

PROSOCO Inc

### **PALLET TAG PROGRAM** LABORATORY REPORT



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

Product Data literature for all products evaluated





PROSOCO, Inc.

**FOR:** Allen Cunningham, Pacific Clay Products, Inc.

cc: Paul Tessier Steve Dean

**SUBJECT:** Pacific Clay Products, Inc. (Brick)

Lake Elsinore, CA

**DATE:** February 27, 2003

PROJECT: 0210-04 PTP

#### SAMPLES SUBMITTED: (15) types of clay bricks

Sample	Color/Coating	Size
(6) "Sonora"	Light orange/no coating	7 ¾" x 3 ½" x 2 ¼"
(6) "Red Fl Vel."	Red/no coating	7 ¾" x 3 ½" x 2 ¼"
(6)"Segundo Mod. K"	Red/ "CEMENT/Lime/Cblack/UCAR latex/not fired on"	7 ¾" x 3 ½" x 2 ¼"
(6) "Mesa Tumbled"	Red/no coating	7 ¾" x 3 ½" x 2 ¼"
(6) "Napa"	Red/no coating	7 ¾" x 3 ½" x 2 ¼"
(6) "Dark Heritage Red"	Dark red/"Sand"	7 ¾" x 3 ½" x 2 ¼"
(6) "Frisco Tumbled"	Grey/"Englobe"	7 ¾" x 3 ½" x 2 ¼"
(6) "Summer Glacier"	Light yellow/"Englobe"	7 ¾" x 3 ½" x 2 ¼"
(6) "Mt. Whitney"	Pale yellow/"Englobe"	7 ¾" x 3 ½" x 2 ¼"
(6) "Merlot Tumbled"	Dark purple/"Englobe"	7 ¾" x 3 ½" x 2 ¼"
(6) "Burgundy Sandface"	Dark maroon/"Sand/FeO"	7 ¾" x 3 ½" x 2 ¼"
(6) "Burg. Vel."	Maroon/no coating	7 ¾" x 3 ½" x 2 ¼"
(6) "Santa Rosa"	Red/"Englobe/Cblk"	7 ¾" x 3 ½" x 2 ¼"
(6) "Black Hills Common"	Red with yellow/"Englobe"	7 ¾" x 3 ½" x 2 ¼"
(6) "Galena"	Red/"Englobe"	7 ¾" x 3 ½" x 2 ¼"

Submitted by: Paul Tessier





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#### **PURPOSE OF TESTING:**

Fifteen different types of clay bricks were submitted to PROSOCO, Inc.'s Testing Laboratory with a request to determine if application of the products evaluated will produce any surface alteration during new construction cleaning operations. Additionally, the effectiveness of water repellent treatments and graffiti control products suitable for clay brick masonry will also be evaluated.

**A. New Construction Cleaning** – Sure Klean<sup>®</sup> Vana Trol<sup>®</sup> and Enviro Klean<sup>®</sup> Safety Klean were evaluated for removal of laboratory applied mortar.

To simulate new construction soiling, all bricks 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 brick and filled with a wet mixture of Ash Grove<sup>®</sup> Type S cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the brick for 10 minutes before removal.

Soiled bricks were allowed to dry before test cleaning.

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

**B.** Limiting Surface Alterations – Sure Klean<sup>®</sup> Vana Trol<sup>®</sup> and Enviro Klean<sup>®</sup> Safety Klean were tested at various dilutions to determine if a cleaning program implemented to remove excess mortar and related new construction soiling would otherwise alter the appearance of cleaned surfaces. Surface Alteration was evaluated visually based upon perceived discoloration or erosion/etching of the masonry unit.

<u>Surface Finish Removal</u> is the visual examination of the brick comparing the surface finish of the untreated control surface to the surface finish cleaned with selected product(s) at given dilutions.

<u>Substrate Deterioration</u> is the visual examination of the brick comparing the surface of the untreated control to surfaces cleaned with selected product(s) at given dilutions looking for any potential erosion/digestion of the brick.

<u>Color Change</u> is the visual examination comparing the color of the untreated control surface to color of surfaces cleaned with selected products at given dilutions.

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

- **C.** Water Repellent Evaluation Sure Klean® Weather Seal Siloxane PD and Sure Klean® Weather Seal Siloxane WB Concentrate were evaluated on the submitted samples for their ability to provide water repellency.
- **D.** Graffiti Control Evaluation Sure Klean® Weather Seal Blok-Guard® & Graffiti Control was evaluated for its ability to control graffiti on the submitted samples. Defacer Eraser® Graffiti Release, Defacer Eraser® Graffiti Wipe, and Sure Klean® Fast Acting Stripper were evaluated for their ability to remove graffiti from the submitted samples.





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#### PRODUCTS EVALUATED FOR CLEANING AND LIMITING SURFACE ALTERATIONS

SAMPLE	TREATMENT	DILUTION
All submitted clay bricks	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6, 1:8
All submitted clay bricks	Enviro Klean <sup>®</sup> Safety Klean	1:2, 1:3

#### WATER REPELLENT PRODUCTS EVALUATED

SAMPLE	TREATMENT	DILUTION
	Sure Klean® Weather Seal Siloxane PD	Concentrate
All submitted clay bricks	Sure Klean <sup>®</sup> Weather Seal Siloxane WB Concentrate	1:9

#### **GRAFFITI CONTROL PRODUCTS EVALUATED**

SAMPLE	TREATMENT
All submitted clay bricks	Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control

#### **GRAFFITI REMOVAL PRODUCTS EVALUATED**

SAMPLE	TREATMENT		
	Defacer Eraser® Graffiti Release		
All submitted clay bricks	Defacer Eraser <sup>®</sup> Graffiti Wipe		
	Sure Klean <sup>®</sup> Fast Acting Stripper		

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





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#### **SECTION A - NEW CONSTRUCTION CLEANING**

#### **DESCRIPTION OF PRODUCTS EVALUATED – New Construction Cleaning**

These cleaning trials were conducted to determine the optimal cleaning/cure time combination to most efficiently remove Ash Grove Type S mortar from the submitted fired clay bricks.

Ash Grove<sup>®</sup> Type S cementitious mortar was prepared in compliance with the manufacturers instructions, applied to the brick surface 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 Ash Grove<sup>®</sup> Type S cementitious masonry cement mortar was visually evaluated after 3, 7 and 14 days of curing.

**Sure Klean** Vana Trol - A concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Use on: gray, brown, white, and most light-colored brick; natural stone; cast stone. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-10 parts water. Apply by brush or low-pressure spray.

**Enviro Klean® Safety Klean** – An effective, safe alternative to acidic compounds for cleaning brick, tile, and concrete surfaces. Rids new masonry construction of excess mortar, dirt, and other common job site soiling. Ideal for projects where traditional acidic cleaners are not allowed. Contains no hydrochloric acid and is safe for use on and around metal surfaces. Liquid concentrate for dilution with 1-3 parts water. Apply by brush or low-pressure spray.

#### **TEST METHOD - New Construction Cleaning**

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

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

Vana Trol	®5	5 minutes
Safety Kle	ean3	3 minutes

4. Pressure rinse thoroughly. \*

<sup>\*</sup> 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 - New Construction Cleaning**

#### % Removal

#### "Sonora"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
	1:3	100%	100%	100%

#### "Red FI Vel."

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
	1:3	100%	100%	100%

#### "Segundo Mod. K"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
	1:3	100%	100%	100%

#### "Mesa Tumbled"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Napa"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
	1:3	100%	100%	100%





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#### **Test Results - New Construction Cleaning**

#### % Removal

#### "Dark Heritage Red"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Frisco Tumbled"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Summer Glacier"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Mt. Whitney"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Merlot Tumbled"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%





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#### **Test Results - New Construction Cleaning**

#### % Removal

#### "Burgundy Sandface"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Burg. Vel."

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Santa Rosa"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Black Hills Common"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%

#### "Galena"

Product	Dilution	3 day	7 day	14 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Klean Safety Klean	1:3	100%	100%	100%





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#### **CONCLUSIONS - New Construction Cleaning**

Based on the test results, Sure Klean<sup>®</sup> Vana Trol and Enviro Klean<sup>®</sup> Safety Klean in all dilutions tested performed extremely well in removing excess mortar smears on the submitted clay bricks. Both products performed well in removing the mortar soils even after allowing the mortar to remain on the surface of the brick for 14 days under ideal curing conditions.

It is recommended that the selected cleaners always be used in the lowest possible concentration. They should be rinsed with the lowest pressure of water as practical, at least 400 psi, to minimize removal of the decorative finish. Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction.

#### Recommended Products and Dilutions - New Construction Cleaning

Recommendations for cleaning for each type of clay brick submitted by Pacific Clay Products, Inc., Lake Elsinore, CA are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Brick Type	New Construction Cleaning (Type S, 14 Days)
	Sure Klean <sup>®</sup> VanaTrol <sup>®</sup> 1:8
All submitted brick types	OR
	Enviro Klean <sup>®</sup> Safety Klean 1:3

Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction. Rinsing with high-pressure spray (400-800 psi) is recommended.

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

See product literature for additional application and product information.



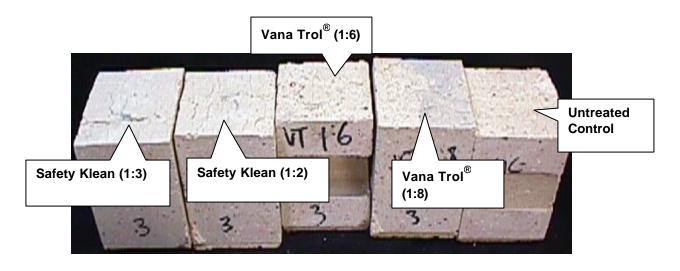


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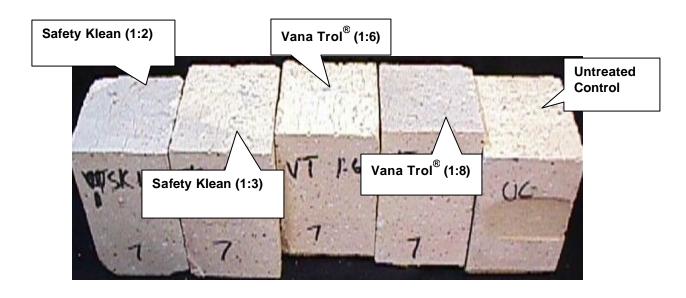
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#### **PHOTOGRAPHS - Cleaning**

#### "Summer Glacier" after 3 day cleaning



#### "Summer Glacier" after 7 day cleaning





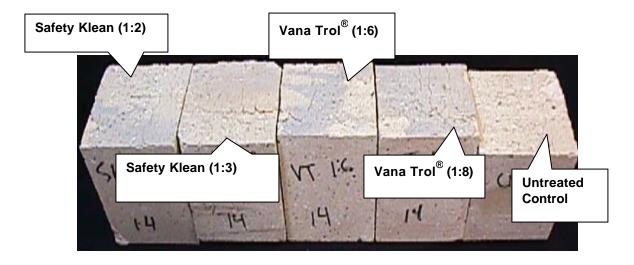


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PHOTOGRAPHS - Cleaning (cont.)

#### "Summer Glacier" after 14 day cleaning







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#### **SECTION B – LIMITING SURFACE ALTERATIONS**

#### **DESCRIPTION OF PRODUCTS EVALUATED - Limiting Surface Alterations**

**Sure Klean** Vana Trol - A concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Designed for use on gray, brown, white and most light-colored brick, natural stone and cast stone. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 410 parts water. Apply by brush or low-pressure spray.

**Enviro Klean® Safety Klean** – An effective, safe alternative to acidic compounds for cleaning brick, tile, and concrete surfaces. Rids new masonry construction of excess mortar, dirt, and other common job site soiling. Ideal for projects where traditional acidic cleaners are not allowed. Contains no hydrochloric acid and is safe for use on and around metal surfaces. Liquid concentrate for dilution with 1-3 parts water. Apply by brush or low-pressure spray.

#### **TEST METHOD – Limiting Surface Alterations:**

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

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

Vana Trol <sup>®</sup>	5 minutes
Safety Klean	3 minutes

- 4. Pressure rinse thoroughly. \*
- \* 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 – Limiting Surface Alterations**

Substrate: Clay brick	Pigment Col	Pigment Color: "Sonora"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean ® Vana Trol®	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Red Fl Vel."						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Segundo Mod. K"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean® Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Mesa Tumbled"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	Pigment Color: "Napa"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			

Scale used for reporting results of both categories

0 - No change

1 - change - slight

2 - change - moderate

3 – change – heavy 4 – change - excessive





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#### **TEST RESULTS – Limiting Surface Alterations**

Substrate: Clay brick	Pigment Col	Pigment Color: "Dark Heritage Red"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Frisco Tumbled"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Summer Glacier"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean® Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Mt. Whitney"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Merlot Tumbled"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			

Scale used for reporting results of both categories

0 - No change

1 - change - slight

3 - change - heavy 4 - change - excessive

2 - change - moderate





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#### **TEST RESULTS – Limiting Surface Alterations**

Substrate: Clay brick	Pigment Cole	Pigment Color: "Burgundy Sandface"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Cole	or: "Burg. Vel."						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Santa Rosa"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	or: "Black Hills Comm	non"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			
Substrate: Clay brick	Pigment Col	Pigment Color: "Galena"						
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:2	0	0	0	0			
Enviro Klean <sup>®</sup> Safety Klean	1:3	0	0	0	0			

Scale used for reporting results of both categories

0 – No change

3 - change - heavy

1 - change - slight

4 - change - excessive

2 - change - moderate





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#### **CONCLUSIONS – Limiting Surface Alterations**

Test results indicate that none of the products tested caused any surface alterations any of the submitted clay bricks. It is recommended that the selected cleaners always be used in the lowest possible concentration. They should be rinsed with the lowest pressure of water as practical, such as garden hose strength, to minimize removal of the decorative finish. Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction.

#### **RECOMMENDED PRODUCTS AND DILUTIONS – Limiting Surface Alterations**

Product recommendations for limiting surface alterations for each type of clay brick submitted by Pacific Clay Products, Inc., Lake Elsinore, CA are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Brick Type	Limiting Surface Alterations
	Sure Klean <sup>®</sup> VanaTrol <sup>®</sup> 1:8
All submitted clay bricks	OR
	Enviro Klean <sup>®</sup> Safety Klean 1:3

Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction. Rinsing with high-pressure spray (400-800 psi) is recommended.

Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. On-site testing should always 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** Weather Seal Siloxane PD – A ready-to-use, water-based silane/siloxane water repellent for concrete, GFRC, and most masonry and stucco surfaces. Siloxane PD penetrates more deeply than conventional water repellents. It helps masonry resist cracking, spalling, staining, and other damage related to water intrusion. Low odor and alkaline stable, Siloxane PD is ideal for field and in-plant application.

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

#### **SAMPLE PREPARATION - Protective Water Repellents:**

The submitted brick were cut, oven dried and allowed to reabsorb atmospheric humidity for 24 hours prior to treatment. The treatment method consisted of two 10-second immersions with a 20-second absorption period between immersions to simulate a wet-on-wet application. All treatments were allowed to cure for at least 14 days prior to testing.





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#### **TEST METHODS - Protective Water Repellents:**

#### Water Absorption Tube Test: RILEM II.4, 5.0 milliliters, 20 minutes

The water absorption tube test simulating wind driven and wind blown rain conditions was also performed. Tests were run with 5.0-milliliter head pressures. Filled to 5 milliliters, a water absorption tube produces a 98 mph dynamic wind pressure. See RILEM II.4 Tech Note for additional information.

The ranking system used to evaluate the effectiveness of the products applied to each submitted sample is as follows:

**AA** = "Above Average" correlates to less than or equal to 20% of the maximum untreated absorption.

**A** = "Average" correlates to less than or equal to 50% of the maximum untreated absorption.

BA = "Below Average" correlates to greater than 50% of the maximum untreated absorption.

EXAMPLE: If RILEM tubes applied to an untreated sample result in loss of 5 ml of water or more, then:

A rating of AA Above Average water repellent performance would require loss of no more than 5 ml X 20% = 1 ml.

A rating of **A** Average water repellent performance would require loss of no more than 5 ml X 50% = 2.5ml.

A rating of BA *Below Average* water repellent performance would be reported for treatments which result in a loss of more than 50% X 5ml = 2.5ml+

#### Water Absorption Tube Test: RILEM II.4, 5.0 milliliters, 20 minutes

AA = Above Average

A = Average

**BA** = Below Average

"Sonora"	Results in mL loss	Ranking
Untreated Control	1.2	-
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Red FI Vel."	Results in mL loss	Ranking
Untreated Control	2.8	-
Weather Seal Siloxane PD	0.6	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
"Segundo Mod. K"	Results in mL loss	Ranking
Untreated Control	3.5	
Weather Seal Siloxane PD	0.7	AA
Weather Seal Siloxane WB (1:9)	0.6	AA





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Water Absorption Tube Test: RILEM II.4, 5.0 milliliters, 20 minutes

AA = Above Average

A = Average

**BA** = Below Average

"Mesa Tumbled"	Results in mL loss	Ranking
		Kanking
Untreated Control	1.6	
Weather Seal Siloxane PD	0.0	<u>AA</u> AA
Weather Seal Siloxane WB (1:9)	0.1	<u> </u>
"Napa"	Results in mL loss	Ranking
Untreated Control	2.7	<del></del>
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Dark Heritage Red"	Results in mL loss	Ranking
Untreated Control	5.5	
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
"Frisco Tumbled"	Results in mL loss	Ranking
Untreated Control	1.4	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Summer Glacier"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.2	<u>AA</u>
"Mt. Whitney"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	AA
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Merlot Tumbled"	Results in mL loss	Ranking
Untreated Control	4.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.2	<u>AA</u>
"Burgundy Sandface"	Results in mL loss	Ranking
Untreated Control	1.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.1	AA





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Water Absorption Tube Test: RILEM II.4, 5.0 milliliters, 20 minutes

AA = Above Average

A = Average

**BA** = Below Average

"Burg. Vel."	Results in mL loss	Ranking
Untreated Control	0.5	
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Santa Rosa"	Results in mL loss	Ranking
Untreated Control	1.8	
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.1	<u>AA</u>
"Black Hills Common"	Results in mL loss	Ranking
"Black Hills Common" Untreated Control	Results in mL loss	Ranking 
		Ranking  <u>AA</u>
Untreated Control	1.7	-
Untreated Control Weather Seal Siloxane PD	1.7 0.4	 <u>AA</u>
Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9)	1.7 0.4 0.0	 <u>AA</u> <u>AA</u>
Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9)  "Galena"	1.7 0.4 0.0 Results in mL loss	 <u>AA</u> <u>AA</u>

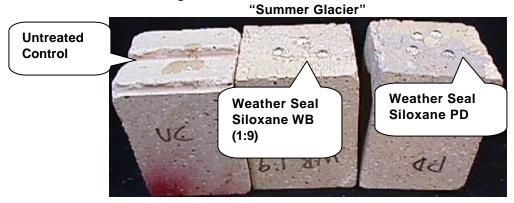




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#### PHOTOGRAPH - Surface Beading



#### **CONCLUSIONS - Protective Water Repellents:**

Test results indicate that both Sure Klean<sup>®</sup> Weather Seal Siloxane PD and Sure Klean<sup>®</sup> Weather Seal Siloxane WB Concentrate diluted with nine parts water exhibited above average water repellency on all submitted clay bricks.

#### **RECOMMENDATIONS - Protective Water Repellents:**

Recommendations for water repellent treatments for each type of clay brick submitted by Pacific Clay Products, Inc., Lake Elsinore, CA are provided in the chart below. Recommendations are based on the treatments that proved most effective by results and can provide water repellency on all types submitted if possible.

Brick Type	Water Repellent			
	Sure Klean <sup>®</sup> Weather Seal Siloxane PD			
All submitted clay bricks	OR			
	Sure Klean <sup>®</sup> Weather Seal Siloxane WB Concentrate (1:9)			

It must be pointed out that in any installation, the brick are a single component of the masonry facade. The ability of a water repellent treatment to prevent the ingress of water is affected by a variety of other factors. Therefore, on-site testing should be carried out for all installations with the recommended systems to ensure job site workmanship yields equivalent 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 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® Blok-Guard® & Graffiti Control** – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, and concrete block without altering the natural appearance. Blok-Guard® & Graffiti Control penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering as well as long-lasting protection against many types of graffiti.

#### **Products Evaluated for Graffiti Removal**

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

**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 removed a variety of graffiti stains from most smooth masonry, wood and metal surfaces.

**Sure Klean** Fast Acting Stripper – A thixotropic stripping compound designed for removing coatings and epoxies from masonry, wood and metal surfaces. Also removes oil, grease, and waxes from concrete decks, tile and terrazzo floors.

#### **Graffiti Agents**

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

#### **SAMPLE PREPARATION – Graffiti Control**

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

Sections of the brick samples were treated with Sure Klean<sup>®</sup> Blok-Guard<sup>®</sup> & Graffiti Control in accordance with PROSOCO, Inc.'s Product Guide application recommendations and then allowed to cure for at least 24 hours. 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 at least 24 hours following application of Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Defacer Eraser<sup>®</sup> Graffiti Release, Defacer Eraser<sup>®</sup> Graffiti Wipe, and Sure Klean<sup>®</sup> Fast Acting Stripper.





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#### **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 Release	15 minutes
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.

"Sonora"					
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	90%	20%	80%	80%	68%
Graffiti Wipe	100%	80%	80%	80%	85%
Fast Acting Stripper	70%	90%	90%	90%	85%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	100%	50%	95%	95%	85%
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"Red	d FI Vel."			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	95%	70%	80%	100%	86%
Graffiti Wipe	100%	90%	90%	90%	93%
Fast Acting Stripper	95%	100%	95%	100%	98%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	95%	80%	90%	90%	89%
Graffiti Wipe	100%	95%	100%	100%	99%
Fast Acting Stripper	95%	100%	100%	100%	99%





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	"Segur	ndo Mod. K"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	70%	100%	100%	100%	93%
Graffiti Wipe	100%	90%	80%	100%	93%
Fast Acting Stripper	80%	60%	80%	100%	80%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	80%	100%	100%	100%	95%
Graffiti Wipe	100%	95%	100%	100%	98%
Fast Acting Stripper	80%	100%	100%	100%	95%
	"Mesa	a Tumbled"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	60%	60%	80%	100%	75%
Graffiti Wipe	100%	80%	80%	100%	90%
Fast Acting Stripper	80%	90%	90%	100%	90%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	95%	90%	95%	100%	95%
Graffiti Wipe	100%	95%	100%	100%	98%
Fast Acting Stripper	90%	100%	100%	100%	98%
•	"	Napa"		<u> </u>	•
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	80%	80%	90%	100%	88%
Graffiti Wipe	100%	90%	90%	90%	93%
Fast Acting Stripper	100%	100%	90%	100%	98%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	100%	85%	100%	100%	96%
Graffiti Wipe	100%	95%	100%	100%	98%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"Dark H	leritage Red"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	60%	70%	70%	90%	73%
Graffiti Wipe	100%	90%	90%	100%	95%
Fast Acting Stripper	100%	95%	95%	100%	98%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Release	95%	90%	90%	90%	91%
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	90%	100%	100%	100%	98%





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	"Frisco Tumbled"					
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	50%	50%	50%	50%	50%	
Graffiti Wipe	95%	60%	60%	60%	69%	
Fast Acting Stripper	90%	90%	90%	90%	90%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	90%	60%	80%	80%	78%	
Graffiti Wipe	100%	95%	95%	95%	96%	
Fast Acting Stripper	90%	100%	100%	95%	96%	
Tast Hearing Stripper		ner Glacier"	10070	0070	0070	
	Red	Black	Green	Red	% Avg.	
Untreated Control	Paint	Marker	Marker	Marker	Removal	
Graffiti Release	10%	20%	40%	40%	28%	
Graffiti Wipe	30%	30%	30%	30%	30%	
Fast Acting Stripper	10%	20%	40%	40%	28%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	50%	40%	50%	50%	48%	
Graffiti Wipe	90%	70%	70%	70%	75%	
Fast Acting Stripper	80%	80%	90%	90%	85%	
Tast Acting Chipper		Whitney"	3070	3070	0370	
	Red	Black	Green	Red	9/ Ava	
Untreated Control	Paint	Marker	Marker	Marker	% Avg. Removal	
Graffiti Release	20%	30%	50%	50%	38%	
Graffiti Wipe	40%	60%	60%	60%	55%	
Fast Acting Stripper	50%	90%	90%	90%	80%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	50%	50%	50%	50%	50%	
Graffiti Wipe	80%	60%	60%	60%	65%	
Fast Acting Stripper	60%	90%	90%	90%	83%	
	"Merlo	t Tumbled"				
Untreated Control	Red	Black	Green	Red	% Avg.	
Croffiti Dologoo	Paint	Marker	Marker	Marker	Removal	
Graffiti Release	100%	100% 100%	100% 100%	100%	100%	
Graffiti Wipe	100% 60%	80%	100%	100%	100% 85%	
Fast Acting Stripper						
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	100%	100%	100%	100%	100%	
Graffiti Wipe	10%	100%	100%	100%	100%	
Fast Acting Stripper	90%	100%	100%	100%	98%	





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"Burgundy Sandface"							
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Graffiti Release	40%	50%	100%	100%	73%		
Graffiti Wipe	100%	90%	100%	100%	98%		
Fast Acting Stripper	90%	100%	100%	100%	98%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red	Black	Green	Red	% Avg.		
Blok-Guard & Grannti Control	Paint	Marker	Marker	Marker	Removal		
Graffiti Release	100%	100%	100%	100%	100%		
Graffiti Wipe	100%	100%	100%	100%	100%		
Fast Acting Stripper	100%	100%	100%	100%	100%		
"Burg. Vel."							
Untreated Control	Red	Black	Green	Red	% Avg.		
Ontreated Control	Paint	Marker	Marker	Marker	Removal		
Graffiti Release	70%	60%	95%	100%	81%		
Graffiti Wipe	100%	90%	100%	100%	98%		
Fast Acting Stripper	90%	100%	100%	100%	98%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red	Black	Green	Red	% Avg.		
	Paint	Marker	Marker	Marker	Removal		
Graffiti Release	95%	100%	100%	100%	98% 100%		
Graffiti Wipe	100%	100%	100%	100%			
Fast Acting Stripper	95%	100%	100%	100%	98%		
		nta Rosa"		1	1		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Graffiti Release	95%	90%	100%	100%	96%		
Graffiti Wipe	100%	90%	90%	100%	95%		
Fast Acting Stripper	95%	100%	90%	100%	96%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Graffiti Release	95%	100%	100%	100%	98%		
Graffiti Wipe	100%	100%	100%	100%	100%		
Fast Acting Stripper	100%	90%	100%	100%	98%		
- sorroung curppe		ills Common"	.0070	.0070	3370		
	Red	Black	Green	Red	% Avg.		
Untreated Control	Paint	Marker	Marker	Marker	Removal		
Graffiti Release	95%	100%	100%	100%	98%		
Graffiti Wipe	100%	90%	100%	100%	98%		
Fast Acting Stripper	30%	40%	70%	90%	58%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Graffiti Release	95%	95%	100%	100%	98%		
Graffiti Wipe	100%	100%	100%	100%	100%		
Fast Acting Stripper	95%	80%	100%	100%	94%		





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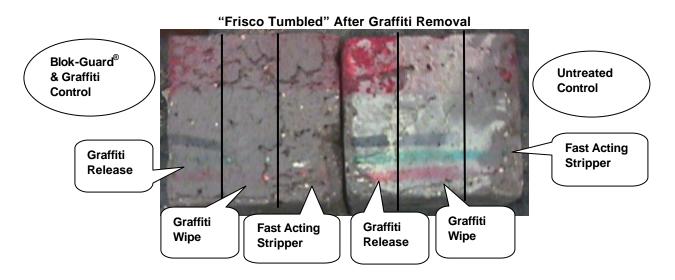
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#### **TEST RESULTS - Graffiti Control**

"Galena"						
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	40%	90%	90%	90%	78%	
Graffiti Wipe	60%	90%	100%	100%	88%	
Fast Acting Stripper	40%	90%	90%	100%	80%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Graffiti Release	50%	90%	100%	90%	83%	
Graffiti Wipe	100%	100%	100%	100%	100%	
Fast Acting Stripper	70%	90%	100%	100%	90%	

#### PHOTOGRAPHS - Graffiti Control









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#### **CONCLUSIONS - Graffiti Control**

Based upon laboratory evaluations, Defacer Eraser® Graffiti Wipe and Sure Klean® Fast Acting Stripper were most effective at removing graffiti from the submitted samples. Graffiti removal was improved when the submitted samples were treated with Sure Klean® Weather Seal Blok-Guard® & Graffiti Control prior to graffiti application.

#### **RECOMMENDATIONS - GRAFFITI CONTROL**

Recommendations for graffiti control treatment for each type of clay brick submitted by Pacific Clay Products, Inc., Lake Elsinore, CA 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.

Brick Type	Graffiti Repellents	Graffiti Removers		
All submitted clay bricks	Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	Defacer Eraser <sup>®</sup> Graffiti Wipe OR Sure Klean <sup>®</sup> Fast Acting Stripper		

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

Courtney A. Williams
Project Testing Coordinator

autrey Williams

CAW/



### Laboratory Report

### **Pallet Tag Program Evaluation**

### Pacific Clay Products, Inc. (Clay Bricks) Lake Elsinore, CA

Project No. 0210-04 PTP

#### Prepared For:

Allen Cunningham
Pacific Clay Products, Inc.
14741 Lake Street
Lake Elsinore, CA 92530-1

Prepared By:



PROSOCO, Inc. March 2003