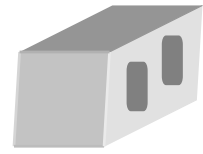




# PALLET TAG PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

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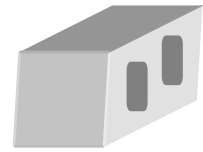
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## ATTACHMENTS

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



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**FOR:** Matt Gage  
**cc:** Steve Hawkins  
 Paul Tessier  
 Steve Dean

**SUBJECT:** Gage Brothers Block  
 Harrisburg, SD

**DATE:** December 15, 2003

**PROJECT:** 0310-12 PTP

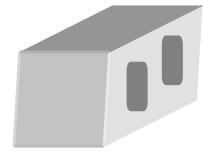
**SAMPLES SUBMITTED:** Fourteen types of CMU's, eleven with Dry-Blok  
 Seven types of concrete bricks, all with Dry-Blok

Block	Color	Name	Size	Dry Blok
Smooth-face CMU	Red	1A	16" x 8" x 1"	Yes
Split-face CMU	Red	1A		Yes
Smooth-face CMU	Tan	2		Yes
Split-face CMU	Tan	2		Yes
Burnished CMU	Grey	3		<b>No</b>
Smooth-face CMU	Grey	3		<b>No</b>
Split-face CMU	Grey	3		<b>No</b>
Burnished CMU	Tan	7A		Yes
Smooth-face CMU	Tan	7A		Yes
Burnished CMU	Brown	9		Yes
Smooth-face CMU	Brown	9		Yes
Smooth-face CMU	White	15		Yes
Ground-face CMU	White	HW		Yes
Smooth-face CMU	White	HW		Yes
Concrete Brick	White	1	8" x 3.5" x 2.25"	Yes
Concrete Brick	Tan	2		Yes
Concrete Brick	Dark Red	3		Yes
Concrete Brick	Orange	4		Yes
Concrete Brick	Red with brown	5		Yes
Concrete Brick	Red with orange	6		Yes
Concrete Brick	Red	7	11.5" x 3.5" x 3.5"	Yes

Submitted by: Steve Hawkins



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## PURPOSE OF TESTING:

Three integrally colored split-face concrete blocks, seven integrally colored smooth-face concrete blocks, three integrally colored burnished concrete blocks, one integrally colored ground-face concrete block, and seven integrally colored concrete bricks, all with large, small and fine aggregate were submitted for testing using PROSOCO's new construction cleaning, water repellent products, and graffiti control 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 concrete masonry units (CMU's) 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 Ash Grove® Type S mortar. The wet, mortar-filled cylinder is allowed to remain in contact with the CMU for 10 minutes before removal.

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, 7 days, and 14 days of curing\*.

**B. Color Uniformity Testing\*** - Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner were evaluated at various dilutions to determine the optimal concentration of cleaner that leaves the external surface looking most like the natural through-body color of the CMU. Color uniformity was evaluated by comparing aggregate exposure and surface pigment alternation/removal of each cleaned surface compared to the natural through-body color of the CMU.

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

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

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

0 – <b>Worst</b> match to through-body	3 – <b>Good</b> match to through-body
1 – <b>Poor</b> match to through-body	4 – <b>Best</b> match to through-body
2 – <b>Fair</b> match to through-body	

### \* NOTE: When cleaning integrally colored CMU.

Integrally colored concrete masonry units (CMU's) 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.

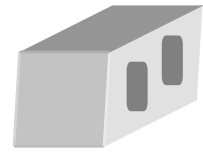
In addition to removing excess mortar and construction related soiling, the goal of any cleaning operation undertaken on integrally colored CMU should include removal of unnaturally high concentrations of surface pigment. By revealing the natural through-body color on the integrally colored unit, the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

**D. Graffiti Control** – Sure Klean® Custom Masonry Sealer was evaluated for its 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.



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## PRODUCTS EVALUATED FOR CLEANING AND COLOR UNIFORMITY

Block Type	Product	Dilution
All Submitted non-Burnished CMU's All Submitted Concrete Bricks	Sure Klean® Custom Masonry Cleaner	1:2, 1:4, 1:6
	Sure Klean® Burnished Custom Masonry Cleaner	1:2, 1:3
All Submitted Burnished CMU's	Sure Klean® Burnished Custom Masonry Cleaner	1:2, 1:3

## WATER REPELLENT PRODUCTS EVALUATED

Block Type	Product	Dilution
All Submitted non-Burnished CMU's All Submitted Concrete Bricks	Sure Klean® Custom Masonry Sealer	Concentrate
	Sure Klean® Weather Seal Siloxane WB Concentrate	1:9, 1:14

## GRAFFITI CONTROL PRODUCTS EVALUATED

Block Type	Product
All Submitted non-Burnished CMU's All Submitted Concrete Bricks	Sure Klean® Custom Masonry Sealer

## GRAFFITI REMOVAL PRODUCTS EVALUATED

Block Type	Product
All Submitted non-Burnished CMU's All Submitted Concrete Bricks	Sure Klean® Fast Acting Stripper
	Defacer Eraser® Graffiti Wipe



# PALLET TAG PROGRAM LABORATORY REPORT



## SECTION A – CLEANING INTEGRALLY COLORED CMU's

### DESCRIPTION OF PRODUCTS EVALUATED

These cleaning trials were conducted to determine the optimal cleaning/cure time combination.

**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** – An acidic cleaner that removes common construction and atmospheric staining from custom masonry and other architectural concrete surfaces. This general-purpose, nonetching 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.

### TEST METHOD – Cleaning

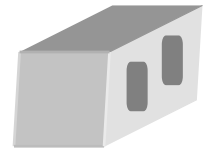
Dilution ratios refer to mixtures of parts concentrated cleaner : parts fresh water. Chemical cleaners were evaluated using the following procedure:

1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
1. Allow appropriate dwell time for each cleaner:
  - Custom Masonry Cleaner ..... 3 minutes
  - Burnished Custom Masonry Cleaner ..... 3-5 minutes
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.



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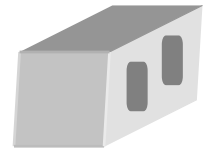
**TEST RESULTS – Cleaning**

**% Removal of Type S Mortar**

<b>“1A” Split-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	100%	97%
Custom Masonry Cleaner	1:4	98%	100%	97%
Custom Masonry Cleaner	1:6	98%	95%	97%
Burnished Custom Masonry Cleaner	1:2	95%	85%	85%
Burnished Custom Masonry Cleaner	1:3	95%	85%	85%
<b>“1A” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	95%	95%	98%
Custom Masonry Cleaner	1:4	95%	95%	98%
Custom Masonry Cleaner	1:6	95%	95%	98%
Burnished Custom Masonry Cleaner	1:2	95%	85%	85%
Burnished Custom Masonry Cleaner	1:3	95%	85%	85%
<b>“2” Split-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	95%	95%	100%
Custom Masonry Cleaner	1:4	95%	95%	95%
Custom Masonry Cleaner	1:6	95%	95%	95%
Burnished Custom Masonry Cleaner	1:2	95%	85%	80%
Burnished Custom Masonry Cleaner	1:3	90%	85%	80%
<b>“2” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	95%	95%	97%
Custom Masonry Cleaner	1:4	95%	95%	95%
Custom Masonry Cleaner	1:6	95%	95%	95%
Burnished Custom Masonry Cleaner	1:2	90%	80%	85%
Burnished Custom Masonry Cleaner	1:3	90%	80%	85%
<b>“3” Split-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	95%	100%
Custom Masonry Cleaner	1:4	95%	95%	98%
Custom Masonry Cleaner	1:6	95%	95%	98%
Burnished Custom Masonry Cleaner	1:2	90%	90%	95%
Burnished Custom Masonry Cleaner	1:3	90%	90%	95%



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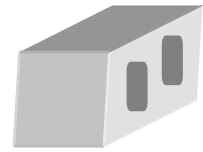
**TEST RESULTS – Cleaning**

**% Removal of Type S Mortar**

<b>“3” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	95%	98%
Custom Masonry Cleaner	1:6	95%	95%	98%
Burnished Custom Masonry Cleaner	1:2	93%	90%	95%
Burnished Custom Masonry Cleaner	1:3	93%	90%	95%
<b>“3” Burnished CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Burnished Custom Masonry Cleaner	1:2	97%	98%	100%
Burnished Custom Masonry Cleaner	1:3	100%	98%	100%
<b>“7A” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	98%	100%
Custom Masonry Cleaner	1:6	100%	98%	100%
Burnished Custom Masonry Cleaner	1:2	95%	98%	97%
Burnished Custom Masonry Cleaner	1:3	95%	98%	97%
<b>“7A” Burnished CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>7 day</b>	<b>14 day</b>	<b>21 day</b>
Burnished Custom Masonry Cleaner	1:2	97%	97%	100%
Burnished Custom Masonry Cleaner	1:3	97%	97%	100%
<b>“9” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>7 day</b>	<b>14 day</b>	<b>21 day</b>
Custom Masonry Cleaner	1:2	95%	95%	95%
Custom Masonry Cleaner	1:4	95%	95%	95%
Custom Masonry Cleaner	1:6	95%	95%	95%
Burnished Custom Masonry Cleaner	1:2	90%	90%	85%
Burnished Custom Masonry Cleaner	1:3	90%	90%	85%



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**TEST RESULTS – Cleaning**

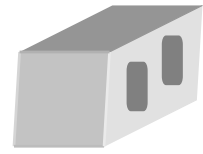
**% Removal of Type S Mortar**

<b>“9” Burnished CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Burnished Custom Masonry Cleaner	1:2	97%	100%	100%
Burnished Custom Masonry Cleaner	1:3	97%	100%	100%
<b>“15” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	97%	97%
Custom Masonry Cleaner	1:4	100%	97%	97%
Custom Masonry Cleaner	1:6	100%	97%	97%
Burnished Custom Masonry Cleaner	1:2	98%	97%	90%
Burnished Custom Masonry Cleaner	1:3	95%	97%	90%
<b>“HW” Smooth-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>3 day</b>	<b>7 day</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%	100%	100%
Custom Masonry Cleaner	1:4	100%	98%	100%
Custom Masonry Cleaner	1:6	100%	98%	100%
Burnished Custom Masonry Cleaner	1:2	100%	95%	100%
Burnished Custom Masonry Cleaner	1:3	100%	95%	100%
<b>“HW” Ground-face CMU</b>				
<b>Product</b>	<b>Dilution</b>	<b>7 day</b>	<b>14 day</b>	<b>21 day</b>
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%
<b>“1” Concrete Brick</b>				
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>		
Custom Masonry Cleaner	1:2	100%		
Custom Masonry Cleaner	1:4	100%		
Custom Masonry Cleaner	1:6	100%		
Burnished Custom Masonry Cleaner	1:2	95%		
Burnished Custom Masonry Cleaner	1:3	95%		





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**TEST RESULTS – Cleaning**

**% Removal of Type S Mortar**

<b>“2” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%
Custom Masonry Cleaner	1:4	98%
Custom Masonry Cleaner	1:6	98%
Burnished Custom Masonry Cleaner	1:2	90%
Burnished Custom Masonry Cleaner	1:3	90%
<b>“3” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%
Custom Masonry Cleaner	1:4	95%
Custom Masonry Cleaner	1:6	95%
Burnished Custom Masonry Cleaner	1:2	95%
Burnished Custom Masonry Cleaner	1:3	95%
<b>“4” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	97%
Custom Masonry Cleaner	1:4	97%
Custom Masonry Cleaner	1:6	95%
Burnished Custom Masonry Cleaner	1:2	95%
Burnished Custom Masonry Cleaner	1:3	95%
<b>“5” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%
Custom Masonry Cleaner	1:4	90%
Custom Masonry Cleaner	1:6	90%
Burnished Custom Masonry Cleaner	1:2	80%
Burnished Custom Masonry Cleaner	1:3	80%
<b>“6” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	99%
Custom Masonry Cleaner	1:4	97%
Custom Masonry Cleaner	1:6	97%
Burnished Custom Masonry Cleaner	1:2	90%
Burnished Custom Masonry Cleaner	1:3	90%
<b>“7” Concrete Brick</b>		
<b>Product</b>	<b>Dilution</b>	<b>14 day</b>
Custom Masonry Cleaner	1:2	100%
Custom Masonry Cleaner	1:4	98%
Custom Masonry Cleaner	1:6	98%
Burnished Custom Masonry Cleaner	1:2	95%
Burnished Custom Masonry Cleaner	1:3	90%



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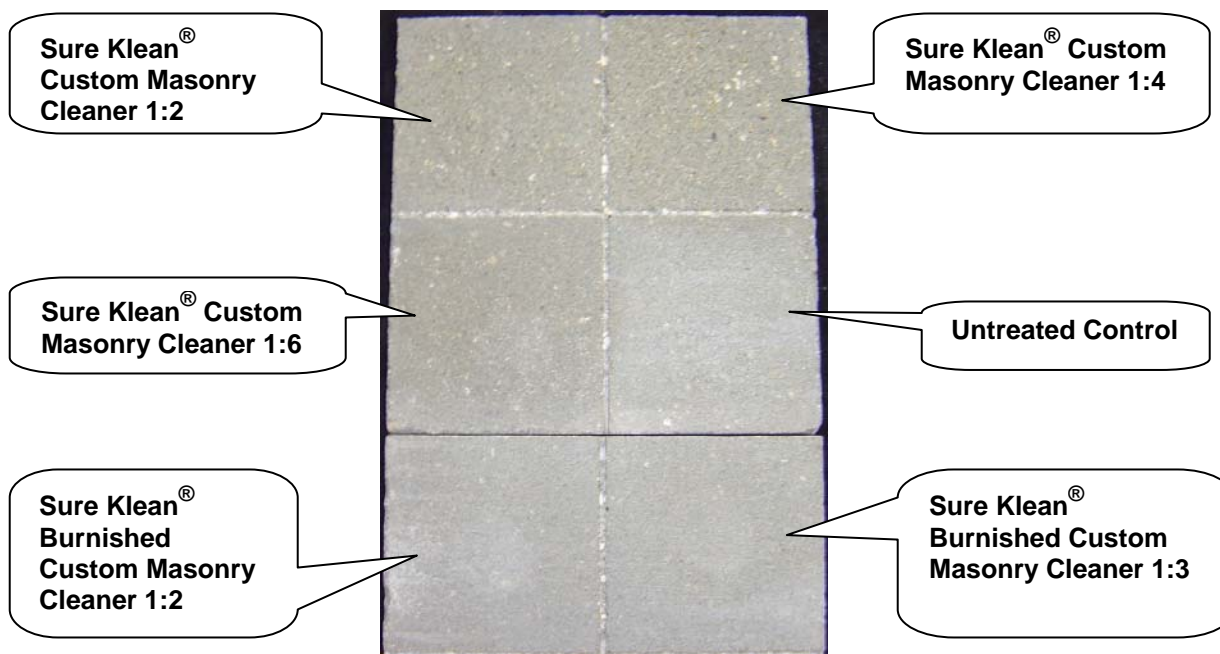


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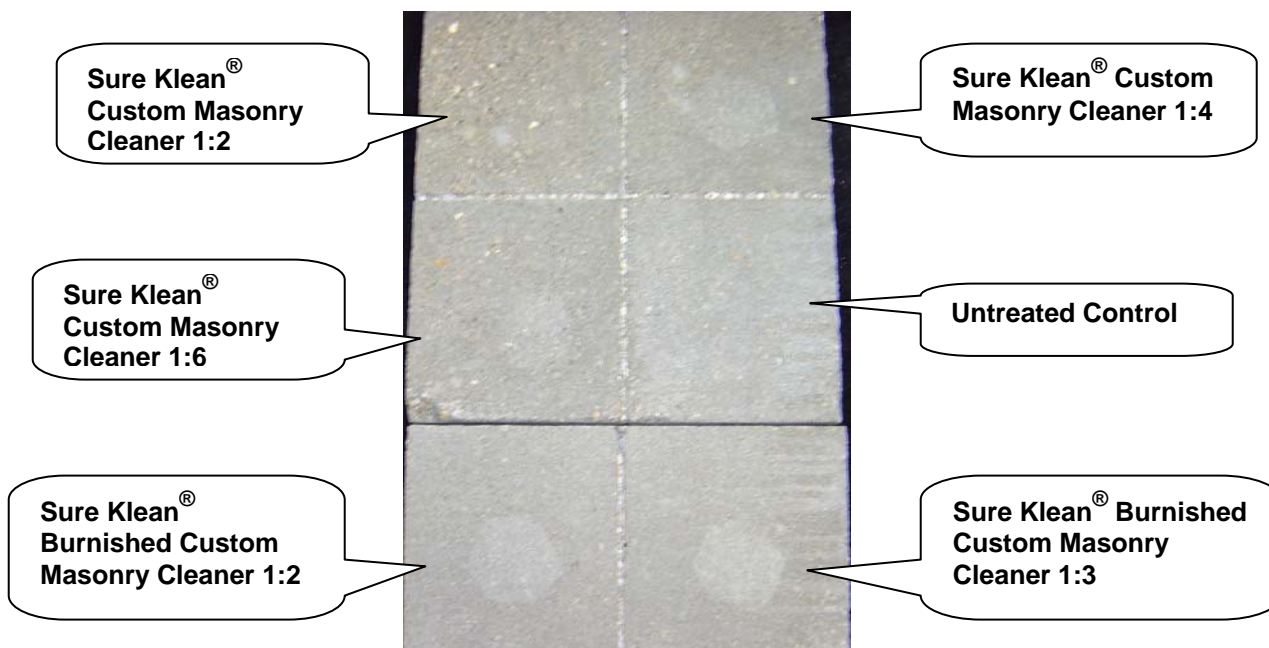
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## PHOTOGRAPHS- Cleaning

**"3" Smooth-face CMU; 3 Day Cleaning**

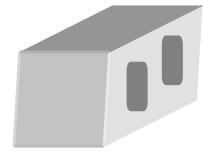


**"3" Smooth-face CMU; 7 Day Cleaning**



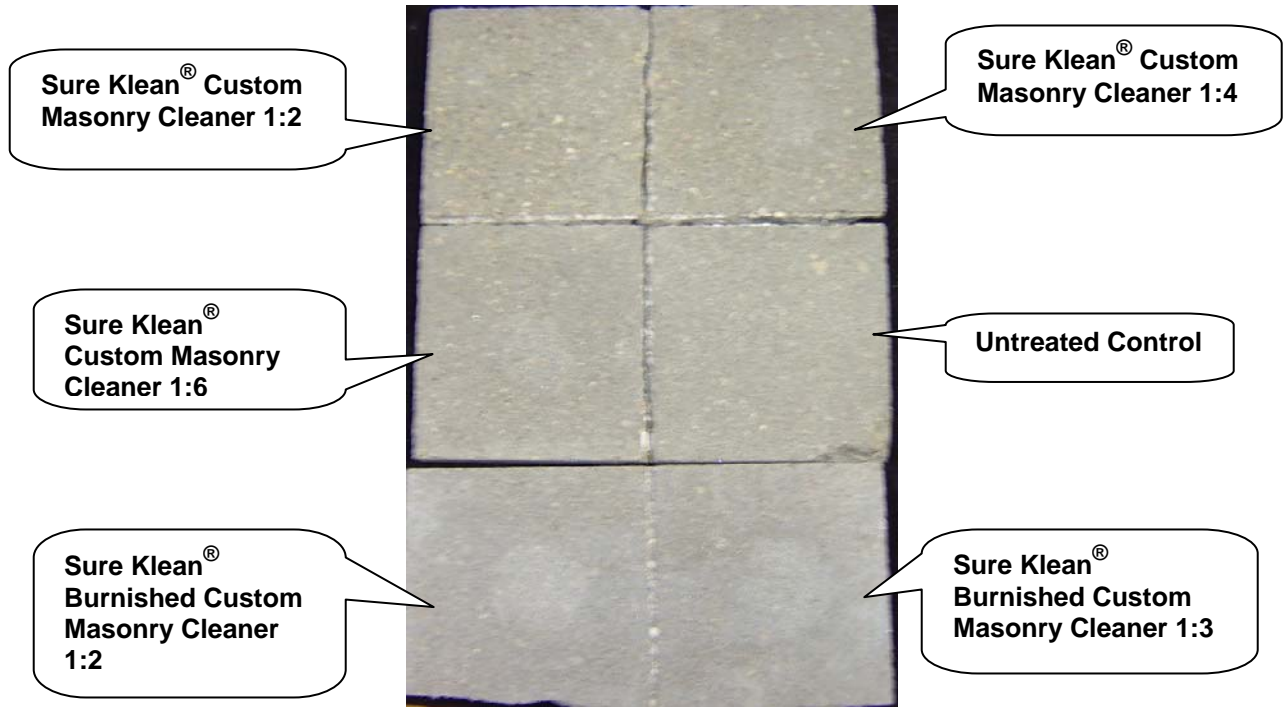


# PALLET TAG PROGRAM LABORATORY REPORT



## PHOTOGRAPHS- Continued

### "3" Smooth-face CMU; 14 Day Cleaning

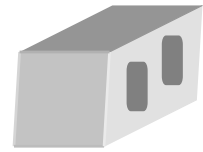


### "3" Concrete Brick; 14 Day Cleaning





# PALLET TAG PROGRAM LABORATORY REPORT



## CONCLUSIONS – Cleaning

Based on the test data, all of the submitted block and brick samples were efficiently cleaned with a dilution of the selected PROSOCO Inc. cleaning product. 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 heavy concentrations of pigmented matrix from the split-face blocks, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit.

## RECOMMENDED PRODUCTS AND DILUTIONS – CLEANING

Recommendations for cleaning for each type of CMU and brick submitted by Gage Brothers Block, Harrisburg, SD, are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar.

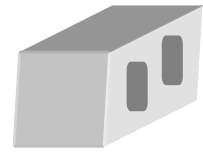
Block	New Construction Cleaning (Type S mortar, 14 day)
"1A" Split-face, "3" Split-face, "3" Smooth-face, "7A" Smooth-face, "9" Smooth-face, "HW" Smooth-face, and "2" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:6)
"1A" Smooth-face, "2" Smooth-face, "4" Concrete Brick, "5" Concrete Brick, and "7" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:4)
"2" Split-face CMU, "3" Concrete Brick, and "6" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:2)
"HW" Ground-face CMU, and "1" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:6) OR Sure Klean® Burnished Custom Masonry Cleaner (1:2)
"3" Burnished, "7A" Burnished, "9" Burnished, and "15" Smooth-face CMU	Sure Klean® Burnished Custom Masonry Cleaner (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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered through a 15-40 degree fan spray often produces best cleaning results.

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.



# PALLET TAG PROGRAM LABORATORY REPORT



## SECTION B – COLOR UNIFORMITY:

### DESCRIPTION OF PRODUCTS EVALUATED – Color Uniformity:

**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** – An acidic cleaner that removes common construction and atmospheric staining from custom masonry and other architectural concrete surfaces. This general-purpose, nonetching 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.

### TEST METHOD – Color Uniformity Testing:

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

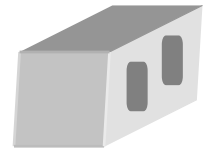
1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
3. Allow appropriate dwell time, as specified.
 

Custom Masonry Cleaner.....	3 minutes
Burnished Custom Masonry Cleaner.....	3-5 minutes
4. Reapply the products 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 was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.



# PALLET TAG PROGRAM LABORATORY REPORT



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**TEST RESULTS – Color Uniformity**

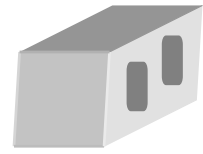
<b>Substrate:</b> Split-face CMU		<b>Pigment Color:</b> "1A"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	2	0
Burnished Custom Masonry Cleaner	1:3	2	0
<b>Substrate:</b> Smooth-face CMU		<b>Pigment Color:</b> "1A"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	0
Burnished Custom Masonry Cleaner	1:3	2	0
<b>Substrate:</b> Split-face CMU		<b>Pigment Color:</b> "2"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	1
Burnished Custom Masonry Cleaner	1:3	2	1
<b>Substrate:</b> Smooth-face CMU		<b>Pigment Color:</b> "2"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	1	0
Burnished Custom Masonry Cleaner	1:3	1	0

Scale used for reporting results of both categories

- |  |                                       |
|--|---------------------------------------|
| 0 – <b>Worst</b> match to through-body | 3 – <b>Good</b> match to through-body |
| 1 – <b>Poor</b> match to through-body  | 4 – <b>Best</b> match to through-body |
| 2 – <b>Fair</b> match to through-body  |                                       |



# PALLET TAG PROGRAM LABORATORY REPORT



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**TEST RESULTS – Color Uniformity**

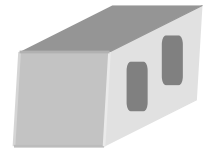
<b>Substrate: Split-face CMU</b>		<b>Pigment Color: "3"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	2	0
Burnished Custom Masonry Cleaner	1:3	2	0
<b>Substrate: Smooth-face CMU</b>		<b>Pigment Color: "3"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	2	1
Burnished Custom Masonry Cleaner	1:3	2	1
<b>Substrate: Burnished CMU</b>		<b>Pigment Color: "3"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
<b>Substrate: Smooth-face CMU</b>		<b>Pigment Color: "7A"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	2	2
Burnished Custom Masonry Cleaner	1:3	2	2

Scale used for reporting results of both categories

- |  |                                       |
|--|---------------------------------------|
| 0 – <b>Worst</b> match to through-body | 3 – <b>Good</b> match to through-body |
| 1 – <b>Poor</b> match to through-body  | 4 – <b>Best</b> match to through-body |
| 2 – <b>Fair</b> match to through-body  |                                       |



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**TEST RESULTS – Color Uniformity**

<b>Substrate:</b> Burnished CMU		<b>Pigment Color:</b> "7A"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
<b>Substrate:</b> Smooth-face CMU		<b>Pigment Color:</b> "9"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	1	0
Burnished Custom Masonry Cleaner	1:3	1	0
<b>Substrate:</b> Burnished CMU		<b>Pigment Color:</b> "9"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
<b>Substrate:</b> Smooth-face CMU		<b>Pigment Color:</b> "15"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4

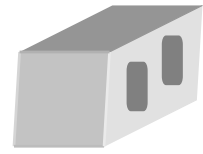
Scale used for reporting results of both categories

- |  |                                       |
|--|---------------------------------------|
| 0 – <b>Worst</b> match to through-body | 3 – <b>Good</b> match to through-body |
| 1 – <b>Poor</b> match to through-body  | 4 – <b>Best</b> match to through-body |
| 2 – <b>Fair</b> match to through-body  |                                       |





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**TEST RESULTS – Color Uniformity**

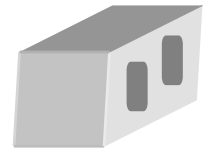
<b>Substrate: Split-face CMU</b>		<b>Pigment Color: "HW"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	4
Custom Masonry Cleaner	1:4	3	4
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	3	3
Burnished Custom Masonry Cleaner	1:3	3	3
<b>Substrate: Ground-face CMU</b>		<b>Pigment Color: "HW"</b>	
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	4	4
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
<b>Substrate: Concrete Brick</b>		<b>Pigment Color: "1"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	3	3
<b>Substrate: Concrete Brick</b>		<b>Pigment Color: "2"</b>	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	4	4
Burnished Custom Masonry Cleaner	1:2	3	3
Burnished Custom Masonry Cleaner	1:3	2	3

Scale used for reporting results of both categories

- |  |                                       |
|--|---------------------------------------|
| 0 – <b>Worst</b> match to through-body | 3 – <b>Good</b> match to through-body |
| 1 – <b>Poor</b> match to through-body  | 4 – <b>Best</b> match to through-body |
| 2 – <b>Fair</b> match to through-body  |                                       |



# PALLET TAG PROGRAM LABORATORY REPORT



**TEST RESULTS – Color Uniformity**

<b>Substrate:</b> Concrete Brick		<b>Pigment Color:</b> "3"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	2
Burnished Custom Masonry Cleaner	1:3	2	2
<b>Substrate:</b> Concrete Brick		<b>Pigment Color:</b> "4"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	2
Burnished Custom Masonry Cleaner	1:3	2	2
<b>Substrate:</b> Concrete Brick		<b>Pigment Color:</b> "5"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	3	3
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	2
Burnished Custom Masonry Cleaner	1:3	2	2
<b>Substrate:</b> Concrete Brick		<b>Pigment Color:</b> "6"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	4	4
Custom Masonry Cleaner	1:4	3	3
Custom Masonry Cleaner	1:6	2	2
Burnished Custom Masonry Cleaner	1:2	1	1
Burnished Custom Masonry Cleaner	1:3	1	1
<b>Substrate:</b> Concrete Brick		<b>Pigment Color:</b> "7"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Custom Masonry Cleaner	1:2	2	2
Custom Masonry Cleaner	1:4	4	4
Custom Masonry Cleaner	1:6	3	3
Burnished Custom Masonry Cleaner	1:2	2	1
Burnished Custom Masonry Cleaner	1:3	2	1

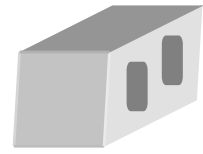
Scale used for reporting results of both categories

- 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



# PALLET TAG PROGRAM LABORATORY REPORT

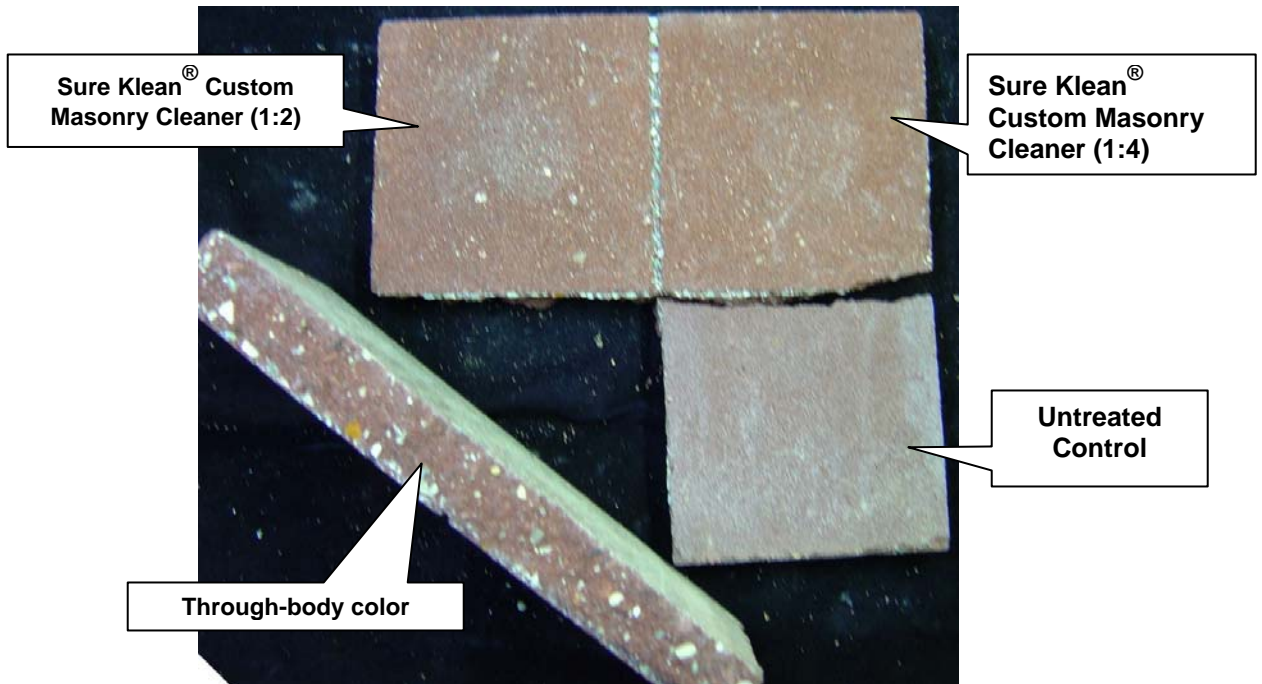


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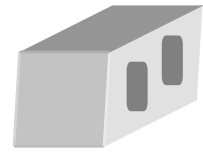
## PHOTOGRAPHS – Color Uniformity

“1A” Smooth-face; Through-body





# PALLET TAG PROGRAM LABORATORY REPORT



## CONCLUSIONS: COLOR UNIFORMITY:

All dilutions of Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner. Higher concentrations of cleaner removed moderate to heavy concentrations of pigmented matrix, exposing small and large aggregate. Lower concentrations of cleaner removed slight to moderate concentrations of pigmented matrix, exposing small and large aggregate. All dilutions enhanced the natural appearance of the integrally colored CMU. **The in-plant treatment on the burnished CMU's was not affected by either dilution of Sure Klean® Burnished Custom Masonry Cleaner**

## RECOMMENDATIONS – COLOR UNIFORMITY

Recommendations for color uniformity for each type of CMU and brick submitted by Gage Brothers Block, Harrisburg, SD, are provided in the chart below. Recommendations are based on the optimum dilution that provides the best color uniformity.

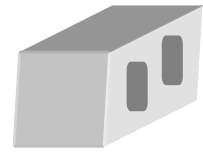
Block	Color Uniformity
"1A" Split-face, "3" Split-face, "3" Smooth-face, "7A" Smooth-face, "9" Smooth-face, "HW" Smooth-face, and "2" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:6)
"1A" Smooth-face, "2" Smooth-face, "4" Concrete Brick, "5" Concrete Brick, and "7" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:4)
"2" Split-face CMU, "3" Concrete Brick, and "6" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:2)
"HW" Ground-face CMU, and "1" Concrete Brick	Sure Klean® Custom Masonry Cleaner (1:6) OR Sure Klean® Burnished Custom Masonry Cleaner (1:2)
"3" Burnished, "7A" Burnished, "9" Burnished, and "15" Smooth-face CMU	Sure Klean® Burnished Custom Masonry Cleaner (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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered through a 15-40 degree fan spray often produces best cleaning results.

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



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## 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<sup>®</sup> Weather Seal Siloxane WB Concentrate** – A concentrated water repellent designed for dilution with fresh water at the jobsite. This solvent-free blend of silanes and oligomeric alkoxy siloxanes mixes easily with water to produce a penetrating water repellent ideal for application to dense or porous masonry surfaces.

**Sure Klean<sup>®</sup> Custom Masonry Sealer** – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, architectural concrete block, precast concrete, wood and porous masonry. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering.

---

## 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 3 days prior to testing. The burnished CMU's were not tested for water repellency due to the presence of the in-plant treatment.

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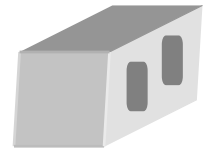
## TEST METHODS – Protective Water Repellents:

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

The water absorption tube test simulating wind driven rain conditions was performed. This test simulates 60 mile per hour wind driven rain conditions for a period of 20 minutes. See Technical Services TECH Note RILEM Tube Test Procedures.



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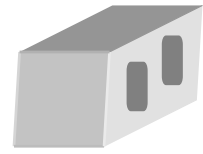
## TEST RESULTS – Protective Water Repellents:

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

	RESULTS
<b>"1A" Split-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	56 mph
Custom Masonry Sealer	59 mph
<b>"1A" Smooth-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	59 mph
<b>"2" Split-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	57 mph
Weather Seal Siloxane WB Concentrate (1:14)	57 mph
Custom Masonry Sealer	59 mph
<b>"2" Smooth-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	58 mph
Custom Masonry Sealer	60 mph
<b>"3" Split-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	59 mph



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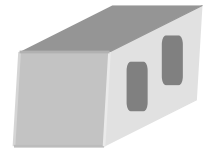
## TEST RESULTS - Protective Water Repellents:

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

	RESULTS
<b>"3" Smooth-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	< 40 mph
Custom Masonry Sealer	60 mph
<b>"7A" Smooth-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	60 mph
<b>"9" Smooth-face CMU</b>	
Untreated Control	49 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	60 mph
Custom Masonry Sealer	60 mph
<b>"15" Smooth-face CMU</b>	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	< 40 mph
<b>"HW" Smooth-face CMU</b>	
Untreated Control	57 mph
Weather Seal Siloxane WB (1:9)	59 mph
Weather Seal Siloxane WB (1:14)	60 mph
Custom Masonry Sealer	59 mph



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## TEST RESULTS - Protective Water Repellents:

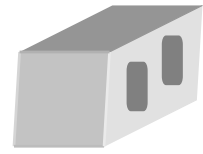
### Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

"HW" Ground-face CMU	
Untreated Control	59 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	60 mph
Custom Masonry Sealer	60 mph
"1" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	59 mph
"2" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	59 mph
"3" Concrete Brick	
Untreated Control	58 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	60 mph
Custom Masonry Sealer	58 mph
"4" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	60 mph
Custom Masonry Sealer	59 mph





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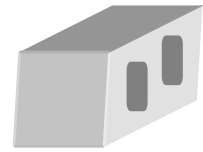
## TEST RESULTS - Protective Water Repellents:

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

"5" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	60 mph
Custom Masonry Sealer	57 mph
"6" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	60 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	60 mph
"7" Concrete Brick	
Untreated Control	< 40 mph
Weather Seal Siloxane WB Concentrate (1:9)	59 mph
Weather Seal Siloxane WB Concentrate (1:14)	59 mph
Custom Masonry Sealer	60 mph

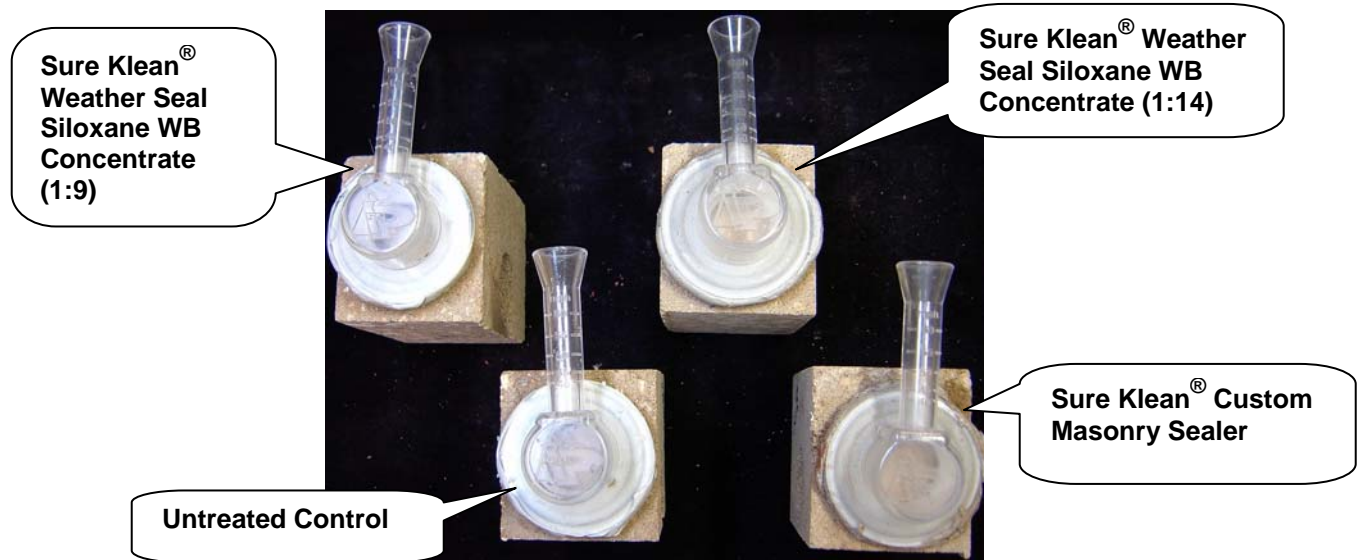


# PALLET TAG PROGRAM LABORATORY REPORT

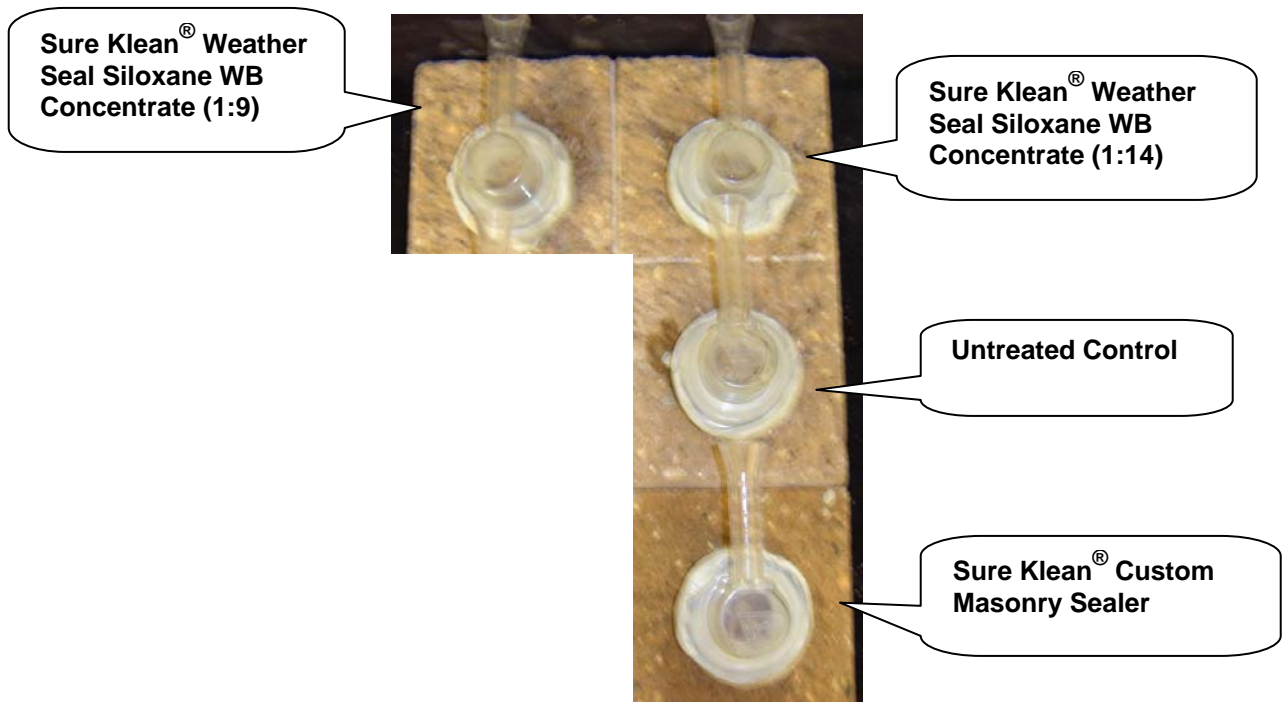


## PHOTOGRAPHS- Protective Water Repellents

### "2" Concrete Brick- RILEM Testing

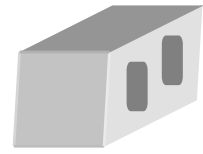


### "2" Split-face CMU





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## CONCLUSIONS - Protective Water Repellents

Based upon laboratory evaluations, Most of the water repellents tested provided above average water repellency to all submitted samples. In addition, Sure Klean® Custom Masonry Sealer enhanced the appearance of each CMU or brick. **There are no water repellent recommendations for the burnished CMU's because of the in-plant treatment.**

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## RECOMMENDATIONS - PROTECTIVE WATER REPELLENTS

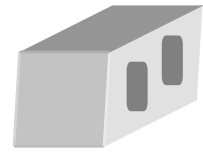
Recommendations for water repellency treatment for each type of CMU and brick submitted by Gage Brothers Block, Harrisburg, SD, are provided in the chart below. Recommendations are based on the treatment that proved most effective and can provide water repellency on all types submitted.

Block Type	Water Repellents
"15" Smooth-face CMU	Sure Klean® Weather Seal Siloxane WB Concentrate (1:9) OR Sure Klean® Weather Seal Siloxane WB Concentrate (1:14)
All Other Submitted non-Burnished CMU's All Submitted Concrete Bricks	Sure Klean® Custom Masonry Sealer OR Sure Klean® Weather Seal Siloxane WB Concentrate (1:9)

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.



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## SECTION D – GRAFFITI CONTROL

### DESCRIPTION OF PRODUCTS EVALUATED

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

#### Graffiti Control Treatments

**Sure Klean<sup>®</sup> Custom Masonry Sealer** – A clear, solvent-based silicone elastomer formulated to weatherproof concrete block and other porous masonry material. Sure Klean<sup>®</sup> Custom Masonry Sealer protects masonry surfaces from repeated graffiti attacks without altering the natural appearance.

#### Products Evaluated for Graffiti Removal

**Defacer Eraser<sup>®</sup> 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.

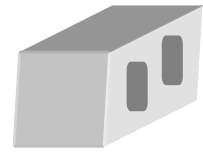
**Sure Klean<sup>®</sup> Fast Acting Stripper** – A thixotropic stripping compound formulated specifically for removal of high strength paints and coatings such as epoxies, polyurethanes, and floor enamels. Additionally, Fast Acting Stripper dissolves most spray paints, marking pens, lacquers and other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

#### Graffiti Agents

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



# PALLET TAG PROGRAM LABORATORY REPORT



## **SAMPLE PREPARATION – Graffiti Control**

This evaluation compares the effectiveness in preventing staining of enamel spray paint and permanent markers. The burnished CMU's were not evaluated for their ability to repel graffiti due to the presence of the in-plant treatment.

Sections of the concrete samples were treated with one coat of Sure Klean® Custom Masonry Sealer, in accordance with PROSOCO, Inc.'s Product Guide application instructions and then allowed to cure for at least one day. At the end of the one-day 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® Custom Masonry Sealer. 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**

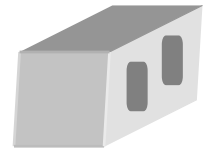
Chemical cleaners were evaluated using the following procedure:

1. Apply the product to a dry surface, soiled with graffiti.
2. Allow appropriate dwell time:
  - Graffiti Wipe ..... 5 minutes
  - Fast Acting Stripper ..... .20 minutes
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.



# PALLET TAG PROGRAM LABORATORY REPORT

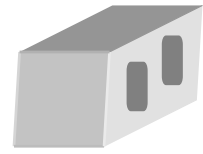


**TEST RESULTS – Graffiti Control**

<b>“1A” Split-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	98%	100%	100%	<b>98%</b>
Graffiti Wipe	90%	95%	98%	98%	<b>95%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	100%	100%	100%	<b>99%</b>
Graffiti Wipe	100%	100%	100%	100%	<b>100%</b>
<b>“1A” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	98%	98%	100%	98%	<b>99%</b>
Graffiti Wipe	100%	98%	100%	100%	<b>100%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	98%	100%	100%	100%	<b>100%</b>
Graffiti Wipe	100%	100%	100%	100%	<b>100%</b>
<b>“2” Split-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	80%	80%	80%	80%	<b>80%</b>
Graffiti Wipe	75%	70%	70%	70%	<b>74%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	85%	100%	100%	100%	<b>96%</b>
Graffiti Wipe	95%	98%	100%	100%	<b>98%</b>
<b>“2” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	80%	90%	90%	90%	<b>88%</b>
Graffiti Wipe	95%	85%	85%	85%	<b>88%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	95%	98%	98%	<b>97%</b>
Graffiti Wipe	100%	98%	98%	98%	<b>99%</b>



# PALLET TAG PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

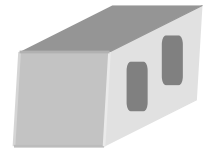
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**TEST RESULTS – Graffiti Control**

<b>“3” Split-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	65%	95%	95%	90%	<b>86%</b>
Graffiti Wipe	85%	90%	95%	90%	<b>90%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	80%	100%	100%	100%	<b>95%</b>
Graffiti Wipe	95%	100%	98%	95%	<b>97%</b>
<b>“3” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	85%	90%	98%	95%	<b>92%</b>
Graffiti Wipe	95%	90%	98%	95%	<b>95%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	98%	98%	98%	<b>97%</b>
Graffiti Wipe	100%	98%	98%	98%	<b>99%</b>
<b>“7A” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	80%	80%	80%	80%	<b>80%</b>
Graffiti Wipe	80%	80%	80%	80%	<b>80%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	90%	98%	98%	98%	<b>96%</b>
Graffiti Wipe	95%	98%	98%	98%	<b>97%</b>



# PALLET TAG PROGRAM LABORATORY REPORT



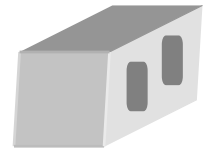
**TEST RESULTS – Graffiti Control**

<b>“9” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	90%	95%	100%	95%	<b>95%</b>
Graffiti Wipe	95%	95%	100%	95%	<b>96%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	98%	98%	100%	100%	<b>99%</b>
Graffiti Wipe	100%	100%	100%	100%	<b>100%</b>
<b>“15” Smooth-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	50%	70%	75%	70%	<b>67%</b>
Graffiti Wipe	75%	50%	50%	50%	<b>56%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	70%	90%	95%	90%	<b>86%</b>
Graffiti Wipe	95%	85%	95%	90%	<b>91%</b>
<b>“HW” Split-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	65%	50%	50%	50%	<b>53%</b>
Graffiti Wipe	70%	50%	50%	50%	<b>55%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	75%	75%	75%	85%	<b>78%</b>
Graffiti Wipe	90%	85%	85%	85%	<b>86%</b>
<b>“HW” Ground-face CMU</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	85%	85%	85%	85%	<b>85%</b>
Graffiti Wipe	90%	95%	95%	95%	<b>94%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	90%	90%	90%	90%	<b>90%</b>
Graffiti Wipe	95%	95%	95%	95%	<b>95%</b>





# PALLET TAG PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

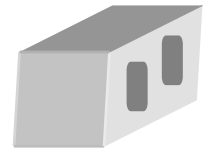
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**TEST RESULTS – Graffiti Control**

<b>“1” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	75%	70%	70%	70%	<b>71%</b>
Graffiti Wipe	90%	70%	70%	70%	<b>75%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	85%	90%	95%	95%	<b>91%</b>
Graffiti Wipe	98%	95%	95%	95%	<b>96%</b>
<b>“2” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	80%	70%	70%	70%	<b>73%</b>
Graffiti Wipe	90%	70%	70%	70%	<b>75%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	70%	70%	70%	70%	<b>70%</b>
Graffiti Wipe	90%	75%	75%	75%	<b>79%</b>
<b>“3” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	75%	75%	75%	75%	<b>75%</b>
Graffiti Wipe	100%	80%	80%	80%	<b>85%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	100%	95%	95%	95%	<b>96%</b>
Graffiti Wipe	100%	95%	98%	100%	<b>98%</b>
<b>“4” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	85%	90%	85%	95%	<b>89%</b>
Graffiti Wipe	75%	75%	75%	90%	<b>79%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	90%	85%	98%	95%	<b>92%</b>
Graffiti Wipe	100%	85%	95%	95%	<b>94%</b>



# PALLET TAG PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

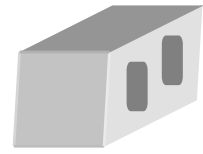
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**TEST RESULTS – Graffiti Control**

<b>“5” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	75%	85%	85%	85%	<b>83%</b>
Graffiti Wipe	95%	85%	85%	85%	<b>88%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	90%	100%	100%	<b>96%</b>
Graffiti Wipe	100%	90%	100%	100%	<b>98%</b>
<b>“6” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	60%	60%	60%	60%	<b>60%</b>
Graffiti Wipe	60%	55%	55%	55%	<b>56%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	95%	95%	100%	100%	<b>98%</b>
Graffiti Wipe	100%	100%	100%	100%	<b>100%</b>
<b>“7” Concrete Brick</b>					
<b>Untreated Control</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	60%	60%	60%	60%	<b>60%</b>
Graffiti Wipe	95%	85%	85%	80%	<b>86%</b>
<b>Custom Masonry Sealer</b>	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	<b>% Avg. Removal</b>
Fast Acting Stripper	90%	95%	98%	98%	<b>95%</b>
Graffiti Wipe	100%	100%	98%	98%	<b>99%</b>



# PALLET TAG PROGRAM LABORATORY REPORT



## PHOTOGRAPHS – Graffiti Control

### “2” Split-face CMU Graffiti Applied



Sure Klean®  
Custom  
Masonry Sealer



Untreated  
Control

### “2” Split-face CMU After Graffiti Removal

Sure Klean®  
Custom Masonry Sealer



Sure Klean®  
Fast Acting  
Stripper

Defacer Eraser®  
Graffiti Wipe

Untreated  
Control

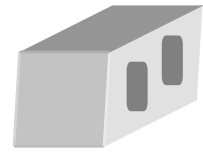


Sure Klean®  
Fast Acting  
Stripper

Defacer Eraser®  
Graffiti Wipe



# PALLET TAG PROGRAM LABORATORY REPORT



## CONCLUSIONS – Graffiti Control

Based upon laboratory evaluations, graffiti removal was improved dramatically when the submitted samples were treated with Sure Klean® Custom Masonry Sealer prior to graffiti application. In addition, Sure Klean® Custom Masonry Sealer enhanced the appearance of CMU's. **There are no graffiti repellent recommendations for the burnished CMU's because of the in-plant treatment.**

## RECOMMENDATIONS – GRAFFITI CONTROL

Recommendations for graffiti control treatment for each type of CMU and brick submitted by Gage Brothers, Harrisburg, SD, 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.

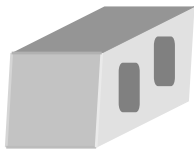
Block Type	Graffiti Repellents	Graffiti Removers
"1A" Split-face, "1A" Smooth-face, "2" Split-face, "2" Smooth-face, "3" Split-face, "3" Smooth-face, "7A" Smooth-face, "9" Smooth-face, and "HW" Ground-face CMU's, "1" Concrete Brick, "3" Concrete Brick, "4" Concrete Brick, "5" Concrete Brick, "6" Concrete Brick, "7" Concrete Brick	Sure Klean® Custom Masonry Sealer	Sure Klean® Fast Acting Stripper OR Defacer Eraser® Graffiti Wipe
"15" Smooth-face, "HW" Smooth-face CMU's, "2" Concrete Brick		Defacer Eraser® Graffiti Wipe

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.

For the most severe graffiti cases Sure Klean® Fast Acting Stripper is recommended for job-site testing. For mild graffiti cases, Defacer Eraser® Graffiti Wipe is recommended for job-site testing. See product literature for additional application and product information.

Nathan R. Colaner  
Technical Analyst

NRC/



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***Laboratory Report***

**Pallet Tag Program Evaluation**

**Gage Brothers Block  
Harrisburg, SD**

***Project No. 0310-12 PTP***

***Prepared For:***

**Matt Gage  
Gage Brothers Block  
Harrisburg, SD**

***Prepared By:***



***PROSOCO, Inc.  
December 2003***