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Submitted Information

For: Jeff Lucas
Cc: Gary Hayes
 Brian Koenings

Subject: Stone Center of Indiana, Inc.
 Indianapolis, IN

Date: August 14, 2008

Project: 0806-08 PTP

Samples Submitted: 21 types of natural stone in various sizes, shapes, and colors

Sample	Type	Color	Size
"Penn Irregular"	Irregular quartzitic sandstone	Lilac	Various
"Chilton Irregular"	Dolomitic Limestone	Blue gray w/ some reds & lavenders	Various
"Lannon Irregular"	Irregular Dolomitic Limestone	Cream w/ some reds & lavenders	Various
"Tenn Blue"	Quartzitic sandstone	Blue	Various
"Gray Gorge"	Limestone	Gray to dark gray	Various
"Chocolate Flag Irregular"	Sandstone	Dark brown w/ some blacks & buffs	Various
"Tenn Irregular"	Quartzitic sandstone	Earth tones w/ some pinks	Various
"Hampton"	Sandstone	Deep lilac	11 ½" x 11 ½" x 1"
"Bronte"	Sandstone	Brown w/ buffs & tans	11 ½" x 11 ½" x 1"
"Teakwood"	Sandstone	Yellow & rust	11 ½" x 11 ½" x 1"
"Chocolate Pattern"	Sandstone	Lilac to brown	11 ½" x 11 ½" x 1"
"Sheffield"	Sandstone	Blue green	11 ½" x 11 ½" x 1"
"Brown Wave"	Sandstone	Brown to deep lavender	11 ½" x 11 ½" x 1"
"Pennsylvania Pattern"	Quartzitic sandstone	Blue gray	11 ½" x 11 ½" x 1"
"Tumbled Garden Path"	Quartzitic sandstone	Blue gray to green	Various
"Penn Green"	Irregular quartzitic sandstone	Light to dark green w/ some browns & rust	Various
"Mesa Flats"	Sandstone	Blonde to peach	Various
"Iron Mountain"	Sandstone	Light brown w/ black, buffs & tans	Various
"Red Slate"	Slate	Red	Various
"Purple Slate"	Slate	Purple	Various
"Green Slate"	Slate	Green	Various

Submitted by: Jeff Lucas

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

Twenty one types of natural stone samples were submitted to AMT Laboratories by PROSOCO, Inc. with a request to determine if application of the products evaluated will produce any surface alterations during new construction cleaning operations. Additionally, the effectiveness of water repellents, stain repellents, and color and sheen enhancement products suitable for natural stone were evaluated.

New Construction Cleaning – Sure Klean® Vana Trol® was tested at various dilutions to determine the optimum cleaner/cure time combination for complete removal of laboratory applied Type S mortar from the submitted natural stone while limiting surface alterations. 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 samples and filled with a wet mixture of Type S cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the samples for 10 minutes before removal.

Heavy deposits of mortar were removed with dry scraping after 24 hours. Prepared cleaning solutions were then evaluated for their effectiveness in removing residual Type S mortar 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 samples 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 – Sure Klean® Weather Seal Natural Stone Treatment WB, Stand Off® SLX100 Water & Oil Repellent, Paver Kare® Paver Enhancer WB, Paver Kare® Sand Joint Stabilizer, and Consolideck® Saltguard® WB were evaluated for their ability to provide water repellency to the submitted natural stone.

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

Color and Sheen Enhancement – Sure Klean® Weather Seal Natural Stone Treatment WB, Stand Off® SLX100 Water & Oil Repellent, Paver Kare® Paver Enhancer WB, Paver Kare® Sand Joint Stabilizer, and Consolideck® Saltguard® WB were evaluated on the submitted natural stone for their ability to provide color and/or sheen enhancement.

Products Evaluated**New Construction Cleaning Products Evaluated**

Sample	Product	Dilution
All Submitted Natural Stone Samples	Sure Klean® Vana Trol®	1:6, 1:8

Protective Water Repellent & Color and Sheen Enhancement Products Evaluated

Sample	Product	Dilution
All Submitted Slate Samples	Stand Off® SLX100 Water & Oil Repellent	Concentrate
	Paver Kare® Paver Enhancer WB	Concentrate
	Paver Kare® Sand Joint Stabilizer	Concentrate
	Consolideck® Saltguard® WB	Concentrate
All Other Submitted Natural Stone Samples	Sure Klean® Weather Seal Natural Stone Treatment WB	Concentrate
	Stand Off® SLX100 Water & Oil Repellent	Concentrate
	Paver Kare® Paver Enhancer WB	Concentrate
	Paver Kare® Sand Joint Stabilizer	Concentrate
	Consolideck® Saltguard® WB	Concentrate

Stain Repellency Products Evaluated

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

New Construction Cleaning

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

Type S cementitious mortar was prepared in compliance with the manufacturer's instructions, applied to the natural stone surface and allowed to cure for 3, 7, and 14 days. Mortar removal was accomplished using chemical assistance and a high-pressure water rinse with pressure rinsing equipment. The removal of 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.

Sample Preparation – New Construction Cleaning

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

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
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 S Mortar Removal)**

“Penn Irregular”				
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 %
“Chilton Irregular”				
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 %
“Lannon Irregular”				
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 %
“Tenn Blue”				
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 %
“Gray Gorge”				
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 %
“Chocolate Flag Irregular”				
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 %
“Tenn Irregular”				
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 %
“Hampton”				
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 %
“Bronte”				
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 %
“Teakwood”				
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 %
“Chocolate Pattern”				
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 %

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

“Sheffield”				
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 %
“Brown Wave”				
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 %
“Pennsylvania Pattern”				
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 %
“Tumbled Garden Path”				
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 %
“Penn Green”				
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 %
“Mesa Flats”				
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 %
“Iron Mountain”				
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 %
“Red Slate”				
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 %
“Purple Slate”				
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 %
“Green Slate”				
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 %

Test Results – Limiting Surface Alterations

“Penn Irregular”					
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
“Chilton Irregular”					
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
“Lannon Irregular”					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	2	0
Sure Klean® Vana Trol®	1:8	0	0	2	0
“Tenn Blue”					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	1	0
Sure Klean® Vana Trol®	1:8	0	0	1	0
“Gray Gorge”					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	1	0
Sure Klean® Vana Trol®	1:8	0	0	1	0
“Chocolate Flag Irregular”					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	1	0
Sure Klean® Vana Trol®	1:8	0	0	1	0
“Tenn Irregular”					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean® Vana Trol®	1:6	0	0	1	0
Sure Klean® Vana Trol®	1:8	0	0	1	0
“Hampton”					
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
“Bronte”					
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
“Teakwood”					
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

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

Test Results – Limiting Surface Alterations

“Sheffield”					
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
“Brown Wave”					
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
“Pennsylvania Pattern”					
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
“Tumbled Garden Path”					
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
“Penn Green”					
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
“Mesa Flats”					
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
“Iron Mountain”					
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
“Red Slate”					
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
“Purple Slate”					
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
“Green Slate”					
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

0 – No Change

1 – Change – Slight

2 – Change – Moderate

3 – Change – Heavy

4 – Change – Excessive

Photographs – New Construction Cleaning**“Bronte” Sandstone; 3 Day Cleaning; Type S Mortar**

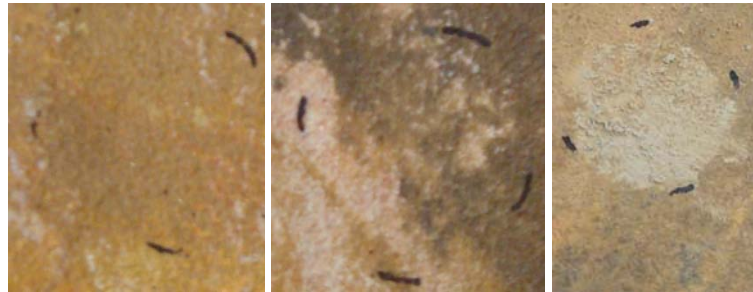
Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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“Bronte” Sandstone; 7 Day Cleaning; Type S Mortar

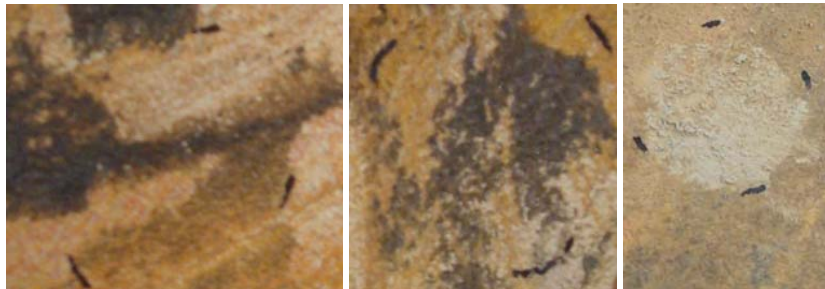
Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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“Bronte” Sandstone; 14 Day Cleaning; Type S Mortar

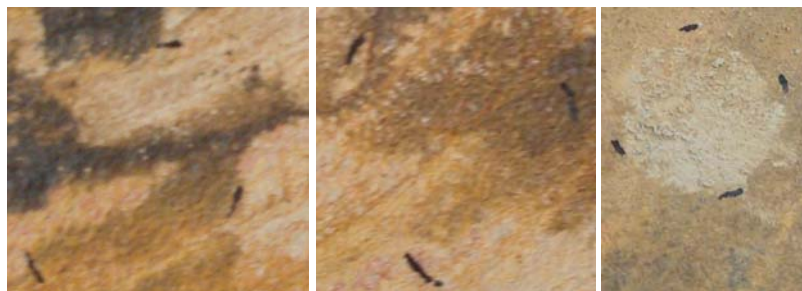
Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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Photographs – New Construction Cleaning**“Tenn Irregular” Quartzitic Sandstone; 3 Day Cleaning; Type S Mortar**

Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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“Tenn Irregular” Quartzitic Sandstone; 7 Day Cleaning; Type S Mortar

Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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“Tenn Irregular” Quartzitic Sandstone; 14 Day Cleaning; Type S Mortar

Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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Photographs – Limiting Surface Alterations**“Gray Gorge” Limestone; Type S Mortar**

Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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“Chocolate Pattern” Limestone; Type S Mortar

Sure Klean® Vana Trol® (1:6)	Sure Klean® Vana Trol® (1:8)	Untreated Control
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Conclusions – New Construction Cleaning

Based on the test results, Sure Klean® Vana Trol® removed all of the excess mortar from the submitted natural stone samples. Sure Klean® Vana Trol® performed well in removing the mortar soils even after allowing the mortar to remain on the surface of the samples for 14 days for type S mortar under ideal curing conditions. Both dilutions of Sure Klean® Vana Trol® caused a slight color change to the surface of a few natural stone samples. It is recommended that the selected cleaners always be used in the lowest possible concentration.

Recommendations – New Construction Cleaning

Recommendations for cleaning for the natural stone submitted by Stone Center of Indiana, Indianapolis, IN 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 Natural Stone Samples	Sure Klean® Vana Trol® (1:8)

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 Natural Stone Treatment WB - A low odor, water-based solution of potassium methyl silicate developed to effectively treat a wide range of natural stone and masonry surfaces. Natural Stone Treatment WB provides long-lasting repellency without altering the natural appearance of the substrate. Natural Stone Treatment WB is used as a surface treatment on natural stone and masonry surfaces to impart a water-repellent surface and reduce water absorption into the substrate. Unlike conventional silicate water repellents, Natural Stone Treatment WB has been developed to help prevent surface staining during application.

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 WB - A long-lasting, penetrating water repellent used for enhancing the natural color of most clay, concrete and porous natural stone paving, new or old. This water-based blend of siloxane resins increases paver service-life by providing protection against weather- and water-borne staining and soiling. It also helps pavers resist damage from destructive de-icing salts. Paver Enhancer WB is ideal for interlocking concrete, clay and integrally colored concrete paving, indoors or out. It will not alter the natural texture of treated surfaces.

Paver Kare® Sand Joint Stabilizer - Controls erosion of loose sand joints commonly employed with interlocking concrete pavers, clay pavers, natural stone or decorative concrete paving. This durable, blended polymer consolidates loose sand joints and protects treated paving from water penetration and related staining. Dry-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.

Consolideck® Saltguard® WB – A ready-to-use water-based, VOC compliant silane/siloxane water repellent and “chloride screen” for the protection of concrete and masonry surfaces. Saltguard® WB penetrates more deeply than conventional water- or solvent-based water repellents. Low odor and alkaline stable, Saltguard® WB is ideal for field or in-plant application to concrete and most masonry surfaces. Saltguard® WB protects horizontal and vertical surfaces from moisture intrusion and chemical attack of chloride salts.

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 72 hours 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 windblown 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**

“Penn Irregular”	Results in mL loss	Ranking
Untreated Control	0.3	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.2	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Chilton Irregular”	Results in mL loss	Ranking
Untreated Control	0.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.3	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.2	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Lannon Irregular”	Results in mL loss	Ranking
Untreated Control	0.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.1	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.3	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.5	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Tenn Blue”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.2	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.2	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>

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

“Gray Gorge”	Results in mL loss	Ranking
Untreated Control	0.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.3	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Chocolate Flag Irregular”	Results in mL loss	Ranking
Untreated Control	3.3	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.5	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.5	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Tenn Irregular”	Results in mL loss	Ranking
Untreated Control	0.9	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.2	<u>AA</u>
Consolideck® Saltguard® WB	0.1	<u>AA</u>
“Hampton”	Results in mL loss	Ranking
Untreated Control	0.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.5	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.1	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>

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

“Bronte”	Results in mL loss	Ranking
Untreated Control	0.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.5	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.3	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.2	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Teakwood”	Results in mL loss	Ranking
Untreated Control	5.0	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.1	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.1	<u>AA</u>
Paver Kare® Paver Enhancer WB	3.3	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.3	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Chocolate Pattern”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.05	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.2	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.1	<u>A</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.05	<u>A</u>
“Sheffield”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.3	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.3	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.1	<u>A</u>
Paver Kare® Sand Joint Stabilizer	0.1	<u>A</u>
Consolideck® Saltguard® WB	0.2	<u>BA</u>

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

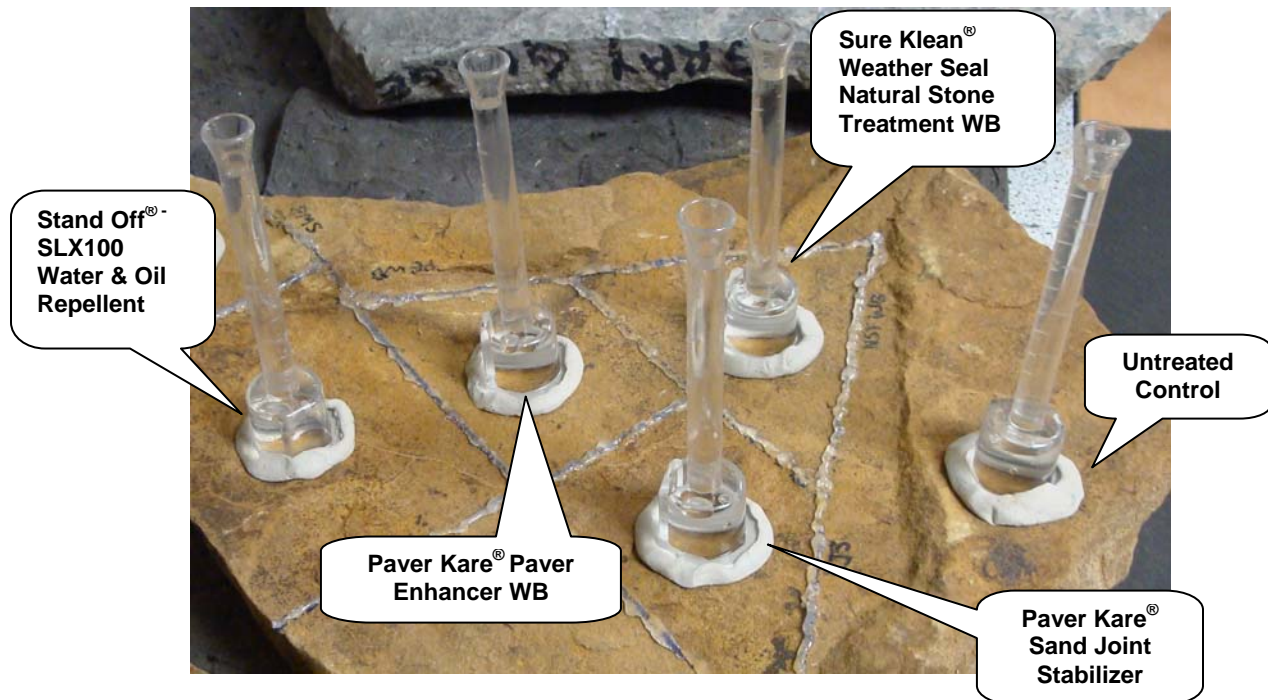
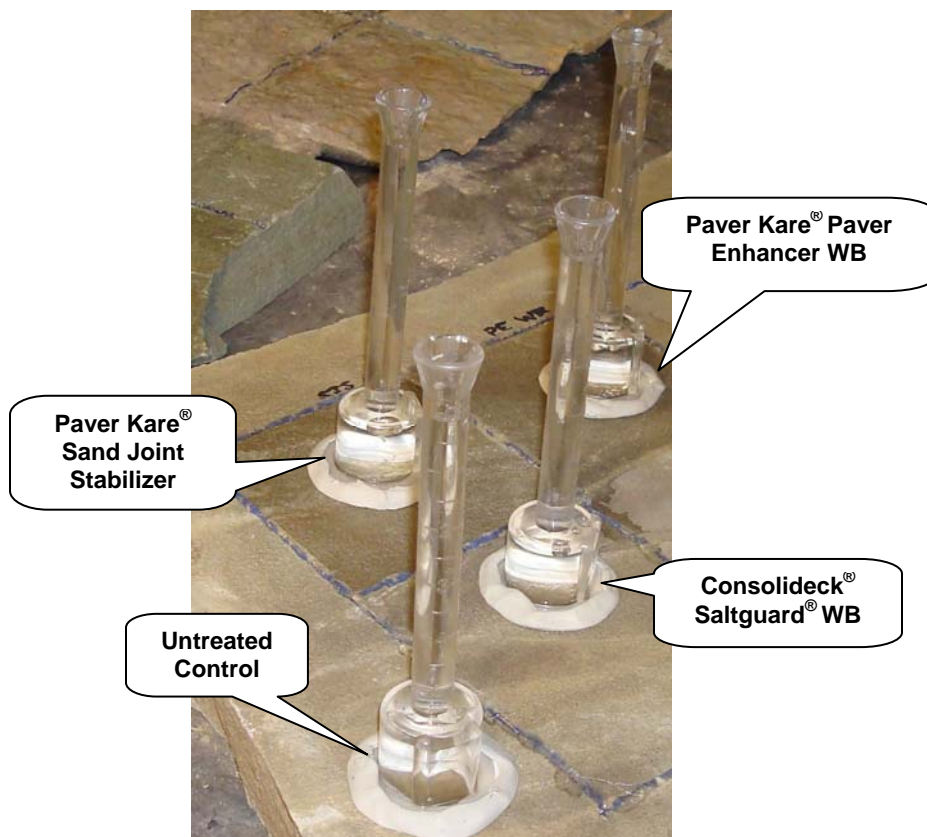
“Brown Wave”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.1	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.5	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.1	<u>A</u>
Consolideck® Saltguard® WB	0.2	<u>BA</u>
“Pennsylvania Pattern”	Results in mL loss	Ranking
Untreated Control	0.4	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.1	<u>A</u>
Paver Kare® Paver Enhancer WB	0.2	<u>A</u>
Paver Kare® Sand Joint Stabilizer	0.1	<u>A</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Tumbled Garden Path”	Results in mL loss	Ranking
Untreated Control	0.1	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.05	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.05	<u>A</u>
Paver Kare® Paver Enhancer WB	0.1	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.1	<u>BA</u>
Consolideck® Saltguard® WB	0.1	<u>BA</u>
“Penn Green”	Results in mL loss	Ranking
Untreated Control	0.1	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.0	<u>AA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.1	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.2	<u>BA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>

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**

“Mesa Flats”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.1	<u>A</u>
Stand Off® SLX100 Water & Oil Repellent	0.2	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.2	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.1	<u>A</u>
Consolideck® Saltguard® WB	0.05	<u>AA</u>
“Iron Mountain”	Results in mL loss	Ranking
Untreated Control	0.2	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0.3	<u>BA</u>
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.2	<u>BA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>
“Red Slate”	Results in mL loss	Ranking
Untreated Control	0.0	--
Stand Off® SLX100 Water & Oil Repellent	0.1	<u>BA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.1	<u>BA</u>
“Purple Slate”	Results in mL loss	Ranking
Untreated Control	0.0	--
Stand Off® SLX100 Water & Oil Repellent	0.0	<u>AA</u>
Paver Kare® Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare® Sand Joint Stabilizer	0.0	<u>AA</u>
Consolideck® Saltguard® WB	0.0	<u>AA</u>

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**

"Green Slate"	Results in mL loss	Ranking
Untreated Control	0.0	--
Stand Off [®] SLX100 Water & Oil Repellent	0.1	<u>BA</u>
Paver Kare [®] Paver Enhancer WB	0.0	<u>AA</u>
Paver Kare [®] Sand Joint Stabilizer	0.1	<u>BA</u>
Consolideck [®] Saltguard [®] WB	0.0	<u>AA</u>

Photographs – Protective Water Repellents**“Tenn Irregular”, Horizontal RILEM II.4, 5.0 milliliters, 20 minutes****“Tenn Blue”, Horizontal RILEM II.4, 5.0 milliliters, 20 minutes**

Conclusions – Protective Water Repellents

In the RILEM tests, results indicate that at least two of the treatments evaluated provided above average water repellent protection to each type of natural stone. Paver Kare® Paver Enhancer WB and Paver Kare® Sand Joint Stabilizer exhibited moderate color enhancement on the natural stone samples evaluated.

Recommendations – Protective Water Repellents

Recommendations for water repellent treatments for each type of natural stone submitted by Stone Center of Indiana, Indianapolis, IN are provided in the chart below. Recommendations are based on the treatments that proved most effective at providing water repellency on the submitted samples.

Sample	Protective Water Repellents
"Penn Irregular"	Sure Klean® Weather Seal Natural Stone Treatment WB or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
"Chilton Irregular"	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
"Gray Gorge"	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB

Recommendations – Protective Water Repellents

Sample	Protective Water Repellents
“Lannon Irregular” “Bronte”	Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
“Tenn Blue” “Iron Mountain”	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
“Chocolate Flag Irregular” “Tenn Irregular”	Sure Klean® Weather Seal Natural Stone Treatment WB or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB or Stand Off® SLX100 Water & Oil Repellent
“Purple Slate”	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB

Recommendations – Protective Water Repellents

Sample	Protective Water Repellents
"Teakwood"	<p>Sure Klean® Weather Seal Natural Stone Treatment WB</p> <p>or</p> <p>Stand Off® SLX100 Water & Oil Repellent</p> <p>or</p> <p>Paver Kare® Sand Joint Stabilizer</p> <p>or</p> <p>Consolideck® Saltguard® WB</p>
"Hampton"	<p>Sure Klean® Weather Seal Natural Stone Treatment WB</p> <p>or</p> <p>Paver Kare® Sand Joint Stabilizer</p> <p>or</p> <p>Consolideck® Saltguard® WB</p>
"Chocolate Pattern"	Paver Kare® Sand Joint Stabilizer
"Sheffield"	<p>Paver Kare® Paver Enhancer WB</p> <p>or</p> <p>Paver Kare® Sand Joint Stabilizer</p>
"Brown Wave"	Paver Kare® Paver Enhancer WB
"Pennsylvania Pattern"	<p>Sure Klean® Weather Seal Natural Stone Treatment WB</p> <p>or</p> <p>Consolideck® Saltguard® WB</p>

Recommendations – Protective Water Repellents

Sample	Protective Water Repellents
"Tumbled Garden Path"	Sure Klean® Weather Seal Natural Stone Treatment WB or Stand Off® SLX100 Water & Oil Repellent
"Penn Green"	Sure Klean® Weather Seal Natural Stone Treatment WB Or Stand Off® SLX100 Water & Oil Repellent or Consolideck® Saltguard® WB
"Mesa Flats"	Consolideck® Saltguard® WB
"Red Slate"	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer
"Green Slate"	Paver Kare® Paver Enhancer WB or Consolideck® Saltguard® WB

***NOTE:** Stand Off® SLX100 Water & Oil Repellent is manufactured and marketed in compliance with VOC regulations. This product may not be suitable for sale in states and districts with more restrictive regulations.

The ability of a water repellent treatment to prevent the ingress of water 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 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 and oil staining on the natural stone 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 Sure Klean® 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

The protective treatments were 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

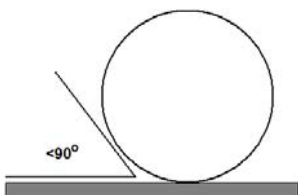
Surface Beading Evaluation

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 or greater” indicated that the food or oil quickly absorbed into the substrate and correlates to “below average” repellency.

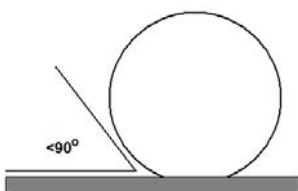
Note: Non-free flowing staining agents such as ketchup and mustard are applied in a globular fashion and therefore are not evaluated for their beading properties.

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, 4 hours, 1 hour, and 10 minutes. 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.

Test Results – Surface Beading

“Penn Irregular”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	5	5	3	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	3	3	3	3
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	3	3	3	3	2
“Chilton Irregular”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	6	5	4	5	5	5
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	4	4	3	3	3
Stand Off® SLX100 Water & Oil Repellent	3	--	--	2	3	4	2	3	3
“Lannon Irregular”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	6	6	6	6	5	5
Stone, Tile & Masonry Protector (STMP)	4	--	--	4	4	4	4	4	4
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	2	4	3	4	4
“Tenn Blue”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	6	6	5	6	6	6
Stone, Tile & Masonry Protector (STMP)	2	--	--	4	3	2	4	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	3	2	3	3	2

Test Results – Surface Beading

“Gray Gorge”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	6	6	4	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	3	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	2	2	2
“Chocolate Flag Irregular”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	6	6	6	5	6	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	3	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	2	2	4	4	4
“Tenn Irregular”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	5	5	5	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	2	3	3	3
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	2	2	3	3	3
“Hampton”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	5	5	4	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	4	3	3	3	4	5
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	3	2	3	3	3

Test Results – Surface Beading

“Bronte”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	5	5	5	4	5	5
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	3	2	4	4	4
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	3	3	4
“Teakwood”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	6	6	6	6	6	6
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	3	3	2	2	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	3	2	3	2	4
“Chocolate Pattern”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	5	5	4	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	2	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	2	3	3
“Sheffield”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	6	5	5	5	5	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	4	4	2	3	3	4
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	2	2	3

Test Results – Surface Beading

“Brown Wave”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	6	6	5	5	5	4
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	3	3	4	4	4
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	3	3	4
“Pennsylvania Pattern”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	5	5	5	6	6	5
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	3	3	4	4
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	3	3	4	4	3
“Tumbled Garden Path”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	--	--	5	5	6	5	6	6
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	2	3	4	3	3
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	2	3	3	3	2
“Penn Green”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	6	--	--	6	5	5	6	6	6
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	2	2	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	2	2	3	3	2

Test Results – Surface Beading

“Mesa Flats”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	7	--	--	7	6	5	6	6	6
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	2	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	2	2	2	3	3	3
“Iron Mountain”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	7	--	--	6	6	6	6	6	7
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	3	2	2	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	3	3	3	3	3
“Red Slate”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	4	--	--	4	4	4	5	5	4
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	2	3	3	3	4
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	2	3	3	3	3
“Purple Slate”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	4	--	--	4	4	5	5	5	4
Stone, Tile & Masonry Protector (STMP)	3	--	--	3	2	3	3	3	3
Stand Off® SLX100 Water & Oil Repellent	3	--	--	3	3	3	3	3	3

Test Results – Surface Beading

“Green Slate”									
Treatment	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	4	--	--	4	4	4	4	4	4
Stone, Tile & Masonry Protector (STMP)	2	--	--	3	2	2	3	3	3
Stand Off® SLX100 Water & Oil Repellent	2	--	--	3	2	2	3	3	3

Test Results – Stain Repellency**% Stain Removal**

“Penn Irregular”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	98%	98%	98%	98%	98%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	98%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Chilton Irregular”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
4 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	100%	<1%	<1%	100%
4 hr	100%	100%	<1%	100%	100%	100%	<1%	<1%	100%
1 hr	100%	100%	<1%	100%	100%	100%	<1%	<1%	100%
10 min	100%	100%	<1%	100%	100%	100%	<1%	<1%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Lannon Irregular”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	*	<1%	<1%	*
4 hr	100%	100%	90%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	90%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	90%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	85%	70%	100%	100%	100%	100%
4 hr	100%	100%	100%	95%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Tenn Blue”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Gray Gorge”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	*	<1%	<1%	*
4 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<5%	<0%	<1%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	<1%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	<1%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	<1%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Chocolate Flag Irregular”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<1%	<1%	100%	<1%	*	<1%	<1%	*
4 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<1%	<1%	100%	<1%	100%	<1%	<1%	100%
4 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
1 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
10 min	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Tenn Irregular”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<1%	<1%	100%	<1%	*	<1%	<1%	*
4 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<1%	<1%	100%	<1%	100%	<1%	<1%	100%
4 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
1 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
10 min	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Hampton”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	75%	100%	100%	100%	100%	100%	<1%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	<1%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	<1%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	<1%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	85%	90%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Bronte”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	85%	70%	*	<1%	<1%	*
4 hr	100%	100%	85%	85%	70%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	20%	100%	85%	100%	100%	85%	85%	80%
4 hr	100%	100%	100%	100%	100%	100%	80%	80%	80%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Teakwood”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	85%	85%	95%	85%	95%	<1%	<1%	70%
4 hr	100%	90%	90%	95%	85%	95%	<1%	<1%	70%
1 hr	100%	100%	90%	100%	85%	95%	<1%	<1%	100%
10 min	100%	100%	98%	100%	85%	100%	<1%	<1%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	95%	90%	85%	70%	70%	90%	<1%	<1%	*
4 hr	100%	100%	100%	98%	100%	90%	<1%	<1%	*
1 hr	100%	100%	100%	100%	70%	95%	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	100%	<1%	<1%	*
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	<5%	<5%	100%
4 hr	100%	100%	100%	100%	100%	100%	<5%	<5%	100%
1 hr	100%	100%	100%	100%	100%	100%	<5%	<5%	100%
10 min	100%	100%	100%	100%	100%	100%	<5%	<5%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Chocolate Pattern”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	98%	90%	75%	100%	100%	*	<1%	<1%	*
4 hr	95%	100%	95%	100%	85%	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	100%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	90%	90%	90%	100%	100%	90%	90%	70%
4 hr	100%	95%	95%	100%	100%	100%	95%	100%	90%
1 hr	100%	100%	95%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Sheffield”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	5%	<1%	<1%	100%	100%	*	<1%	<1%	*
4 hr	100%	100%	98%	100%	100%	*	<1%	<1%	*
1 hr	100%	100%	98%	100%	100%	*	<1%	<1%	*
10 min	100%	100%	98%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	<1%	100%	70%	<1%	<1%	80%
4 hr	100%	100%	100%	100%	100%	70%	<1%	<1%	100%
1 hr	100%	100%	100%	100%	100%	70%	<1%	<1%	<10%
10 min	100%	100%	100%	100%	100%	100%	100%	<1%	<10%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Brown Wave”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	90%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	98%	95%	95%	95%	95%	95%	90%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Pennsylvania Pattern”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	98%	98%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	95%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	95%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	98%	100%	98%	100%	100%	100%	95%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	98%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Tumbled Garden Path”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	90%
4 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	90%
1 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
10 min	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Penn Green”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	100%	<1%	<1%	100%
4 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
1 hr	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
10 min	100%	100%	100%	100%	100%	100%	<1%	<1%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Mesa Flats”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	<1%	<1%	100%	100%	*	<1%	<1%	*
4 hr	100%	<5%	<5%	100%	100%	*	<1%	<1%	*
1 hr	100%	<10%	<10%	100%	100%	*	<1%	<1%	*
10 min	100%	<10%	<10%	100%	100%	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	100%	<20%	20%	<20%	<1%
4 hr	100%	100%	100%	100%	100%	<20%	<20%	<20%	<20%
1 hr	100%	100%	100%	100%	100%	<20%	<20%	<20%	<20%
10 min	100%	100%	100%	100%	100%	<20%	<20%	<20%	<20%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Iron Mountain”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	<1%	100%	*	*	<1%	<1%	*
4 hr	100%	100%	100%	100%	*	*	<1%	<1%	*
1 hr	100%	100%	100%	100%	*	*	<1%	<1%	*
10 min	100%	100%	100%	100%	*	*	<1%	<1%	*
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Red Slate”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

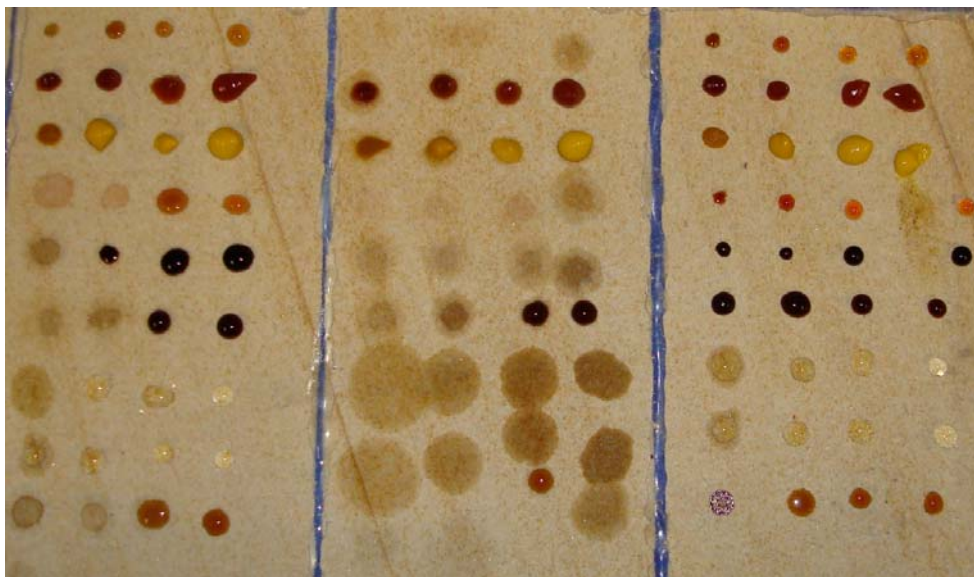
“Purple Slate”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Test Results – Stain Repellency**% Stain Removal**

“Green Slate”									
Untreated Control									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® Stone, Tile & Masonry Protector (STMP)									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%
Stand Off® SLX100 Water & Oil Repellent									
	Coco-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Indicates the % stain removal cannot be determined due to saturation of the oil stain.

Photographs – Stain Repellency**“Teakwood” Sandstone; Stains Applied**

Stand Off [®] Stone, Tile & Masonry Protector (STMP)	Untreated Control	Stand Off [®] SLX100 Water & Oil Repellent
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“Teakwood” Sandstone; Stains Removed

Stand Off [®] Stone, Tile & Masonry Protector (STMP)	Untreated Control	Stand Off [®] SLX100 Water & Oil Repellent
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Photographs – Stain Repellency**“Brown Wave” Sandstone; Stains Applied**

Stand Off® Stone, Tile & Masonry Protector (STMP)	Untreated Control	Stand Off® SLX100 Water & Oil Repellent
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“Brown Wave” Sandstone; Stains Removed

Stand Off® Stone, Tile & Masonry Protector (STMP)	Untreated Control	Stand Off® SLX100 Water & Oil Repellent
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Conclusions – Stain Repellency

Based upon laboratory evaluations, both of the treatments evaluated improved the surface beading of the samples. In addition, Stand Off® Stone, Tile & Masonry Protector (STMP) and Stand Off® SLX100 Water & Oil Repellent were effective in improving the natural stone samples' resistance to the applied stains. Stand Off® Stone, Tile & Masonry Protector (STMP) did not enhance the color or sheen of the natural stone samples. Stand Off® SLX100 Water & Oil Repellent caused a slight to moderate color and sheen enhancement to the submitted natural stone samples.

Recommendations – Stain Repellency

Recommendations for stain resistance treatment for the natural stone submitted by Stone Center of Indiana, Indianapolis, IN are provided in the chart below. Recommendations are based on the treatments that proved most effective for providing stain repellency on the submitted samples.

Sample	Stain Repellent	Maintenance Cleaner
"Chilton Irregular" "Lannon Irregular" "Tenn Blue" "Gray Gorge" "Chocolate Flag Irregular" "Hampton" "Bronte" "Teakwood" "Chocolate Pattern" "Sheffield" "Brown Wave" "Mesa Flats"	Stand Off® SLX100 Water & Oil Repellent	Enviro Klean® 2010 All Surface Cleaner

Recommendations – Stain Repellency

Sample	Stain Repellent	Maintenance Cleaner
"Penn Irregular" "Tenn Irregular" "Pennsylvania Pattern" "Tumbled Garden Path" "Penn Green" "Iron Mountain" "Red Slate" "Purple Slate" "Green Slate"	Stand Off® Stone, Tile & Masonry Protector (STMP) or Stand Off® SLX100 Water & Oil Repellent	Enviro Klean® 2010 All Surface Cleaner

***NOTE:** Stand Off® SLX100 Water & Oil Repellent is manufactured and marketed in compliance with VOC regulations. This product may not be suitable for sale in states and districts with more restrictive regulations.

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 and/or sheen enhancement to the submitted samples.

Description of Product Evaluated – Color and Sheen Enhancement

Sure Klean® Weather Seal Natural Stone Treatment WB - A low odor, water-based solution of potassium methyl silicate developed to effectively treat a wide range of natural stone and masonry surfaces. Natural Stone Treatment WB provides long-lasting repellency without altering the natural appearance of the substrate. Natural Stone Treatment WB is used as a surface treatment on natural stone and masonry surfaces to impart a water-repellent surface and reduce water absorption into the substrate. Unlike conventional silicate water repellents, Natural Stone Treatment WB has been developed to help prevent surface staining during application.

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 WB - A long-lasting, penetrating water repellent used for enhancing the natural color of most clay, concrete and porous natural stone paving, new or old. This water-based blend of siloxane resins increases paver service-life by providing protection against weather- and water-borne staining and soiling. It also helps pavers resist damage from destructive de-icing salts. Paver Enhancer WB is ideal for interlocking concrete, clay and integrally colored concrete paving, indoors or out. It will not alter the natural texture of treated surfaces.

Paver Kare® Sand Joint Stabilizer - Controls erosion of loose sand joints commonly employed with interlocking concrete pavers, clay pavers, natural stone or decorative concrete paving. This durable, blended polymer consolidates loose sand joints and protects treated paving from water penetration and related staining. Dry-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.

Consolideck® Saltguard® WB – A ready-to-use water-based, VOC compliant silane/siloxane water repellent and “chloride screen” for the protection of concrete and masonry surfaces. Saltguard® WB penetrates more deeply than conventional water- or solvent-based water repellents. Low odor and alkaline stable, Saltguard® WB is ideal for field or in-plant application to concrete and most masonry surfaces. Saltguard® WB protects horizontal and vertical surfaces from moisture intrusion and chemical attack of chloride salts.

Test Method – Color and Sheen Enhancement

Sure Klean® Weather Seal Natural Stone Treatment WB, Stand Off® SLX100 Water & Oil Repellent, Paver Kare® Paver Enhancer WB, Paver Kare® Sand Joint Stabilizer, and Consolideck® Saltguard® WB 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 wet untreated surface to the treated surface.

Test Results – Color and Sheen Enhancement Products Evaluated

“Penn Irregular”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0*	0
Stand Off® SLX100 Water & Oil Repellent	1	0
Paver Kare® Paver Enhancer WB	3	3
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	0	0
“Chilton Irregular”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	2	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	2	3
Paver Kare® Sand Joint Stabilizer	2	3
Consolideck® Saltguard® WB	0	0
“Lannon Irregular”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	2	1
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	2	1
Consolideck® Saltguard® WB	0	0
“Tenn Blue”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0*	0
Stand Off® SLX100 Water & Oil Repellent	1	0
Paver Kare® Paver Enhancer WB	3	1
Paver Kare® Sand Joint Stabilizer	2	3
Consolideck® Saltguard® WB	0	0

*Indicates a white haze appearance.

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

Test Results – Color and Sheen Enhancement Products Evaluated

“Gray Gorge”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	1	0
Paver Kare® Paver Enhancer WB	3	3
Paver Kare® Sand Joint Stabilizer	0	0
Consolideck® Saltguard® WB	0	0
“Chocolate Flag Irregular”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	3	3
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	0	0
“Tenn Irregular”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	3	1
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	3	1
Consolideck® Saltguard® WB	0	0
“Hampton”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	1	0
Paver Kare® Sand Joint Stabilizer	2	1
Consolideck® Saltguard® WB	0	0

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

Test Results – Color and Sheen Enhancement Products Evaluated

“Bronte”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	1	0
Consolideck® Saltguard® WB	0	0
“Teakwood”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	1	0
Consolideck® Saltguard® WB	0	0
“Chocolate Pattern”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	1	0
Paver Kare® Sand Joint Stabilizer	3	2
Consolideck® Saltguard® WB	0	0
“Sheffield”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	2	1
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	0	0

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

Test Results – Color and Sheen Enhancement Products Evaluated

“Brown Wave”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	2	1
Paver Kare® Sand Joint Stabilizer	2	2
Consolideck® Saltguard® WB	0	0
“Pennsylvania Pattern”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	1	0
Paver Kare® Paver Enhancer WB	3	0
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	0	0
“Tumbled Garden Path”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	1	1
Consolideck® Saltguard® WB	0	0
“Penn Green”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0*	0
Stand Off® SLX100 Water & Oil Repellent	0*	0
Paver Kare® Paver Enhancer WB	2	0
Paver Kare® Sand Joint Stabilizer	1	1
Consolideck® Saltguard® WB	0*	0

*Indicates a white haze appearance.

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

Test Results – Color and Sheen Enhancement Products Evaluated

“Mesa Flats”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	2	2
Paver Kare® Sand Joint Stabilizer	2	2
Consolideck® Saltguard® WB	0	0
“Iron Mountain”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Sure Klean® Weather Seal Natural Stone Treatment WB	0	0
Stand Off® SLX100 Water & Oil Repellent	0	0
Paver Kare® Paver Enhancer WB	0	0
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	0	0
“Red Slate”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Stand Off® SLX100 Water & Oil Repellent	3	1
Paver Kare® Paver Enhancer WB	2	2
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	3	2
“Purple Slate”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Stand Off® SLX100 Water & Oil Repellent	3	3
Paver Kare® Paver Enhancer WB	3	3
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	3	3

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

Test Results – Color and Sheen Enhancement Products Evaluated

“Green Slate”		
Product	Color Enhancement	Sheen Enhancement
Untreated Control	--	--
Stand Off® SLX100 Water & Oil Repellent	3	1
Paver Kare® Paver Enhancer WB	3	2
Paver Kare® Sand Joint Stabilizer	3	3
Consolideck® Saltguard® WB	3	2

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

Photographs – Color and Sheen Enhancement**“Chilton” Dolomitic Limestone; Treatments Applied**

Paver Kare® Sand Joint Stabilizer	Paver Kare® Paver Enhancer WB	Wet Untreated Control
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“Iron Mountain” Sandstone; Treatments Applied

Paver Kare® Paver Enhancer WB	Stand Off® SLX100 Water & Oil Repellent	Wet Untreated Control
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“Purple Slate” Slate; Treatments Applied

Consolideck® Saltguard® WB	Paver Kare® Sand Joint Stabilizer	Paver Kare® Paver Enhancer WB	Wet Untreated Control
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Recommendations – Color and Sheen Enhancement

Recommendations for color and sheen enhancement for the natural stone submitted by Stone Center of Indiana, Indianapolis, IN 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
"Penn Irregular" "Mesa Flats"	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer
"Chilton Irregular"	Sure Klean® Weather Seal Natural Stone Treatment WB or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer
"Lannon Irregular" "Chocolate Flag Irregular" "Tenn Irregular"	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Sand Joint Stabilizer	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Sand Joint Stabilizer
"Tenn Blue" "Sheffield" "Brown Wave" "Pennsylvania Pattern"	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer	Paver Kare® Sand Joint Stabilizer
"Penn Green"	Paver Kare® Paver Enhancer WB	Paver Kare® Sand Joint Stabilizer
"Gray Gorge"	Paver Kare® Paver Enhancer WB	Paver Kare® Paver Enhancer WB
"Hampton" "Chocolate Pattern" "Tumbled Garden Path" "Iron Mountain"	Paver Kare® Sand Joint Stabilizer	Paver Kare® Sand Joint Stabilizer

Recommendations – Color and Sheen Enhancement

Sample	Color Enhancement	Sheen Enhancement
“Red Slate” “Green Slate”	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB	Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
“Purple Slate”	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB	Stand Off® SLX100 Water & Oil Repellent or Paver Kare® Paver Enhancer WB or Paver Kare® Sand Joint Stabilizer or Consolideck® Saltguard® WB
“Bronte” “Teakwood”	Paver Kare® Sand Joint Stabilizer	No Recommendations

***NOTE:** Stand Off® SLX100 Water & Oil Repellent is manufactured and marketed in compliance with VOC regulations. This product may not be suitable for sale in states and districts with more restrictive regulations.

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



Alia Bober
Project Testing Laboratory Technician



PALLET TAG PROGRAM

Laboratory Report

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Project No. 0806-08 PTP

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PROSOCO
SINCE 1939

Prepared By:
AMT Laboratories
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