



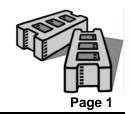
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### **Attachments**

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





### Submitted Information

For: Mike Burdette cc: Paul Tessier

Steve Dean

**Subject:** Cunningham Brick Company, Inc.

**Date:** May 17<sup>th</sup>, 2005

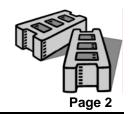
**Project:** 0502-11 PTP

Samples Submitted: 24 types of clay brick

Name	Finish	Color/Coating	Size
"Baystone"	velour rock face	pink	
"Belmont"	sand coat	dark red/dark red sand	
"Cascade White"	velour rock face	white	
"Chestnut"	velour rock face	dark brown	
"Coral"	velour rock face	light pink	
"Diamond White"	engobe/sand coat	white/white sand	
"Graystone"	velour rock face	gray	
"Gulfstone"	velour rock face	pink	
"Ivory Cream"	blade cut	white	
"Oatmeal"	velour rock face	light beige	
"Old Walnut"	sand coat	red/red and brown sand	
"Pewter Frost"	engobe/sand coat	gray/gray sand	7 ½" x 2 ¼" x 3 ½"
"Portsmouth"	sand coat	red/pink and gray sand	1 /2 X Z /4 X 3 /2
"Red Smooth"	smooth/die finish	red	
"Red Velour"	velour rock face	red	
"Riverbend"	engobe/sand coat	red/red sand	
"San Marcos"	sand coat	red/brown sand	
"Sandstone"	velour rock face	pink	
"Silverstone"	velour rock face	light gray	
"Smoke Gray"	velour rock face	dark gray	
"Tan"	velour rock face	tan	
"Taupe Gray"	velour rock face	light gray	
"Tide Water"	sand coat	red/red sand	
"Winestone"	velour rock face	light brown	

Submitted by: Mike Burdette





**Purpose of Testing** 

Twenty-four types of clay brick 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 repellents and graffiti repellents suitable for clay brick were evaluated.

**New Construction Cleaning** – Enviro Klean<sup>®</sup> Safety Klean and either Sure Klean<sup>®</sup> Vana Trol<sup>®</sup> or Sure Klean<sup>®</sup> 600 Detergent were tested at various dilutions to determine the optimal cleaning/cure time combination to most efficiently remove Type N mortar from the submitted fired clay brick while limiting surface alterations to the decorative finish. The surface alteration evaluation was visually determined based upon perceived discoloration or erosion/etching of the clay brick.

To simulate new construction soiling, all samples were placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall were positioned on top of each brick and filled with a wet mixture of Type N cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the brick for 10 minutes before removal. Soiled brick 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 any residual Type N mortar after 7, 14, and 21 days of curing. A visual examination was also made to determine if the tested cleaners caused any surface alterations to the submitted clay brick based on the following:

<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.

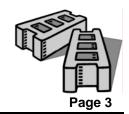
<u>Color Change</u> is the visual examination comparing the color of the untreated control surface to color of surfaces cleaned with selected products at given dilutions.

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

**Water Repellent Evaluation** – Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control and Sure Klean<sup>®</sup> Weather Seal Siloxane PD were evaluated on the submitted samples for their ability to provide water repellency.

**Graffiti Repellency Evaluation** – Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control was evaluated for its ability to provide graffiti control. Sure Klean<sup>®</sup> Fast Acting Stripper and Defacer Eraser<sup>®</sup> Graffiti Wipe were evaluated for their ability to remove graffiti.





### **Products Evaluated**

### **Products Evaluated for New Construction Cleaning and Limiting Surface Alterations**

Sample	Treatment	Dilution
"Baystone" "Belmont" "Cascade White" "Chestnut" "Coral" "Diamond White" "Graystone" "Gulfstone" "Ivory Cream" "Oatmeal"	Enviro Klean <sup>®</sup> Safety Klean	1:2, 1:3
"Pewter Frost" "Portsmouth" "Riverbend" "San Marcos" "Sandstone" "Silverstone" "Smoke Gray" "Tan" "Taupe Gray" "Tide Water" "Winestone"	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6, 1:8
"Red Smooth"	Enviro Klean <sup>®</sup> Safety Klean	1:2, 1:3
"Red Velour"	Sure Klean <sup>®</sup> 600 Detergent	1:6, 1:8

#### **Water Repellent Products Evaluated**

Sample	Treatment	Dilution
All Submitted Clay Brick	Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	Concentrate
All Submitted Clay Brick	Sure Klean® Weather Seal Siloxane PD	Concentrate

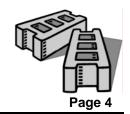
#### **Graffiti Control Products Evaluated**

Sample	Treatment	Dilution
All Submitted Clay Brick	Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	Concentrate

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

Sample	Treatment	Dilution
All Submitted Clay Brick	Sure Klean <sup>®</sup> Fast Acting Stripper	Concentrate
All Submitted Clay Brick	Defacer Eraser <sup>®</sup> Graffiti Wipe	Concentrate





#### **New Construction Cleaning**

These cleaning trials were conducted to determine the optimal cleaning/cure time combination to most efficiently remove Type N mortar from the submitted fired clay brick while limiting surface alterations to the decorative finish.

Type N mortar was prepared in compliance with the manufacturers instructions, applied to the brick surface and allowed to cure for 7, 14 and 21 days. Mortar removal was accomplished using chemical assistance and a high-pressure water rinse with pressure rinsing equipment. The removal of Type N masonry mortar was visually evaluated after 7, 14 and 21 days of curing. A visual examination was also made to determine if the tested cleaners caused any surface alterations to the submitted clay brick.

### **Description of Products Evaluated** - New Construction Cleaning

**Enviro Klean® Safety Klean** – An effective, safe, alternative to acidic compounds for cleaning brick, tile, and concrete surfaces. Safety Klean rids new masonry construction of excess mortar, dirt and other common job site soiling. It's ideal for projects where traditional acidic cleaners are not allowed. Non-fuming Safety Klean contains no hydrochloric or other traditional inorganic acids and is safe for use on and around most metal surfaces. Always test. Additionally, it is up to 70 percent more effective than citric and glycolic acids and 50 percent more effective than phosphoric acid.

**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.

**Sure Klean® 600 Detergent** – A general purpose, concentrated acidic cleaner for brick, tile and concrete surfaces. 600 Detergent dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking.

#### **Test Method** – New Construction Cleaning

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

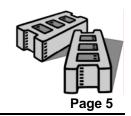
- 1. Pre-wet the surface with water.
- 2. Apply the cleaner.
- 3. Allow the appropriate dwell time, as specified.

Vana Trol <sup>®</sup>	3-5 minutes
600 Detergent	3-5 minutes
Safety Klean	3-5 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.

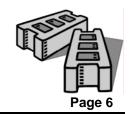




**Test Results** – New Construction Cleaning

	"Baystone	"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Sure Kleari Varia 1101	1:8	100%	100%	98%
Enviro Klean® Safety Klean	1:2	100%	100%	98%
Enviro Riean Salety Riean	1:3	100%	100%	98%
	"Belmont'			
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	98%	95%
Gare Rican Varia 1101	1:8	99%	95%	95%
Enviro Klean <sup>®</sup> Safety Klean	1:2	99%	98%	90%
Enviro Riean Salety Riean	1:3	98%	95%	90%
"(	Cascade Wh	ite"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	99%	98%
Sure Klean Vana Iroi	1:8	99%	99%	98%
F : 14 8 0 1 1 14	1:2	99%	99%	95%
Enviro Klean® Safety Klean	1:3	99%	99%	95%
	"Chestnut		0070	00,0
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	98%	95%
Sure Klean Vana I roi	1:8	99%	95%	95%
Faring Klasse® Cofety Klasse	1:2	99%	99%	95%
Enviro Klean® Safety Klean	1:3	98%	98%	95%
	"Coral"			•
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Sure Klean Vana Iroi	1:8	100%	100%	100%
F : 14 ® 0 ( ) 14	1:2	100%	100%	100%
Enviro Klean® Safety Klean	1:3	100%	100%	98%
"[	Diamond Wh	ite"		
Product	Dilution	7 day	14 day	21 day
Comp. Klasse® Vensa Trad®	1:6	99%	99%	95%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	99%	98%	90%
F. 10 10 0 8 0 1 1 10	1:2	99%	98%	90%
Enviro Klean® Safety Klean	1:3	99%	95%	90%
	"Graystone			
Product	Dilution	7 day	14 day	21 day
	1:6	100%	100%	100%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	100%	100%	100%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Loviro Kloop Cototy Kloop				, , , ,





**Test Results** – New Construction Cleaning

	"Gulfstone	<b>)</b> "		
Product	Dilution	7 day	14 day	21 day
	1:6	100%	99%	99%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	100%	98%	95%
F	1:2	100%	98%	98%
Enviro Klean® Safety Klean	1:3	100%	98%	98%
-	'Ivory Crea			l .
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	98%	98%
Sure Rieari Varia 1101	1:8	99%	95%	95%
Enviro Klean® Safety Klean	1:2	99%	98%	98%
Elivilo Rieali Salety Rieali	1:3	98%	98%	98%
	"Oatmeal	II		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	98%
Oute Nicali Valla 1101	1:8	100%	95%	95%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	99%	99%
Enviro Rieari Salety Rieari	1:3	100%	99%	99%
	"Old Walnເ	ıt"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	98%	98%	95%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	95%	90%	90%
Enviro Klean® Safety Klean	1:2	98%	90%	90%
Enviro Riean Salety Riean	1:3	98%	90%	85%
"	Pewter Fro	st"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Care racair varia rroi	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Environtean Galety Mean	1:3	100%	100%	100%
	"Portsmout	:h"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Care racarr varia rror	1:8	100%	98%	98%
Enviro Klean® Safety Klean	1:2	100%	100%	99%
•	1:3	100%	99%	99%
	Red Smoo			ı
Product	Dilution	7 day	14 day	21 day
Sure Klean® 600 Detergent	1:6	100%	100%	100%
	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
care.	1:3	100%	100%	100%





**Test Results** – New Construction Cleaning

	"Red Velou	r"		
Product	Dilution	7 day	14 day	21 day
Sure Klean® 600 Detergent	1:6	100%	100%	100%
Sure Rieari 600 Detergent	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Enviro Riean Salety Riean	1:3	100%	100%	99%
	"Riverbend	"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	90%
Sure Realt Valla 110	1:8	98%	98%	90%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	98%	85%
Elivilo Rieali Salety Rieali	1:3	100%	98%	85%
,	"San Marco	s"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Sule Riedii Valla 1101	1:8	100%	100%	100%
Carina Klasan® Cafata Klasan	1:2	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:3	100%	100%	100%
	"Sandstone	<b>)</b> "		
Product	Dilution	7 day	14 day	21 day
Sura Klaan <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	100%	98%	98%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	98%
Elivilo Rieali Salety Rieali	1:3	100%	100%	98%
	"Silverston	e"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Sule Riedii Valla 1101	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Elivilo Rieali Salety Rieali	1:3	100%	100%	100%
,	'Smoke Gra	y"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	100%
Jule Nicali Valla 1101	1:8	100%	100%	100%
Enviro Klean <sup>®</sup> Safety Klean	1:2	100%	100%	100%
Livilo Ricali Salety Ricali	1:3	100%	100%	100%
	"Tan"			
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	98%	98%
Cure Mean valia 1101	1:8	99%	98%	95%
Enviro Klean <sup>®</sup> Safety Klean	1:2	99%	98%	98%
LIMITO RICALI Salety RICALI	1:3	99%	98%	95%





### **Test Results** – New Construction Cleaning

"Taupe Gray"				
Product	Dilution	7 day	14 day	21 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%	98%
Elivilo Rieali Salety Rieali	1:3	100%	100%	98%
'	'Tide Wate	r"		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	90%	90%
Sure Riearr Varia 1101	1:8	99%	90%	90%
Enviro Klean® Safety Klean	1:2	98%	95%	95%
Elivilo Rieali Salety Rieali	1:3	98%	90%	90%
,	"Winestone	<del>)</del> "		
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	99%	98%	98%
Suie Neall Valla 1101	1:8	99%	98%	98%
Enviro Klean® Safety Klean	1:2	99%	99%	99%
Livilo Neali Salety Neali	1:3	99%	99%	99%





### **Test Results** – Limiting Surface Alterations

Substrate: Clay Brick	Pigment Co	olor: "Baystone"			
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 Co	olor: "Belmont"			
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 Co	olor: "Cascade W	hite"		
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 Co	olor: "Chestnut"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Product Sure Klean® Vana Trol®		Surface Finish			Staining 0
Product  Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	Dilution	Surface Finish Removal	Deterioration	Change	
Product Sure Klean® Vana Trol®	Dilution 1:6	Surface Finish Removal 0	Deterioration 0	Change 0	0
Product  Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	Dilution 1:6 1:8	Surface Finish Removal 0	Deterioration 0 0	Change 0 0	0
Product  Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Enviro Klean <sup>®</sup> Safety Klean	Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal 0 0	Deterioration 0 0 0	Change 0 0 0	0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal 0 0 0	Deterioration 0 0 0	Change 0 0 0	0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®	Dilution  1:6  1:8  1:2  1:3  Pigment Co	Surface Finish Removal  0 0 0 0 obor: "Coral" Surface Finish	Deterioration 0 0 0 0 0 Substrate	Change 0 0 0 0 0 Color	0 0 0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3  Pigment Co	Surface Finish Removal  0 0 0 0 0 Slor: "Coral" Surface Finish Removal	Deterioration  0  0  0  0  Substrate Deterioration	Change  0  0  0  0  Color Change	0 0 0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Sure Klean® Safety Klean	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6	Surface Finish Removal  0 0 0 0 slor: "Coral" Surface Finish Removal 0	Deterioration  0  0  0  0  Substrate Deterioration  0	Change  0  0  0  0  Color Change 0	0 0 0 0 0 Staining
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6 1:8 1:2 1:3 Pigment Co Dilution 1:6 1:8	Surface Finish Removal  0 0 0 0 0 slor: "Coral" Surface Finish Removal 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0	Change  0  0  0  0  Color Change  0  0	0 0 0 0 0 Staining 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Sure Klean® Safety Klean	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 Solor: "Coral" Surface Finish Removal 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0	Change  0  0  0  Color Change  0  0  0	0 0 0 0 0 Staining 0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 solor: "Coral" Surface Finish Removal 0 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0	Change  0  0  0  Color Change  0  0  0	0 0 0 0 0 Staining 0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Substrate: Clay Brick	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co	Surface Finish Removal  0 0 0 0 0 slor: "Coral" Surface Finish Removal 0 0 0 Surface Finish Removal 0 Surface Finish Removal	Deterioration  0 0 0 0 Substrate Deterioration 0 0 0 Vhite" Substrate	Change  0  0  0  Color Change  0  0  Color Change	0 0 0 0 0 Staining 0 0 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution	Surface Finish Removal  0 0 0 0 0 Solor: "Coral" Surface Finish Removal 0 0 0 Surface Finish Removal 0 Removal	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0  thite" Substrate Deterioration	Change  0  0  0  Color Change  0  0  Color Change	0 0 0 0 Staining 0 0 0 Staining
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 clor: "Coral" Surface Finish Removal 0 0 0 Surface Finish Removal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Deterioration  0 0 0 0 0 Substrate Deterioration 0 0 0 Vhite" Substrate Deterioration 0	Change  0 0 0 0 Color Change 0 0 Color Change 0 0 0 0 0 0 0 0 0 Color Change	0 0 0 0 Staining 0 0 0 Staining 0
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6 1:8 1:2 1:3 Pigment Co Dilution  1:6 1:8 1:2 1:3 Pigment Co Dilution  1:6 1:8 1:2 1:3 Pigment Co Dilution  1:6 1:8	Surface Finish Removal  0 0 0 0 0 oblor: "Coral" Surface Finish Removal 0 0 0 Surface Finish Removal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0  Vhite" Substrate Deterioration  0  0  0  0  O  O  O  O  O  O  O  O  O	Change  0 0 0 0 Color Change 0 0 Color Change 0 0 0 0 0 Color Change 0 0	0 0 0 0 0 Staining 0 0 0 Staining

0 – No change

3 - change - heavy

1 - change - slight

4 - change - excessive





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### <u>Test Results</u> – Limiting Surface Alterations (Continued)

Substrate: Clay Brick	Pigment Co	olor: "Graystone"				
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 Co	olor: "Gulfstone"				
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 Co	olor: "Ivory Crean	n"			
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	
	Pigment Color: "Oatmeal"					
Substrate: Clay Brick	Pigment Co	olor: "Oatmeal"				
Product	Pigment Co	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Product Sure Klean® Vana Trol®		Surface Finish			Staining 0	
Product	Dilution	Surface Finish Removal	Deterioration	Change		
Product Sure Klean® Vana Trol®	Dilution 1:6	Surface Finish Removal 0	Deterioration 0	Change 0	0	
Product  Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	Dilution 1:6 1:8	Surface Finish Removal 0	Deterioration 0 0	Change 0 0	0	
Product  Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> Enviro Klean <sup>®</sup> Safety Klean	Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal 0 0	Deterioration 0 0 0 0 0	Change 0 0 0	0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0  0  0  0	Deterioration 0 0 0 0 0	Change 0 0 0	0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®	Dilution  1:6  1:8  1:2  1:3  Pigment Co	Surface Finish Removal  0 0 0 0 obor: "Old Walnut" Surface Finish	Deterioration 0 0 0 0 0 sylvariate	Change 0 0 0 0 0 Color	0 0 0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution 1:6 1:8 1:2 1:3 Pigment Co	Surface Finish Removal  0 0 0 0 solor: "Old Walnut" Surface Finish Removal	Deterioration  0  0  0  0  Substrate Deterioration	Change  0  0  0  0  Color Change	0 0 0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6	Surface Finish Removal  0 0 0 0 slor: "Old Walnut" Surface Finish Removal 0	Deterioration  0  0  0  0  Substrate Deterioration  0	Change  0  0  0  0  Color Change 0	0 0 0 0 0 Staining	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6 1:8 1:2 1:3 Pigment Co Dilution 1:6 1:8	Surface Finish Removal  0 0 0 0 oblor: "Old Walnut" Surface Finish Removal 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0	Change  0  0  0  0  Color Change  0  0	0 0 0 0 0 Staining 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 Solor: "Old Walnut" Surface Finish Removal 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0	Change  0  0  0  Color Change  0  0  0	0 0 0 0 0 Staining 0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 solor: "Old Walnut" Surface Finish Removal 0 0 0	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0	Change  0  0  0  Color Change  0  0  0	0 0 0 0 0 Staining 0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Substrate: Clay Brick	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co	Surface Finish Removal  0 0 0 0 0 color: "Old Walnut" Surface Finish Removal 0 0 0 Surface Finish Removal 0 Surface Finish Removal 0 Surface Finish	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0  Substrate Deterioration  Substrate	Change  0  0  0  Color Change  0  0  Color Change	0 0 0 0 0 Staining 0 0 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution	Surface Finish Removal  0 0 0 0 0 color: "Old Walnut" Surface Finish Removal 0 0 0 Surface Finish Removal Color: "Pewter Frost	Deterioration  0  0  0  0  Substrate Deterioration  0  0  0  Substrate Deterioration	Change  0  0  0  Color Change  0  0  Color Change	0 0 0 0 Staining 0 0 0 Staining	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 0 clor: "Old Walnut" Surface Finish Removal 0 0 Solor: "Pewter Frost Surface Finish Removal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Deterioration  0 0 0 0 0 Substrate Deterioration 0 0 0 St" Substrate Deterioration 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Change  0 0 0 0 Color Change 0 0 Color Change 0 0 0 0 0	0 0 0 0 Staining 0 0 0 Staining 0	
Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Enviro Klean® Safety Klean  Substrate: Clay Brick  Product  Sure Klean® Vana Trol®  Sure Klean® Vana Trol®	Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3  Pigment Co  Dilution  1:6  1:8  1:2  1:3	Surface Finish Removal  0 0 0 0 0 oblor: "Old Walnut" Surface Finish Removal 0 0 0 Solor: "Pewter Frost Surface Finish Removal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Deterioration  0  0  0  0  0  Substrate Deterioration  0  0  0  Substrate Deterioration  0  0  0  0  0  ot''	Change  0 0 0 0 Color Change 0 0 Color Change 0 0 0 0 0 Color Change 0 0	0 0 0 0 0 Staining 0 0 0 Staining	

0 – No change

3 - change - heavy

1 - change - slight

4 - change - excessive





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### <u>Test Results</u> – Limiting Surface Alterations (Continued)

Sure Klean® Vana Trol®         1:6         0         0         0           Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0	ining 0 0
Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0	0
Enviro Klean® Safety Klean1:2000Enviro Klean® Safety Klean1:300	_
Enviro Klean® Safety Klean 1:3 0 0	0
	-
Cultativates Clay Driels Bioment Colay (D. J. Cover (L.))	0
Substrate: Clay Brick Pigment Color: "Red Smooth"	
Removal   Deterioration   Change	ining
Sure Klean <sup>®</sup> 600 Detergent 1:6 0 0	0
Sure Klean® 600 Detergent 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Red Velour"	
	ining
Sure Klean <sup>®</sup> 600 Detergent 1:6 0 0	0
Sure Klean® 600 Detergent 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Riverbend"	
Removal Deterioration Change	ining
Sure Klean® Vana Trol® 1:6 0 0	0
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "San Marcos"	
Removal   Detendration   Change	ining
Sure Klean® Vana Trol® 1:6 0 0	0
Sure Klean® Vana Trol® 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Sandstone"	
Surface Finish Substrate Color Co.	ining
Product Dilution Removal Deterioration Change Sta	
Sure Klean® Vana Trol® 1:6 0 0 0	0
Product Dilution Removal Deterioration Change Sta	
Sure Klean® Vana Trol® 1:6 0 0 0	0

0 – No change

3 - change - heavy

1 - change - slight

4 - change - excessive





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### <u>Test Results</u> – Limiting Surface Alterations (Continued)

Product Dilution Surface Finish Removal Substrate Color Change  Sure Klean® Vana Trol® 1:6 0 0 0	
	Staining
	0
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Smoke Gray"	
Product Dilution Surface Finish Substrate Color Removal Deterioration Change	Staining
Sure Klean® Vana Trol® 1:6 0 0	0
Sure Klean® Vana Trol® 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Tan"	
Product Dilution Surface Finish Substrate Color Removal Deterioration Change	Staining
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:6 0 0	0
Sure Klean® Vana Trol® 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Taupe Gray"	
Product Dilution Surface Finish Substrate Color Removal Deterioration Change	Staining
Sure Klean® Vana Trol® 1:6 0 0	0
Sure Klean® Vana Trol® 1:8 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:2 0 0	0
Enviro Klean <sup>®</sup> Safety Klean 1:3 0 0	0
Substrate: Clay Brick Pigment Color: "Tide Water"	
Product Dilution Surface Finish Substrate Color Removal Deterioration Change	Staining
ProductDilutionSurface Finish RemovalSubstrate DeteriorationColor ChangeSure Klean® Vana Trol®1:6000	Staining 0
ProductDilutionSurface Finish RemovalSubstrate DeteriorationColor ChangeSure Klean® Vana Trol®1:6000Sure Klean® Vana Trol®1:8000	
ProductDilutionSurface Finish RemovalSubstrate DeteriorationColor ChangeSure Klean® Vana Trol®1:6000Sure Klean® Vana Trol®1:8000Enviro Klean® Safety Klean1:2000	0
ProductDilutionSurface Finish RemovalSubstrate DeteriorationColor ChangeSure Klean® Vana Trol®1:6000Sure Klean® Vana Trol®1:8000	0 0
ProductDilutionSurface Finish RemovalSubstrate DeteriorationColor ChangeSure Klean® Vana Trol®1:6000Sure Klean® Vana Trol®1:8000Enviro Klean® Safety Klean1:2000	0 0 0
Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0           Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0           Substrate: Clay Brick         Pigment Color: "Winestone"           Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change	0 0 0
Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0           Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0           Substrate: Clay Brick         Pigment Color: "Winestone"           Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0	0 0 0 0
Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0           Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0           Substrate: Clay Brick         Pigment Color: "Winestone"           Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change	0 0 0 0 0
Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0           Sure Klean® Vana Trol®         1:8         0         0         0           Enviro Klean® Safety Klean         1:2         0         0         0           Enviro Klean® Safety Klean         1:3         0         0         0           Substrate: Clay Brick         Pigment Color: "Winestone"           Product         Dilution         Surface Finish Removal         Substrate Deterioration         Color Change           Sure Klean® Vana Trol®         1:6         0         0         0	0 0 0 0 0 Staining

0 – No change

3 - change - heavy

1 - change - slight

4 - change - excessive





### **Photographs** - New Construction Cleaning

"Red Velour"; 7 Day Cleaning



### "Red Velour"; 14 Day Cleaning



"Red Velour"; 21 Day Cleaning







**Photographs** – Limiting Surface Alterations

### "Red Velour"; Limiting Surface Alterations







#### **Conclusions – New Construction Cleaning**

Based on the test results, all PROSOCO, Inc. cleaners evaluated performed well in removing excess mortar from most of the submitted clay brick even after allowing the mortar to remain on the surface of the brick for 21 days. In addition, test results indicate that none of the evaluated cleaners caused any surface alterations on any of the submitted clay brick.

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 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 while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction.

#### **Recommendations** - New Construction Cleaning

Recommendations for cleaning for each type of clay brick submitted by Cunningham Brick Company, Inc., Lexington, NC are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Sample	New Construction Cleaning (Type N mortar, 21 day cleaning)
"Baystone" "Pewter Frost" "Belmont" "Portsmouth" "Cascade White" "San Marcos" "Chestnut" "Sandstone" "Coral" "Silverstone" "Diamond White" "Smoke Gray" "Graystone" "Tan" "Gulfstone" "Taupe Gray" "Ivory Cream" "Tide Water" "Oatmeal" "Winestone"	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:6 OR 1:8 OR Enviro Klean <sup>®</sup> Safety Klean 1:2 OR 1:3
"Old Walnut"	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:6 OR 1:8 OR Enviro Klean <sup>®</sup> Safety Klean 1:2
"Riverbend"	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> 1:6 OR 1:8
"Red Smooth" "Red Velour"	Sure Klean <sup>®</sup> 600 Detergent 1:6 OR 1:8 OR Enviro Klean <sup>®</sup> Safety Klean 1:2 OR 1:3

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.





### **Protective Water Repellents**

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

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

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

#### **Description of Products Evaluated – Protective Water Repellents**

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

**Sure Klean® Weather Seal 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.

#### Sample Preparation – Protective Water Repellents

The submitted brick were cut, air-dried, and allowed to reabsorb atmospheric humidity for at least 24 hours prior to treatment. The treatments were applied by brush in accordance to the current PROSOCO, Inc. Product Guide. Both treatments were allowed to cure for at least 3 days prior to testing.





#### <u>Test Methods</u> – Protective Water Repellents

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

The water absorption tube test simulating wind driven and wind blown rain conditions was 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  $\underline{AA}$  Above Average water repellent performance would require loss of no more than 5 ml X 20% = 1 ml.

A rating of  $\underline{\mathbf{A}}$  Average water repellent performance would require loss of no more than 5 ml X 50% = 2.5ml.

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





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

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

 $\underline{AA}$  = Above Average  $\underline{A}$  = Average

**BA** = Below Average

"Baystone"	Results in mL loss	Ranking
Untreated Control	-0.7	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.0	AA
"Belmont"	Results in mL loss	Ranking
Untreated Control	-4.1	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.4	AA
"Cascade White"	Results in mL loss	Ranking
Untreated Control	-0.9	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.0	<u>AA</u>
"Chestnut"	Results in mL loss	Ranking
Untreated Control	-3.5	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.6	AA
"Coral"	Results in mL loss	Ranking
Untreated Control	-0.8	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.0	<u>AA</u>
"Diamond White"	Results in mL loss	Ranking
Untreated Control	-0.7	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.0	<u>AA</u>
"Graystone"	Results in mL loss	Ranking
Untreated Control	-5.0	
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-5.0 -0.0	 <u>AA</u>
Untreated Control		
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	<u>AA</u>
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control	-0.0 -0.1	<u>AA</u> <u>AA</u>
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0 -0.1 Results in mL loss	AA AA Ranking
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control	-0.0 -0.1 Results in mL loss -1.7	AA AA Ranking
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0 -0.1 Results in mL loss -1.7 -0.0	AA AA Ranking  AA
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control	-0.0 -0.1 Results in mL loss -1.7 -0.0 -0.5	AA AA Ranking AA AA
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0 -0.1 Results in mL loss -1.7 -0.0 -0.5 Results in mL loss	AA  Ranking   AA  AA  Ranking
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control	-0.0 -0.1  Results in mL loss -1.7 -0.0 -0.5  Results in mL loss -0.8	AA AA Ranking AA AA Ranking
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0 -0.1  Results in mL loss -1.7 -0.0 -0.5  Results in mL loss -0.8 -0.0	AA AA Ranking AA AA Ranking AA AA AA AA
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Oatmeal" Untreated Control	-0.0 -0.1  Results in mL loss -1.7 -0.0 -0.5  Results in mL loss -0.8 -0.0 -0.2	AA  Ranking   AA  Ranking  AA  AA  Ranking   AA  AA  AA
Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Gulfstone" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Ivory Cream" Untreated Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Sure Klean® Weather Seal Siloxane PD  "Oatmeal"	-0.0 -0.1  Results in mL loss -1.7 -0.0 -0.5  Results in mL loss -0.8 -0.0 -0.2  Results in mL loss	AA  Ranking   AA  Ranking   AA  Ranking   AA  Ranking   AA  AA  Ranking





### **Test Results** – Protective Water Repellents

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

**AA** = Above Average  $\underline{\mathbf{A}}$  = Average **BA** = Below Average

"Old Walnut"	Results in mL loss	Ranking
Untreated Control	-5.0	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.4	AA
"Pewter Frost"	Results in mL loss	Ranking
Untreated Control	-2.5	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.4	AA
"Portsmouth"	Results in mL loss	Ranking
Untreated Control	-5.0	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.5	AA
"Red Smooth"	Results in mL loss	Ranking
Untreated Control	-3.0	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.0	AA
"Red Velour"	Results in mL loss	Ranking
Untreated Control	-5.0	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean® Weather Seal Siloxane PD	-0.5	AA
"Riverbend"	Results in mL loss	Ranking
Untreated Control	-5.0	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.0	<u>AA</u>
"San Marcos"	Results in mL loss	Ranking
Untreated Control	-5.0	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	<u>AA</u>
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.0 -0.7	<u>AA</u> <u>AA</u>
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control	-0.7	AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.7 Results in mL loss	AA Ranking
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control	-0.7  Results in mL loss -0.7	AA Ranking
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.7  Results in mL loss -0.7 -0.0	AA Ranking  AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control	-0.7  Results in mL loss -0.7 -0.0 -0.0	AA Ranking  AA AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.7  Results in mL loss -0.7 -0.0 -0.0  Results in mL loss	AA Ranking  AA AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD	-0.7  Results in mL loss -0.7 -0.0 -0.0  Results in mL loss -1.0	AA Ranking AA AA Ranking Ranking
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.7  Results in mL loss -0.7 -0.0 -0.0  Results in mL loss -1.0 -0.0	AA Ranking AA AA Ranking AA AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Smoke Gray"  Untreated Control	-0.7  Results in mL loss -0.7 -0.0 -0.0  Results in mL loss -1.0 -0.0 -0.0	AA Ranking AA Ranking Ranking AA AA
Sure Klean® Weather Seal Siloxane PD  "Sandstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Silverstone"  Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD  "Smoke Gray"	-0.7  Results in mL loss -0.7 -0.0 -0.0  Results in mL loss -1.0 -0.0 -0.0  Results in mL loss	AA Ranking AA Ranking Ranking AA AA





### **Test Results** – Protective Water Repellents

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

**AA** = Above Average  $\underline{\mathbf{A}}$  = Average **BA** = Below Average

"Tan"	Results in mL loss	Ranking
Untreated Control	-2.3	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	<u>AA</u>
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.0	<u>AA</u>
"Taupe Gray"	Results in mL loss	Ranking
Untreated Control	-1.1	
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	-0.0	AA
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.0	AA
"Tide Water"	Results in mL loss	Ranking
Untreated Control	-2.7	
Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control	-0.0	AA
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.1	<u>AA</u>
"Winestone"	Results in mL loss	Ranking
Untreated Control	-3.6	
Untreated Control  Sure Klean® Weather Seal Blok-Guard® & Graffiti Control  Sure Klean® Weather Seal Siloxane PD	-3.6 -0.0	<u>AA</u>





**Photographs** – Protective Water Repellents

"Red Smooth"; Vertical 5.0 mL RILEM Testing



Sure Klean<sup>®</sup>
Weather Seal
Siloxane PD

Sure Klean<sup>®</sup>
Weather Seal
Blok-Guard<sup>®</sup> &
Graffiti Control

**Untreated Control** 





**Conclusions** – Protective Water Repellents

Test results indicate that both treatments evaluated exhibited above average water repellency on all submitted clay brick. In addition, Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control enhanced the appearance of the clay brick. Sure Klean<sup>®</sup> Weather Seal Siloxane PD did not alter the appearance of any of the submitted brick.

### <u>Recommendations</u> – Protective Water Repellents

Recommendations for water repellent treatments for each type of clay brick submitted by Cunningham Brick Company, Inc., Lexington, NC are provided in the charts below. Recommendations are based on the treatments that proved most effective and can provide water repellency on all types submitted.

Sample	Water Repellents
All Submitted Clay Brick	Sure Klean <sup>®</sup> Weather Seal Blok-Guard <sup>®</sup> & Graffiti Control OR Sure Klean <sup>®</sup> Weather Seal Siloxane PD

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.





### **Graffiti Control**

These trials were conducted to determine the optimal graffiti control treatment for the submitted clay brick samples.

#### **Description of Products Evaluated – Graffiti Control**

#### **Graffiti Control Treatments**

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

#### Products Evaluated for Graffiti Removal

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

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

### **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 clay brick samples were treated with Sure Klean® Weather Seal Blok-Guard® & Graffiti Control in accordance with PROSOCO, Inc.'s Product Guide application recommendations 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<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 Wipe and Sure Klean<sup>®</sup> Fast Acting Stripper.

#### <u>Test Method</u> – Graffiti Control

Chemical cleaners were evaluated using the following procedure:

- 1. Apply the product to a dry surface, soiled with graffiti.
- 2. Allow appropriate dwell time:

- 3. Pressure rinse thoroughly until water runs clear.\*
- 4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.
- \* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.





"Baystone"					
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	99%	98%	80%	95%	93%
Graffiti Wipe	99%	80%	80%	80%	85%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	100%	100%	99%	99%	100%
Graffiti Wipe	100%	99%	99%	99%	99%
·		"Belmont"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	99%	98%	98%	98%
Graffiti Wipe	95%	90%	98%	95%	95%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	100%	100%	100%	100%
Graffiti Wipe	98%	100%	100%	100%	100%
·		"Cascade Whi	te"		
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	80%	50%	20%	20%	43%
Graffiti Wipe	80%	20%	20%	20%	35%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	85%	75%	80%	83%
Graffiti Wipe	90%	80%	80%	80%	83%
		"Chestnut"			
Untreated Control	<b>Red Paint</b>	<b>Black Marker</b>	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	95%	99%	98%	99%	98%
Graffiti Wipe	90%	85%	98%	95%	92%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	99%	100%	100%	100%	100%
Graffiti Wipe	99%	100%	100%	100%	100%
		"Coral"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	80%	20%	90%	70%
Graffiti Wipe	90%	20%	40%	70%	55%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	<b>Black Marker</b>	<b>Green Marker</b>	Red Marker	% Avg. Removal
Fast Acting Stripper	98%	98%	95%	90%	95%
Graffiti Wipe	95%	95%	95%	90%	94%
		"Diamond Wh	ite"		
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	70%	90%	60%	60%	70%
Graffiti Wipe	60%	40%	40%	40%	45%
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Fast Acting Stripper	90%	95%	90%	90%	91%
Graffiti Wipe	90%	95%	90%	90%	91%





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	"Graystone"					
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	95%	50%	90%	81%	
Graffiti Wipe	90%	20%	70%	70%	63%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	99%	99%	95%	95%	97%	
Graffiti Wipe	99%	95%	95%	95%	96%	
		"Gulfstone"				
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	95%	95%	60%	95%	86%	
Graffiti Wipe	90%	20%	50%	90%	63%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	99%	99%	98%	98%	99%	
Graffiti Wipe	99%	99%	98%	98%	99%	
		"Ivory Cream	1"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	70%	80%	40%	20%	53%	
Graffiti Wipe	70%	20%	40%	20%	38%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	95%	90%	90%	91%	
Graffiti Wipe	90%	90%	90%	90%	90%	
	•	"Oatmeal"				
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	90%	20%	40%	60%	
Graffiti Wipe	80%	20%	20%	20%	35%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	<b>Black Marker</b>	<b>Green Marker</b>	Red Marker	% Avg. Removal	
Fast Acting Stripper	95%	90%	80%	80%	86%	
Graffiti Wipe	95%	90%	95%	95%	94%	
		"Old Walnut	,,			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	99%	100%	100%	97%	
Graffiti Wipe	80%	80%	100%	100%	90%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	<b>Black Marker</b>	<b>Green Marker</b>	Red Marker	% Avg. Removal	
Fast Acting Stripper	98%	100%	100%	100%	100%	
Graffiti Wipe	98%	100%	100%	100%	100%	
		"Pewter Fros	t"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	99%	85%	95%	92%	
Graffiti Wipe	85%	20%	85%	85%	69%	
Blok-Guard <sup>®</sup> & Graffiti Control		Black Marker	Green Marker		% Avg. Removal	
Fast Acting Stripper	95%	100%	100%	99%	99%	
Graffiti Wipe	95%	98%	99%	99%	98%	





"Portsmouth"						
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	50%	95%	90%	98%	83%	
Graffiti Wipe	50%	90%	90%	95%	81%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	80%	100%	95%	100%	94%	
Graffiti Wipe	80%	100%	95%	100%	94%	
"Red Smooth"						
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	100%	100%	100%	98%	100%	
Graffiti Wipe	100%	90%	100%	98%	97%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	100%	100%	100%	100%	100%	
Graffiti Wipe	100%	100%	100%	100%	100%	
		"Red Velour	,,			
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	100%	100%	98%	98%	99%	
Graffiti Wipe	100%	98%	98%	98%	99%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	100%	100%	100%	100%	100%	
Graffiti Wipe	100%	100%	100%	100%	100%	
		"Riverbend"	,			
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	99%	90%	99%	95%	
Graffiti Wipe	90%	80%	90%	99%	90%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	98%	100%	100%	100%	100%	
Graffiti Wipe	98%	100%	100%	100%	100%	
		"San Marcos	"			
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	85%	98%	98%	98%	95%	
Graffiti Wipe	85%	90%	95%	98%	92%	
Blok-Guard <sup>®</sup> & Graffiti Control	<b>Red Paint</b>	Black Marker	<b>Green Marker</b>	Red Marker	% Avg. Removal	
Fast Acting Stripper	90%	100%	100%	100%	98%	
Graffiti Wipe	95%	100%	100%	100%	99%	
		"Sandstone	,,			
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	95%	90%	20%	90%	74%	
Graffiti Wipe	90%	20%	20%	20%	38%	
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal	
Fast Acting Stripper	98%	95%	95%	95%	96%	
Graffiti Wipe	98%	95%	98%	99%	98%	





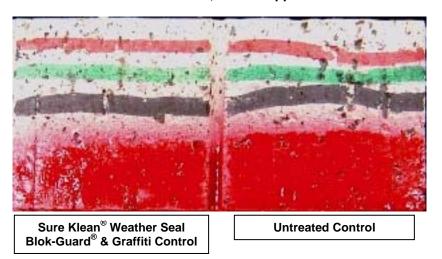
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"Silverstone"							
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	95%	95%	50%	95%	84%		
Graffiti Wipe	90%	20%	50%	40%	50%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	99%	100%	99%	99%	99%		
Graffiti Wipe	99%	100%	99%	98%	99%		
	"Smoke Gray"						
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	95%	95%	60%	80%	83%		
Graffiti Wipe	95%	40%	80%	60%	69%		
Blok-Guard <sup>®</sup> & Graffiti Control	<b>Red Paint</b>	<b>Black Marker</b>	<b>Green Marker</b>	<b>Red Marker</b>	% Avg. Removal		
Fast Acting Stripper	100%	100%	98%	95%	98%		
Graffiti Wipe	100%	99%	98%	95%	98%		
		"Tan"					
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	<b>Red Marker</b>	% Avg. Removal		
Fast Acting Stripper	85%	95%	50%	95%	81%		
Graffiti Wipe	85%	50%	50%	50%	59%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	98%	95%	90%	95%	95%		
Graffiti Wipe	98%	95%	90%	95%	95%		
		"Taupe Gray	,"				
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	<b>Red Marker</b>	% Avg. Removal		
Fast Acting Stripper	85%	90%	60%	90%	81%		
Graffiti Wipe	85%	80%	90%	60%	79%		
Blok-Guard <sup>®</sup> & Graffiti Control	<b>Red Paint</b>	Black Marker	<b>Green Marker</b>	<b>Red Marker</b>	% Avg. Removal		
Fast Acting Stripper	95%	95%	95%	95%	95%		
Graffiti Wipe	95%	95%	95%	95%	95%		
		"Tidewater"	,				
Untreated Control	<b>Red Paint</b>	Black Marker	Green Marker	<b>Red Marker</b>	% Avg. Removal		
Fast Acting Stripper	90%	99%	100%	100%	97%		
Graffiti Wipe	90%	90%	100%	100%	95%		
Blok-Guard <sup>®</sup> & Graffiti Control			Green Marker		% Avg. Removal		
Fast Acting Stripper	95%	100%	100%	100%	99%		
Graffiti Wipe	95%	100%	100%	100%	99%		
		"Winestone	"				
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	90%	95%	90%	98%	93%		
Graffiti Wipe	90%	70%	90%	98%	87%		
Blok-Guard <sup>®</sup> & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal		
Fast Acting Stripper	98%	99%	98%	99%	99%		
Graffiti Wipe	98%	98%	98%	98%	98%		

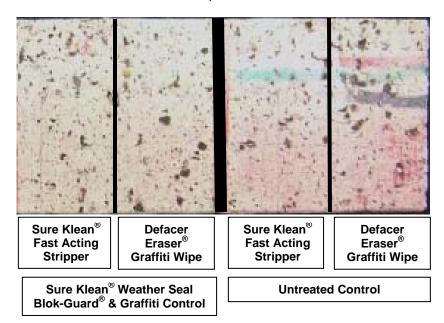


Photographs - Graffiti Control

### "Silverstone"; Graffiti Applied



"Silverstone"; Graffiti Removed







### **Conclusions - Graffiti Control**

Based upon laboratory evaluations, graffiti removal was improved when the submitted samples were treated with Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control prior to graffiti application. In addition, Sure Klean<sup>®</sup> Weather Seal Blok-Guard<sup>®</sup> & Graffiti Control provided a slight enhancement to the natural color of all of the submitted clay brick.

#### Recommendations - Graffiti Control

Recommendations for graffiti control treatment for each type of clay brick submitted by Cunningham Brick Company, Inc., Lexington, NC 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 of clay brick submitted.

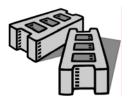
Sample	Graffiti Repellents	Graffiti Removers
All Submitted Clay Brick	Sure Klean <sup>®</sup> Weather Seal Blok- Guard <sup>®</sup> & Graffiti Control	Sure Klean <sup>®</sup> Fast Acting Stripper OR Defacer Eraser <sup>®</sup> Graffiti Wipe

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 procedures for a particular project.

Christopher A. Moore

**Project Testing Laboratory Technician** 

CAM



### Laboratory Report

### **Pallet Tag Program Evaluation**

# Cunningham Brick Company, Inc. Lexington, NC

Project No. 0502-11 PTP

Prepared For:

Cunningham Brick Company, Inc. 701 N Main Street Lexington, NC 27292

Prepared By:



PROSOCO, Inc. April 2005