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Submitted Information

For: Gene Bollinger
cc: Paul Tessier
Ed Nagel
Subject: Summit Brick & Tile Co.
Pueblo, CO
Date:
Project: 0609-11 PTP
Samples Submitted: 8 types of clay pavers

Sample	Color	Finish	Size
"653 Inca Solid"	Red	Wire-cut	4" x 8" x 2 ½"
"751 C Misty Solid"	Beige	Wire-cut	4" x 8" x 2 ½"
"358 HTH Taupe Stone Solid"	Brown/Grey/Tan	Wire-cut	4" x 8" x 2 ½"
"602 TBL Coronado Solid"	Red/Gray/White	Wire-cut	4" x 8" x 2 ½"
"656 Academy Solid"	Red/Brown	Wire-cut	4" x 8" x 2 ½"
"559 DDE Iron Oxide Solid"	Brown/Tan	Wire-cut	4" x 8" x 2 ½"
"702 TBL Concorde Solid"	Gray/Brown/Tan/White	Wire-cut	4" x 8" x 2 ½"
"853 DDE Flint Solid"	Dark Brown/Black	Wire-cut	4" x 8" x 2 ½"

Submitted by: Paul Tessier

Introduction

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

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

Purpose of Testing

Eight types of clay pavers were submitted to AMT Laboratories by PROSOCO, Inc. 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, stain repellents and color and sheen enhancement products suitable for clay pavers were evaluated.

New Construction Cleaning – Sure Klean® Vana Trol® and Paver Kare® Cleaner/Brightener were evaluated for removal of laboratory applied Type N or S mortar while limiting surface alterations to the decorative finish. The surface alteration evaluation was visually determined based upon perceived discoloration or erosion/etching of the samples.

To simulate new construction soiling, the 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 the sample and filled with a wet mixture of Type N or S cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the sample for 10 minutes before removal.

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

A visual examination was also made to determine if the tested cleaners caused any surface alterations to the submitted clay pavers based on the following:

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

Substrate Deterioration is the visual examination of the sample 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 sample.

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

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

Protective Water Repellents – Paver Kare® Penetrating Water Repellent, Paver Kare® Paver Enhancer, and Stand Off® SLX100 Water & Oil Repellent were evaluated on the submitted samples for their ability to provide water repellency.

Stain Repellency – Stand Off® Stone, Tile & Masonry Protector (STMP) and Stand Off® SLX100 Water & Oil Repellent were evaluated on the submitted samples for their ability to repel stains.

Color and Sheen Enhancement – Paver Kare® Sand Joint Stabilizer, Paver Kare® Deep Sheen WB, Paver Kare® Deep Sheen, and Paver Kare® Paver Enhancer were evaluated on the submitted samples for their ability to provide color and/or sheen enhancement.

Products Evaluated**New Construction Cleaning Products Evaluated**

Sample	Product	Dilution
All Submitted Clay Pavers	Sure Klean® Vana Trol®	1:6, 1:8
	Paver Kare® Cleaner/Brightener	1:2, 1:3

Protective Water Repellent Products Evaluated

Sample	Product	Dilution
All Submitted Clay Pavers	Paver Kare® Penetrating Water Repellent	Concentrate
	Stand Off® SLX100 Water & Oil Repellent	Concentrate
	Paver Kare® Paver Enhancer	Concentrate

Stain Repellent Products Evaluated

Sample	Product	Dilution
All Submitted Clay Pavers	Stand Off® Stone, Tile & Masonry Protector (STMP)	Concentrate
	Stand Off® SLX100 Water & Oil Repellent	Concentrate

Color and Sheen Enhancement Products Evaluated

Sample	Product	Dilution
All Submitted Clay Pavers	Paver Kare® Sand Joint Stabilizer	Concentrate
	Paver Kare® Deep Sheen WB	Concentrate
	Paver Kare® Deep Sheen	Concentrate
	Paver Kare® Paver Enhancer	Concentrate

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

New Construction Cleaning

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

Type N cementitious mortar was prepared in compliance with the manufacturer's instructions, applied to the clay pavers and allowed to cure for 7, 14, and 21 days. Type S cementitious mortar was prepared in compliance with the manufacturer's instructions, applied to the clay pavers and allowed to cure for 3, 7, and 14 days. Mortar removal was accomplished using chemical assistance and a high-pressure water rinse with pressure rinsing equipment. The removal of Type N cementitious mortar was visually evaluated after 7, 14, and 21 days of curing. The removal of Type S cementitious mortar was visually evaluated after 3, 7, and 14 days of curing.

Description of Products Evaluated – New Construction Cleaning

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.

Paver Kare® Cleaner/Brightener – Reveals natural color depth and improves color uniformity while cleaning tough construction stains and soiling off new paver installations. Effective for remedial and maintenance cleaning, non-etching Cleaner/Brightener removes mud and rust stains, efflorescence, hard-water scaling, and more. Also improves penetration and bond of water and stain repellent treatments. Liquid concentrate for dilution with 2-3 parts water. Apply by brush, or low-pressure spray.

Test Method – New Construction Cleaning

New construction 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:

Sure Klean® Vana Trol®	3-5 minutes
Paver Kare® Cleaner/Brightener	3-5 minutes
4. Pressure rinse thoroughly.*

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

Test Results – New Construction Cleaning**Cleaning Effectiveness (% Type N Mortar Removal)**

“653 Inca Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	98%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	98%	98%
Paver Kare® Cleaner/Brightener	1:3	100%	98%	100%
“751 C Misty Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“358 HTH Taupe Stone Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	98%
Paver Kare® Cleaner/Brightener	1:3	95%	95%	95%
“602 TBL Coronado Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	98%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	98%	100%
“656 Academy Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	98%	100%
Paver Kare® Cleaner/Brightener	1:2	95%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	95%	98%	100%
“559 DDE Iron Oxide Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	95%	98%	95%
Sure Klean® Vana Trol®	1:8	95%	98%	95%
Paver Kare® Cleaner/Brightener	1:2	95%	98%	95%
Paver Kare® Cleaner/Brightener	1:3	95%	98%	95%
“702 TBL Concorde Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“853 DDE Flint Solid”				
Product	Dilution	7 day	14 day	21 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	98%	98%

Test Results – New Construction Cleaning**Cleaning Effectiveness (% Type S Mortar Removal)**

“653 Inca Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“751 C Misty Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“358 HTH Taupe Stone Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“602 TBL Coronado Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“656 Academy Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“559 DDE Iron Oxide Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“702 TBL Concorde Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%
“853 DDE Flint Solid”				
Product	Dilution	3 day	7 day	14 day
Sure Klean® Vana Trol®	1:6	100%	100%	100%
Sure Klean® Vana Trol®	1:8	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:2	100%	100%	100%
Paver Kare® Cleaner/Brightener	1:3	100%	100%	100%

Test Results – Limiting Surface Alterations

Substrate: Clay Paver		Pigment Color: “653 Inca Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “751 C Misty Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “358 HTH Taupe Stone Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “602 TBL Coronado Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “656 Academy Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “559 DDE Iron Oxide Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0
Substrate: Clay Paver		Pigment Color: “702 TBL Concorde Solid”			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0

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

- | | |
|---------------|---------------|
| 0 – No Change | 3 – Heavy |
| 1 – Slight | 4 – Excessive |
| 2 – Moderate | |

Substrate: Clay Paver		Pigment Color: "853 DDE Flint Solid"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	0	0
Sure Klean® Vana Trol®	1:8	0	0	0	0
Cleaner/Brightener	1:2	0	0	0	0
Cleaner/Brightener	1:3	0	0	0	0

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

0 – No Change

1 – Slight

2 – Moderate

3 – Heavy

4 – Excessive

Photographs – New Construction Cleaning

Type N Mortar

"653 Inca Solid"; 7 Day Cleaning

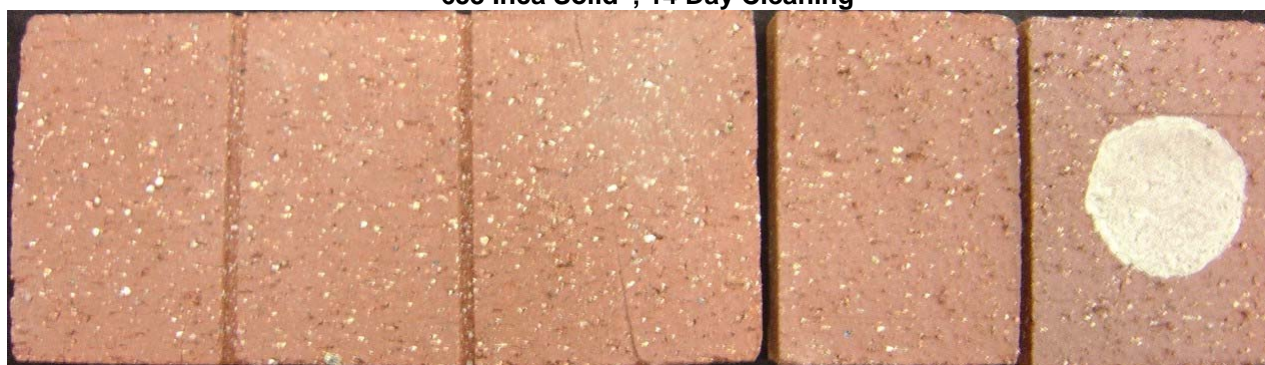


Sure Klean® Vana Trol®
(1:6) and (1:8)

Paver Kare® Cleaner/Brightener
(1:2) and (1:3)

Untreated
Control

"653 Inca Solid"; 14 Day Cleaning



Sure Klean® Vana Trol®
(1:6) and (1:8)

Paver Kare® Cleaner/Brightener
(1:2) and (1:3)

Untreated
Control

Photographs – New Construction Cleaning**Type N Mortar****“653 Inca Solid”; 21 Day Cleaning****Sure Klean[®] Vana Trol[®]
(1:6) and (1:8)****Paver Kare[®] Cleaner/Brightener
(1:2) and (1:3)****Untreated
Control****Type S Mortar****“653 Inca Solid”; 3 Day Cleaning****Sure Klean[®] Vana Trol[®]
(1:6) and (1:8)****Paver Kare[®] Cleaner/Brightener
(1:2) and (1:3)****Untreated
Control**

Photographs – New Construction Cleaning**Type S Mortar****“653 Inca Solid”; 7 Day Cleaning**

**Sure Klean® Vana Trol®
(1:6) and (1:8)**

**Paver Kare® Cleaner/Brightener
(1:2) and (1:3)**

**Untreated
Control**

“653 Inca Solid”; 14 Day Cleaning

**Sure Klean® Vana Trol®
(1:6) and (1:8)**

**Paver Kare® Cleaner/Brightener
(1:2) and (1:3)**

**Untreated
Control**

Photographs – Limiting Surface Alterations**“653 Inca Solid”; Limiting Surface Alterations**

**Sure Klean® Vana Trol®
(1:6) and (1:8)**

**Paver Kare® Cleaner/Brightener
(1:2) and (1:3)**

**Untreated
Control**

Conclusions – New Construction Cleaning

Based on the test results, both dilutions of Sure Klean® Vana Trol® and Paver Kare® Cleaner/Brightener tested performed well in removing excess mortar from the submitted samples. The products tested performed well in removing the Type S and Type N mortar soils even after allowing the mortar to remain on the surface of the samples for 14 and 21 days, respectively, under ideal curing conditions. In addition, test results indicate that the evaluated cleaners caused no noticeable surface alterations to any of the submitted clay pavers.

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 and construction dirt while minimizing any potential surface alterations to the decorative finish.

Recommendations – New Construction Cleaning

Recommendations for cleaning for the clay pavers submitted by Summit Brick & Tile Co., Pueblo, CO 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 S mortar, 14 day cleaning)
All Submitted Clay Pavers	Sure Klean® Vana Trol® (1:6) OR (1:8) OR Paver Kare® Cleaner/Brightener (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

Paver Kare® Penetrating Water Repellent – A VOC-compliant protective treatment perfect for concrete, clay and most stone pavers. An environmentally friendly silane/siloxane liquid water-repellent and “chloride screen,” Penetrating Water Repellent penetrates more deeply than conventional water- or solvent-based water repellents. It helps keep pavers safe from cracking and spalling by preventing repeated wet/dry and freeze/thaw cycles caused by penetration of water and water-carried salts.

Stand Off® SLX100 Water & Oil Repellent – Combines water and oil repellency on most substrates to prevent staining by waterborne and oily substances. This modified “neat” silane system offers invisible protection and low volatility. The small molecular structure of SLX100 allows for maximum penetration at coverage rates higher than that of conventional silanes. Depth of penetration is controlled by the application rate (loading rate). This makes SLX100 ideal for protecting granite and other dense, color-sensitive surfaces.

Paver Kare® Paver Enhancer – A solvent-based blend of high-quality siloxanes modified to provide excellent water repellency and color enhancement to interlocking concrete, fired clay, porous tile and many types of natural stone surfaces. Paver Enhancer penetrates and reacts with the surface to form a chemical bond, providing long-term durability, alkali resistance and superior breatheability.

Sample Preparation – Protective Water Repellents

The submitted samples were scored and allowed to dry for at least 24 hours prior to treatment. All treatments were applied by brush in accordance with the current PROSOCO, Inc. Product Data Sheet application instructions. All treatments were allowed to cure for at least 14 days prior to testing.

Test Methods – Protective Water Repellents**Water Absorption Tube Test: Horizontal 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 vertical 5.0-milliliter head pressures. Filled to 5.0 milliliters, a water absorption tube produces a 103 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 5.0 mL of water or more, then:

A rating of **AA** *Above Average* water repellent performance would be reported for treatments which result in a loss of no more than:

$$5.0 \text{ mL} \times 20\% = \mathbf{1.0 \text{ mL}}$$

A rating of **A** *Average* water repellent performance would be reported for treatments which result in a loss of no more than:

$$5.0 \text{ mL} \times 50\% = \mathbf{2.5 \text{ mL}}$$

A rating of **BA** *Below Average* water repellent performance would be reported for treatments which result in a loss of more than:

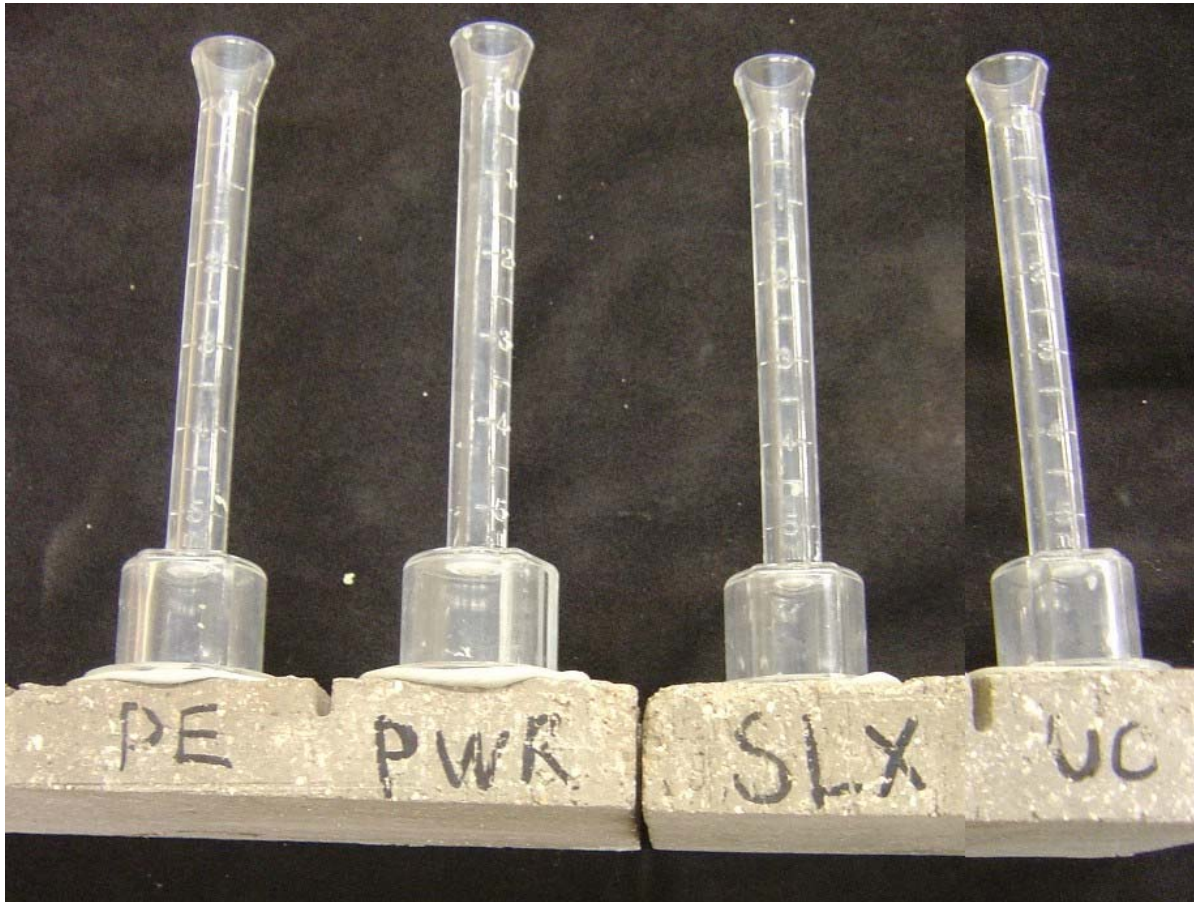
$$5.0 \text{ mL} \times 50\% = \mathbf{2.5 \text{ mL}}$$

Test Results – Protective Water Repellents**Water Absorption Tube Test: Horizontal RILEM II.4, 5.0 milliliters, 20 minutes****AA** = Above Average**A** = Average**BA** = Below Average

“653 Inca Solid”	Results in mL loss	Ranking
Untreated Control	3.6	--
Paver Kare® Penetrating Water Repellent	0.7	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.0	<u>AA</u>
“751 C Misty Solid”	Results in mL loss	Ranking
Untreated Control	1.8	--
Paver Kare® Penetrating Water Repellent	0.8	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.3	<u>AA</u>
Paver Kare® Paver Enhancer	0.1	<u>AA</u>
“358 HTH Taupe Stone Solid”	Results in mL loss	Ranking
Untreated Control	0.4	--
Paver Kare® Penetrating Water Repellent	0.1	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.0	<u>AA</u>
“602 TBL Coronado Solid”	Results in mL loss	Ranking
Untreated Control	1.9	--
Paver Kare® Penetrating Water Repellent	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.0	<u>AA</u>
“656 Academy Solid”	Results in mL loss	Ranking
Untreated Control	2.0	--
Paver Kare® Penetrating Water Repellent	0.1	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.0	<u>AA</u>
“559 DDE Iron Oxide Solid”	Results in mL loss	Ranking
Untreated Control	3.9	--
Paver Kare® Penetrating Water Repellent	0.2	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.6	<u>AA</u>
“702 TBL Concorde Solid”	Results in mL loss	Ranking
Untreated Control	1.8	--
Paver Kare® Penetrating Water Repellent	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer	0.0	<u>AA</u>
“853 DDE Flint Solid”	Results in mL loss	Ranking
Untreated Control	3.3	--
Paver Kare® Penetrating Water Repellent	0.2	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.3	<u>AA</u>
Paver Kare® Paver Enhancer	0.4	<u>AA</u>

Photographs – Protective Water Repellents

“702 TBL Concorde Solid”; Horizontal RILEM II.4, 5.0 milliliters, 20 minutes



**Paver Kare®
Paver Enhancer**

**Paver Kare®
Penetrating Water
Repellent**

**Stand Off®
SLX100 Water &
Oil Repellent**

**Untreated
Control**

Conclusions – Protective Water Repellents

Test results indicate that Stand Off® SLX100 Water & Oil Repellent provided above average water repellency to all of the submitted samples. Paver Kare® Penetrating Water Repellent and Paver Kare® Paver Enhancer provided average to above average water repellency to all of the submitted samples. None of the treatments altered the appearance of the samples in any way.

Recommendations – Protective Water Repellents

Recommendations for water repellency treatment for the clay pavers submitted by Summit Brick & Tile Co., Pueblo, CO are provided in the chart below. Recommendations are based on the treatment that proved most effective and can provide water repellency on all types submitted.

Sample	Protective Water Repellents
“653 Inca Solid”, “602 TBL Coronado Solid”, “656 Academy Solid”, “559 DDE Iron Oxide Solid”, “702 TBL Concorde Solid” and “853 DDE Flint Solid”	Paver Kare® Penetrating Water Repellent OR Stand Off® SLX100 Water & Oil Repellent OR Paver Kare® Paver Enhancer
“751 C Misty Solid” and “358 HTH Taupe Stone Solid”	Stand Off® SLX100 Water & Oil Repellent OR Paver Kare® Paver Enhancer

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.

Stain Repellency

These trials were conducted to determine the effectiveness of treatments in preventing food, oil, and miscellaneous staining on the submitted samples.

Description of Products Evaluated – Stain Repellency

Stain Repellent Treatments

Stand Off® Stone, Tile & Masonry Protector (STMP) – A penetrating oil and stain repellent that is an easy-to-use, low-VOC, low-odor protective treatment improves the stain resistance and simplifies maintenance cleaning of interior and exterior stone, quarry tile, concrete and masonry surfaces.

Stand Off® SLX100 Water & Oil Repellent – Combines water and oil repellency on most substrates to prevent staining by waterborne and oily substances. This modified “neat” silane system offers invisible protection and low volatility. The small molecular structure of SLX100 allows for maximum penetration at coverage rates higher than that of conventional silanes. Depth of penetration is controlled by the application rate (loading rate). This makes SLX100 ideal for protecting granite and other dense, color-sensitive surfaces.

Maintenance Cleaner

Enviro Klean® 2010 All Surface Cleaner – A “next-generation” product for cleaning and degreasing light-to-heavily soiled stone, tile, masonry and much more. Powerful enough for industrial use, flexible enough for jobs around the home, space-saving EK 2010 replaces a host of individual cleaning agents. It is suitable for home-use on windows, bathroom tub and tile, counter tops and more when diluted with water. It's concentrated enough for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces. EK 2010 also removes Paver Kare® Weather Seal Siloxane PD overspray from windows.

Staining Agents Evaluated

<u>Products</u>	<u>Temperature</u>
Coca Cola	ambient (~70°F)
Ketchup	ambient (~70°F)
Mustard	ambient (~70°F)
Red Wine	ambient (~70°F)
Balsamic Vinegar	ambient (~70°F)
Soy Sauce	ambient (~70°F)
Olive Oil	ambient (~70°F)
Wesson Oil	(~250°F)
Coffee	(~120°F)

Sample Preparation – Stain Repellency

Samples were cleaned with Enviro Klean® 2010 All Surface Cleaner diluted with 10 parts water and allowed to dry for 24 hours prior to treatment. The protective treatments were then applied by brush in accordance with the current PROSOCO, Inc. Product Data Sheet application instructions. The treatments were allowed to cure on the samples for at least 72 hours before testing.

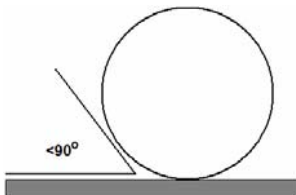
Test Method – Stain Repellency**Surface Beading Evaluation**

The food and oil products were applied to the test areas by using a dropper creating a bead 0.5 – 1.0 cm in diameter. The beading properties of the oils and liquids were visually evaluated within two minutes after application. The results are reported as a rating based on the angle of contact between the base of the droplet and the substrate. A rating of “1 or 2” indicated the smallest angle of contact ($<90^\circ$) which correlates to “above average” repellency. A rating of “3 or 4” indicates “average” repellency. A rating of “5” indicated that the food or oil quickly absorbed into the substrate and correlates to “below average” repellency.

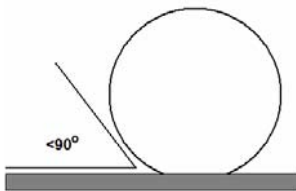
Note: Non-free flowing staining agents such as ketchup and mustard are applied in a globular fashion and therefore are not evaluated for their beading properties.

Rating System (1-5)

1. No wetting of contact area (no darkening); angle less than 90° .



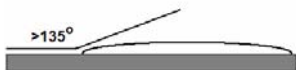
2. Wetting contained to the contact area (slight darkening); angle is less than 90° .



3. Wetting contained to the contact area (slight darkening); angle is greater than 90° , but less than 135° .



4. Wetting beyond the contact area (darkening); angle is greater than 135° .



5. Wetting beyond the contact area (darkening); angle is flat.

**Stain Removal Evaluation**

The soiling agents were allowed to dwell on the treated and untreated substrates for times of 24 hours*. The test areas were then cleaned with Enviro Klean® 2010 All Surface Cleaner diluted 1 part concentrate to 10 parts fresh water and scrubbed under a stream of running water from a faucet. Samples were allowed to dry for 24 hours. Evaluation consisted of a visual examination of the tested areas to determine the percentage of staining removal.

***NOTE: Only one dwell time, 24 hours, was used in this evaluation. Normally, dwell times consist of 24 hours, 4 hours, 1 hour, and 10 minutes.**

Test Results – Surface Beading

“653 Inca Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	3	-	-	1	2	3	2	2	2
SLX100	2	-	-	1	1	1	2	2	1
“751 C Misty Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	3	-	-	5	5	5	5	5	4
STMP	1	-	-	3	2	1	2	2	2
SLX100	1	-	-	2	2	2	2	2	2
“358 HTH Taupe Stone Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	3	-	-	3	3	2	1	1	4
SLX100	1	-	-	2	2	2	2	2	2
“602 TBL Coronado Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	3	-	-	3	3	2	2	2	3
SLX100	1	-	-	1	1	1	1	1	3
“656 Academy Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	4
STMP	3	-	-	3	3	2	2	2	3
SLX100	1	-	-	2	2	2	3	2	2
“559 DDE Iron Oxide Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	5	-	-	3	3	1	2	2	3
SLX100	1	-	-	1	1	1	2	2	2
“702 TBL Concorde Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	2	-	-	3	3	2	2	2	3
SLX100	1	-	-	1	1	1	2	2	3
“853 DDE Flint Solid”									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
STMP	3	-	-	3	3	2	2	2	3
SLX100	1	-	-	2	2	2	2	2	3

***NOTE:** Only one dwell time, 24 hours, was used in this evaluation. Normally, dwell times consist of 24 hours, 4 hours, 1 hour, and 10 minutes.

Test Results – Stain Repellency**% Removal**

“653 Inca Solid”									
Untreated Control									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	50%	50%	100%	100%	100%	50%	50%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
“751 C Misty Solid”									
Untreated Control									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	50%	50%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
“358 HTH Taupe Stone Solid”									
Untreated Control									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	50%	50%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	75%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%

***NOTE:** Only one dwell time, 24 hours, was used in this evaluation. Normally, dwell times consist of 24 hours, 4 hours, 1 hour, and 10 minutes.

Test Results – Stain Repellency**% Removal**

“602 TBL Coronado Solid”									
Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
“656 Academy Solid”									
Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	50%	75%	100%	100%	100%	50%	50%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	90%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	75%	100%	100%	100%	100%	100%	100%	100%
“559 DDE Iron Oxide Solid”									
Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	75%	80%	100%	100%	100%	50%	50%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%

***NOTE:** Only one dwell time, 24 hours, was used in this evaluation. Normally, dwell times consist of 24 hours, 4 hours, 1 hour, and 10 minutes.

Test Results – Stain Repellency**% Removal**

“702 TBL Concorde Solid”									
Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	50%	50%	100%	100%	100%	50%	50%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	75%	75%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	50%	50%	100%
“853 DDE Flint Solid”									
Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	90%	75%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	90%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%

*NOTE: Only one dwell time, 24 hours, was used in this evaluation. Normally, dwell times consist of 24 hours, 4 hours, 1 hour, and 10 minutes.

Photographs – Stain Repellency

“751 C Misty Solid”; Stains Removed



**Stand Off® SLX100 Water &
Oil Repellent**

**Stand Off® Stone, Tile &
Masonry Protector (STMP)**

Untreated Control

Conclusions – Stain Repellency

Based upon laboratory evaluations, both Stand Off® SLX100 Water & Oil Repellent and Stand Off® Stone, Tile & Masonry Protector (STMP) improved the surface beading of the samples. In addition, both treatments were effective in repelling the staining agents from the samples, especially the oils. Neither Stand Off® SLX100 Water & Oil Repellent nor Stand Off® Stone, Tile & Masonry Protector (STMP) caused any change to the appearance of the submitted samples.

Recommendations – Stain Repellency

Recommendations for stain repellency treatment for the clay pavers submitted by Summit Brick & Tile Co., Pueblo, CO are provided in the chart below. Recommendations are based on the treatments that proved most effective for providing stain repellency on the submitted clay pavers.

Sample	Stain Repellent	Maintenance Cleaner
All Submitted Clay Pavers	Stand Off® SLX100 Water & Oil Repellent OR Stand Off® Stone, Tile & Masonry Protector (STMP)	Enviro Klean® 2010 All Surface Cleaner (1:10)

The ability of a stain repellent treatment to prevent staining is affected by a variety of 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 stain repellent product and procedures for a particular project. See product literature for additional application and product information.

Color and Sheen Enhancement

This evaluation compares the effectiveness of the evaluated products in providing color enhancement to the submitted samples.

Description of Products Evaluated – Color and Sheen Enhancement

Paver Kare® Sand Joint Stabilizer – A durable, blended polymer which controls erosion of loose sand joints commonly employed with interlocking concrete pavers, clay pavers, natural stone or decorative concrete paving. Sand Joint Stabilizer also consolidates loose sand joints and protects treated paving from water penetration and related staining. Loose laid paved surfaces treated with Sand Joint Stabilizer resist weed growth and are easier to maintain.

Sand Joint Stabilizer's water-based formula offers several improvements on similar solvent-based products. No solvent odor, easy soap-and-water cleanup, and reduced fire-hazard make the treatment safe and easy to use, as well as effective. In addition, Sand Joint Stabilizer complies with all known regulations limiting Volatile Organic Compound (VOC) content.

Paver Kare® Deep Sheen WB – The perfect treatment for concrete, clay or stone pavers, inside or out. This durable, water-borne protective treatment weather- and stain-proofs new or newly cleaned pavers, giving them a premium, vibrant gloss and shine. This water-borne treatment complies with all known AIM VOC regulations nationwide.

Deep Sheen WB's glossy finish guards pavers against etching and staining from acidic and alkaline contaminants, including food, drinks, cleaning chemicals and more. Fast-drying, non-blushing and non-yellowing, Deep Sheen WB is ideal for paver installations of any size – new or old.

Paver Kare® Deep Sheen – The perfect treatment for pavers, inside or out. This durable protective treatment weather- and stain-proofs new or newly cleaned pavers, giving them a premium, vibrant gloss and shine. Not just for concrete, Deep Sheen adds luster and brings out the real beauty of clay and stone pavers, too. Highly tested Deep Sheen will not “yellow,” blush or dull-out.

Paver Kare® Paver Enhancer – A solvent-based blend of high-quality siloxanes modified to provide excellent water repellency and color enhancement to interlocking concrete, fired clay, porous tile and many types of natural stone surfaces. Paver Enhancer penetrates and reacts with the surface to form a chemical bond, providing long-term durability, alkali resistance and superior breatheability.

Sample Preparation – Color and Sheen Enhancement

Samples were cleaned with Enviro Klean® 2010 All Surface Cleaner diluted with 10 parts water and allowed to dry for at least 24 hours prior to treatment.

Test Method – Color and Sheen Enhancement

Paver Kare® Sand Joint Stabilizer, Paver Kare® Deep Sheen WB, Paver Kare® Deep Sheen, and Paver Kare® Paver Enhancer were applied by brush in accordance with the current PROSOCO, Inc. Product Data Sheet application instructions. After 24 hours, a visual evaluation was made comparing the untreated surface to the treated surfaces.

Test Results – Color and Sheen Enhancement

“653 Inca Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	1
Paver Kare® Deep Sheen WB	3	3
Paver Kare® Deep Sheen	2	2
Paver Kare® Paver Enhancer	1	0
“751 C Misty Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	1	1
Paver Kare® Deep Sheen WB	2	3
Paver Kare® Deep Sheen	1	2
Paver Kare® Paver Enhancer	1	0
“358 HTH Taupe Stone Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	2
Paver Kare® Deep Sheen WB	3	3
Paver Kare® Deep Sheen	2	2
Paver Kare® Paver Enhancer	1	0
“602 TBL Coronado Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	2
Paver Kare® Deep Sheen WB	2	3
Paver Kare® Deep Sheen	2	2
Paver Kare® Paver Enhancer	1	0
“656 Academy Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	1
Paver Kare® Deep Sheen WB	3	3
Paver Kare® Deep Sheen	3	2
Paver Kare® Paver Enhancer	1	0
“559 DDE Iron Oxide Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	1
Paver Kare® Deep Sheen WB	3	3
Paver Kare® Deep Sheen	3	1
Paver Kare® Paver Enhancer	1	0
“702 TBL Concorde Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	1	2
Paver Kare® Deep Sheen WB	2	3
Paver Kare® Deep Sheen	1	1
Paver Kare® Paver Enhancer	1	0

Scale: 0 – No Enhancement; Dull
 1 – Slight Enhancement
 2 – Moderate Enhancement
 3 – Significant Enhancement

Test Results – Color and Sheen Enhancement

“853 DDE Flint Solid”		
Treatment	Color Enhancement	Sheen Enhancement
Paver Kare® Sand Joint Stabilizer	2	1
Paver Kare® Deep Sheen WB	3	3
Paver Kare® Deep Sheen	2	2
Paver Kare® Paver Enhancer	1	0

Scale: 0 – No Enhancement; Dull
 1 – Slight Enhancement
 2 – Moderate Enhancement
 3 – Significant Enhancement

Photographs – Color and Sheen Enhancement**“853 DDE Flint Solid”; Treatments Applied**

Untreated Control

Paver Kare® Sand
Joint StabilizerPaver Kare® Deep
SheenPaver Kare® Deep
Sheen WBPaver Kare® Paver
EnhancerPaver Kare®
Penetrating Water
Repellent

Recommendations – Color and Sheen Enhancement

Recommendations for color enhancement for the clay pavers submitted by Summit Brick & Tile Co., Pueblo, CO are provided in the chart below. Recommendations are based on the treatment that proved most effective in providing color and/or sheen enhancement to the submitted samples.

Sample	Color Enhancement	Sheen Enhancement
"602 TBL Coronado Solid"	Paver Kare® Sand Joint Stabilizer OR Paver Kare® Deep Sheen WB OR Paver Kare® Deep Sheen	Paver Kare® Deep Sheen WB
"656 Academy Solid" and "559 DDE Iron Oxide Solid"	Paver Kare® Deep Sheen WB OR Paver Kare® Deep Sheen	Paver Kare® Deep Sheen WB
"653 Inca Solid", "751 C Misty Solid", "853 DDE Flint Solid", "358 HTH Taupe Stone Solid" and "702 TBL Concorde Solid"	Paver Kare® Deep Sheen WB	Paver Kare® Deep Sheen WB

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



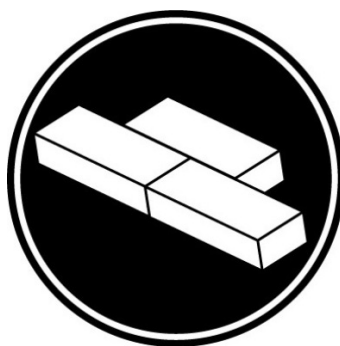
John Lancaster
Project Testing Laboratory Technician



PALLET TAG PROGRAM

Laboratory Report

Summit Brick & Tile Co.
Thirteenth and Erie
Pueblo, CO 81001



Project No. 0609-11 PTP

Prepared For:
PROSOCO
SINCE 1939

Prepared By:
AMT Laboratories
October 2006