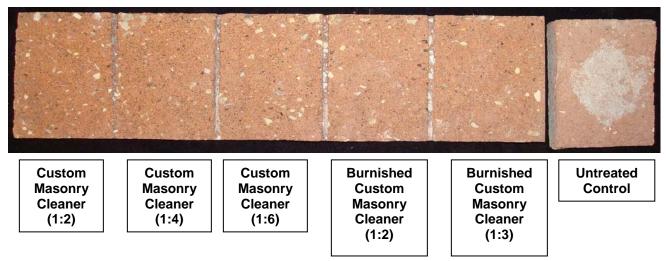
"Forest Berry" Split Face CMU; 3 Day Cleaning



"Forest Berry" Split Face CMU; 7 Day Cleaning



"Forest Berry" Split Face CMU; 14 Day Cleaning



Photographs - Color Uniformity

"Forest Berry" Split Face CMU; Color Uniformity



Conclusions – New Construction Cleaning

Based on the test data, all of the submitted CMUs were efficiently cleaned with Sure Klean[®] Custom Masonry Cleaner and 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.

Recommendations – New Construction Cleaning

Recommendations for cleaning for each type of CMU submitted by County Materials Corporation, Roberts, WI are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while providing the best match to the through-body color of the CMUs.

Sample	New Construction Cleaning (Type S mortar, 14 day cleaning)
All Submitted CMUs	Sure Klean [®] Custom Masonry Cleaner (1:2) OR (1:4) OR (1:6) OR Sure Klean [®] Burnished Custom Masonry Cleaner (1:2) OR (1:3)

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.

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

Description 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, architectural concrete block, pre-cast concrete, wood and porous masonry. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering.

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.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control – A clear, solvent-based silicone elastomer formulated to weatherproof concrete block and other porous masonry materials. Blok-Guard® & Graffiti Control protects masonry surfaces from repeated graffiti attacks without altering the natural appearance. Blok-Guard® & Graffiti Control penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering. Graffiti removal is fast and easy using Defacer Eraser® Graffiti Wipe. Blok-Guard® & Graffiti Control is easy to apply with low-pressure spray, brush or roller.

Sure Klean[®] **Weather Seal Blok-Guard**[®] **& Graffiti Control II** – A clear-drying, water-based silicone emulsion for weatherproofing concrete block and other porous masonry materials. Blok-Guard[®] & Graffiti Control II also protects masonry surfaces from graffiti attacks without altering the natural appearance. Blok-Guard[®] & Graffiti Control II protects exterior walls exposed to normal weathering. Graffiti removal from treated surfaces is fast and easy using Defacer Eraser[®] Graffiti Wipe. Blok-Guard[®] & Graffiti Control II is easy to apply with low-pressure spray, brush or roller.

Sample Preparation – Protective Water Repellents

The submitted samples were scored and allowed to dry for 24 hours prior to treatment. Both of the products were applied by brush in accordance with the current PROSOCO, Inc. Product Data Sheet application instructions. Both treatments were allowed to cure for at least 72 hours prior to testing.

<u>Test Methods</u> – 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. See Technical Services TECH Note RILEM Tube Test Procedures.

<u>Test Results</u> – Protective Water Repellents

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

Results

	Resuits
"Natural Gray" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Brick Rose" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	59 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	59 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	58 mph
"Forest Berry" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Phoenix Sun" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Deerfield" Split Face CMU	
Untreated Control	<40 mph
Sure Klean® Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	59 mph
"Red Dust" Split Face CMU	
Untreated Control	<40 mph
Sure Klean® Custom Masonry Sealer	59 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph

<u>Test Results</u> – Protective Water Repellents

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

Results

	Resuits
"Washed Suede" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
"Hershey Chocolate" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Tumble Weed" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph
"Tobacco Road" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Mushroom" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Desert Castle" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	59 mph

<u>Test Results</u> – Protective Water Repellents

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

Results

	Resuits
"Autumn Glow" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"October Oak" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	59 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	59 mph
"Taupe" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Pacific Beach" Split Face CMU	
Untreated Control	<40 mph
Sure Klean [®] Custom Masonry Sealer	59 mph
Sure Klean [®] Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Blackened Ash" Split Face CMU	
Untreated Control	<40 mph
Sure Klean® Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	60 mph
Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	60 mph
"Smokey Moutain" Split Face CMU	
Untreated Control	<40 mph
Sure Klean® Custom Masonry Sealer	60 mph
Sure Klean® Weather Seal Siloxane WB Concentrate	60 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	59 mph
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	60 mph

Photographs - Protective Water Repellents





Sure Klean[®]
Custom
Masonry
Sealer

Sure Klean[®]
Weather Seal
Siloxane WB
Concentrate (1:9)

Sure Klean[®]
Weather Seal
Blok-Guard[®] &
Graffiti Control

Sure Klean[®]
Weather Seal
Blok-Guard[®] &
Graffiti Control

Untreated Control

Conclusions – Protective Water Repellents

Based upon laboratory evaluations, all of the products tested provided excellent water repellency to each of the submitted samples. In addition, Sure Klean[®] Custom Masonry Sealer, Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control II and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control provided a slight to moderate color enhancement to the submitted samples. Sure Klean[®] Weather Seal Siloxane PD and Sure Klean[®] Weather Seal Siloxane WB Concentrate (1:9) did not alter the appearance of the samples.

Recommendations – Protective Water Repellents

Recommendations for water repellency for each CMU submitted by County Materials Corporation, Roberts, WI are provided in the chart below. Recommendations are based on the treatment that proved most effective and can provide water repellency on all types submitted.

Sample	Protective Water Repellents
All Submitted CMUs	*Sure Klean [®] Custom Masonry Sealer OR *Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control OR Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II OR Sure Klean [®] Weather Seal Siloxane WB Concentrate (1:9)

*NOTE: Sure Klean[®] Custom Masonry Seale and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control are manufactured and marketed in compliance with USEPA AIM VOC regulations (40 CFR 59.403). These products may not be suitable for sale in states and districts with more restrictive AIM VOC regulations.

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.

Graffiti Control

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

<u>Description of Products Evaluated</u> – Graffiti Control

Graffiti Control Treatments

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control – A clear, solvent-based silicone elastomer formulated to weatherproof concrete block and other porous masonry materials. Blok-Guard® & Graffiti Control protects masonry surfaces from repeated graffiti attacks without altering the natural appearance. Blok-Guard® & Graffiti Control penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering. Graffiti removal is fast and easy using Defacer Eraser® Graffiti Wipe. Blok-Guard® & Graffiti Control is easy to apply with low-pressure spray, brush or roller.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II — A clear-drying, water-based silicone emulsion for weatherproofing concrete block and other porous masonry materials. Blok-Guard® & Graffiti Control II also protects masonry surfaces from graffiti attacks without altering the natural appearance. Blok-Guard® & Graffiti Control II protects exterior walls exposed to normal weathering. Graffiti removal from treated surfaces is fast and easy using Defacer Eraser® Graffiti Wipe. Blok-Guard® & Graffiti Control II is easy to apply with low-pressure spray, brush or roller.

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, split-face concrete block, 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

Interior/Exterior Spray Paint (Red) Permanent Marker (Green) Permanent Marker (Red) Permanent Marker (Black)

Sample Preparation - Graffiti Control

Sections of the CMUs were treated with Sure Klean® Weather Seal Blok-Guard® & Graffiti Control and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II in accordance with the current PROSOCO, Inc. Product Data Sheet application instructions and allowed to cure for at least one day. At the end of the 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 no sooner than one day following application of Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control II. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Defacer Eraser[®] Graffiti Wipe and 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.
- 2. Allow appropriate dwell time:
- 3. Pressure rinse thoroughly until water runs clear. *
- 4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.
- *Pressure Rinsing Equipment Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 45 degree fan spray tip was used for rinsing.

	"Natu	ral Gray" Split F	ace CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	80%	70%	70%	78%
Graffiti Wipe	90%	70%	70%	70%	75%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	95%	95%	95%
Graffiti Wipe	99%	95%	90%	95%	95%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	70%	90%	86%
Graffiti Wipe	95%	90%	70%	80%	84%
	"Bric	k Rose" Split F	ace CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	80%	70%	95%	86%
Graffiti Wipe	98%	80%	70%	95%	86%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	100%	100%	95%	95%	98%
Graffiti Wipe	100%	100%	95%	95%	98%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	100%	98%	95%	95%	97%
Graffiti Wipe	100%	98%	95%	95%	97%
	"Fore:	st Berry" Split F	ace CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	95%	70%	80%	86%
Graffiti Wipe	98%	80%	70%	80%	82%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	100%	95%	80%	98%	93%
Graffiti Wipe	100%	90%	80%	95%	91%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	95%	80%	98%	93%
Graffiti Wipe	100%	90%	80%	90%	90%
	"Phoe	nix Sun" Split I	ace CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	60%	70%	79%
Graffiti Wipe	98%	50%	50%	70%	67%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	98%	95%	95%	95%
Graffiti Wipe	95%	95%	90%	90%	93%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	80%	90%	90%
Graffiti Wipe	98%	95%	70%	90%	88%

	"De	erfield" Split Fa	ce CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	50%	70%	78%
Graffiti Wipe	98%	50%	50%	70%	67%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	98%	98%	97%
Graffiti Wipe	98%	95%	95%	95%	96%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	95%	95%	95%
Graffiti Wipe	98%	95%	80%	90%	91%
	"Re	ed Dust" Split Fa	ce CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	80%	80%	88%
Graffiti Wipe	98%	80%	80%	80%	85%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	98%	98%	97%
Graffiti Wipe	100%	95%	95%	98%	97%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	90%	95%	97%
Graffiti Wipe	100%	95%	90%	95%	95%
	"Wash	ed Suede" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	70%	70%	83%
Graffiti Wipe	98%	80%	70%	70%	80%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	98%	80%	90%	90%
Graffiti Wipe	98%	95%	80%	80%	88%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	70%	90%	88%
Graffiti Wipe	98%	95%	70%	80%	86%
	"Hershe	y Chocolate" Sp	lit Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	98%	70%	80%	90%
Graffiti Wipe	95%	70%	70%	70%	76%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	90%	95%	95%
Graffiti Wipe	98%	98%	90%	95%	95%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	98%	80%	90%	92%
Graffiti Wipe	98%	95%	80%	80%	88%

	"Tum	ble Weed" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	80%	60%	60%	60%	65%
Graffiti Wipe	80%	60%	60%	60%	65%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	90%	80%	90%	89%
Graffiti Wipe	95%	90%	80%	90%	89%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	80%	80%	80%	84%
Graffiti Wipe	95%	80%	80%	80%	84%
	"Toba	cco Road" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	90%	80%	90%	88%
Graffiti Wipe	80%	70%	70%	70%	73%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	95%	95%	94%
Graffiti Wipe	90%	95%	90%	95%	93%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	80%	95%	90%
Graffiti Wipe	90%	95%	80%	95%	90%
	"Mu	shroom" Split F	ace CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	90%	70%	70%	80%
Graffiti Wipe	80%	60%	70%	60%	68%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	90%	80%	91%
Graffiti Wipe	90%	90%	80%	80%	85%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	80%	80%	88%
Graffiti Wipe	90%	95%	80%	80%	86%
	"Dese	ert Castle" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	70%	70%	83%
Graffiti Wipe	98%	95%	70%	70%	83%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	100%	95%	98%	97%
Graffiti Wipe	98%	98%	90%	95%	95%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	100%	80%	90%	92%
Graffiti Wipe	98%	98%	80%	90%	92%

	"Autu	mn Glow" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	80%	70%	70%	70%	73%
Graffiti Wipe	80%	60%	70%	60%	68%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	90%	80%	91%
Graffiti Wipe	90%	90%	80%	80%	85%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	80%	80%	88%
Graffiti Wipe	90%	95%	80%	80%	86%
	"Octo	ober Oak" Split I	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	50%	70%	78%
Graffiti Wipe	98%	50%	50%	70%	67%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	98%	98%	97%
Graffiti Wipe	98%	95%	95%	95%	96%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	95%	95%	96%
Graffiti Wipe	98%	95%	80%	90%	91%
	"7	aupe" Split Fac	e CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	90%	70%	70%	80%
Graffiti Wipe	80%	60%	70%	70%	70%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	80%	90%	91%
Graffiti Wipe	90%	90%	80%	80%	85%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	98%	70%	90%	88%
Graffiti Wipe	90%	95%	70%	80%	84%
	"Paci	fic Beach" Split	Face CMU		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	60%	70%	79%
Graffiti Wipe	98%	50%	50%	70%	67%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	98%	95%	95%	94%
Graffiti Wipe	95%	95%	90%	90%	93%
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	95%	80%	90%	90%
Graffiti Wipe	98%	95%	70%	90%	88%

"Blackened Ash" Split Face CMU						
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	98%	70%	80%	85%	
Graffiti Wipe	95%	70%	70%	70%	76%	
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	95%	98%	90%	95%	95%	
Graffiti Wipe	98%	98%	90%	95%	95%	
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	98%	98%	80%	90%	92%	
Graffiti Wipe	98%	95%	80%	80%	88%	
	"Smoke	y Mountain" Sp	lit Face CMU			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	95%	70%	70%	81%	
Graffiti Wipe	98%	50%	70%	60%	70%	
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	98%	90%	80%	90%	
Graffiti Wipe	95%	95%	80%	80%	88%	
Blok-Guard [®] & Graffiti Control II	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	95%	95%	80%	80%	88%	
Graffiti Wipe	98%	95%	80%	80%	88%	

Photographs – Graffiti Control

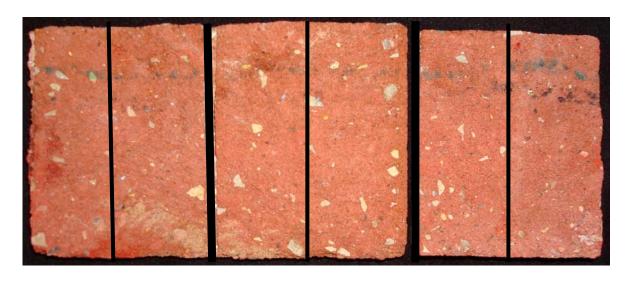
"Brick Rose" Split Face CMU; Before Graffiti Removal



Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II

Untreated Control

"Brick Rose" Split Face CMU; After Graffiti Removal



Sure Klean[®]
Fast Acting
Stripper

Defacer Eraser[®] Graffiti Wipe

Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control Sure Klean[®] Fast Acting Stripper Defacer Eraser[®] Graffiti Wipe

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II Sure Klean[®]
Fast Acting
Stripper

Defacer Eraser[®] Graffiti Wipe

Untreated Control

Conclusions – Graffiti Control

Based upon laboratory evaluations, graffiti removal was improved when the submitted samples were treated with Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control and Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control II prior to graffiti application.

In addition, both treatments provided a slight to moderate color enhancement to the submitted samples.

Recommendations – Graffiti Control

Recommendations for graffiti control treatment for each CMU submitted by County Materials Corporation, Roberts, WI are provided in the chart below. Recommendations are based on the treatment that proved most effective for providing graffiti repellency and the product that was most effective at removing the graffiti on all types submitted.

Sample	Graffiti Repellents	Graffiti Removers
All Submitted CMUs	* Sure Klean [®] Weather Seal Blok- Guard [®] & Graffiti Control OR Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control II	Defacer Eraser [®] Graffiti Wipe OR Sure Klean [®] Fast Acting Stripper

*NOTE: Sure Klean® Weather Seal Blok-Guard® & Graffiti Control is manufactured and marketed in compliance with USEPA AIM VOC regulations (40 CFR 59.403). This product may not be suitable for sale in states and districts with more restrictive AIM VOC regulations.

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.

John Lancaster

Project Testing Laboratory Technician



County Materials Corporation 1203 70th Ave. Roberts, WI 54023-8629 CMU



Project No. 0704-01 PTP

Prepared For: PROSOCO

Prepared By:
AMT Laboratories
May 2007