



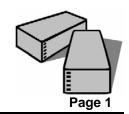
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Attachments

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





PROSOCO, Inc.

Submitted Information

For: James Holt cc: Paul Tessier

Subject: Peacock Enterprises

Atmore, AL

Date: June 8, 2005

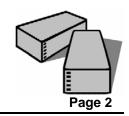
Project: 0504-08 PTP

Samples Submitted: 4 types of concrete pavers

Sample	Color	Size	
"Buff"	Tan		
"Champagne"	Yellow	12" x 12" x 1"	
"Dolphin Gray"	Gray		
"Rice White"	White		

Submitted by: James Holt





Purpose of Testing

Four types of concrete pavers were submitted to PROSOCO, Inc.'s Testing Laboratory with a request to determine the optimal concentration of cleaner that leaves the external surface looking most like the natural through-body color of the concrete paver while still removing excess mortar or grout during new construction cleaning operations. Additionally, the effectiveness of water repellents and stain repellents suitable for concrete pavers were evaluated.

New Construction Cleaning – Sure Klean[®] Vana Trol[®] and Enviro Klean[®] Safety Klean were evaluated for removal of laboratory applied mortar and grout 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 samples and filled with a wet mixture of either Type S or Type N cementitious mortar, or sanded grout. The wet mortar or grout-filled cylinder was allowed to remain in contact with the samples for 10 minutes before removal.

Heavy deposits of mortar and grout 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, Type N mortar after 7, 14, and 21 days of curing and sanded grout after 3 and 7 days of curing.

Color uniformity was evaluated by comparing aggregate exposure and surface pigment alternation/removal of each cleaned surface compared to the natural through-body color of the concrete paver.

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

<u>Surface Pigment Alteration/Removal</u> is the visual examination comparing the pigmentation of the interior, through-body section of the concrete paver to surfaces cleaned with selected product(s) at given dilutions.

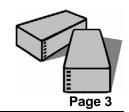
The following is the scale used for reporting results of both categories:

- 0 **Worst** match to through-body
- 1 **Poor** match to through-body
- 2 Fair match to through-body
- 3 **Good** match to through-body
- 4 **Best** match to through-body

Water Repellent Evaluation – Consolideck[®] Saltguard, Consolideck[®] Saltguard WB 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 for their ability to repel stains.





Products Evaluated

Products Evaluated for New Construction Cleaning

Sample	Treatment	Dilution
All Submitted Concrete	Sure Klean [®] Vana Trol [®]	1:6, 1:8
Pavers	Enviro Klean [®] Safety Klean	1:2, 1:3

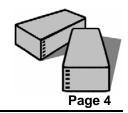
Water Repellent Products Evaluated

Sample	Treatment	Dilution
	Consolideck [®] Saltguard [®]	Concentrate
All Submitted Concrete Pavers	Consolideck [®] Saltguard [®] WB	Concentrate
	Stand Off [®] SLX100 Water & Oil Repellent	Concentrate

Stain Repellent Products Evaluated

Sample	Treatment	Dilution
All Submitted Concrete	Stand Off [®] Stone, Tile & Masonry Protector (STMP)	Concentrate
Pavers	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 or Type N mortar, or sanded grout from the submitted concrete pavers while providing the best color uniformity when compared with the through-body.

Type S and Type N cementitious mortar and sanded grout were prepared in compliance with the manufacturers' instructions, applied to the samples and allowed to cure for the amount of time listed below:

Type of SoilCure Time(s)Type S mortar3, 7 and 14 daysType N mortar7, 14 and 21 daysSanded Grout3 and 7 days

At least 24 hours after cleaning, a visual examination was made to determine the effectiveness of the evaluated cleaners in removing the applied mortar or grout. The samples were then broken in half and a visual evaluation of the through-body color compared to the cleaned surfaces was made.

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.

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

Test Method – New Construction Cleaning

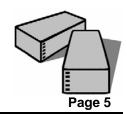
Dilution ratios refer to mixtures of concentrated cleaner: fresh water. Chemical cleaners were evaluated using the following procedure:

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

- 4. Pressure rinse thoroughly.*
- 5. Allow the sample to dry for at least 18 hours and visually examine.
- 6. Break the sample in half and compare the through-body surfaces to the cleaned surfaces for the best match.

*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; Type S Mortar

% removal

	"Buff"			
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean [®] Safety Klean	1:3	100%	100%	100%
	"Champagı	ne"		
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%
Enviro Klean [®] Safety Klean	1:2	100%	100%	100%
Enviro Klean [®] Safety Klean	1:3	100%	100%	100%
•	"Dolphin Gr	ay"		
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean [®] Safety Klean	1:3	100%	100%	100%
	"Rice Whit	:e"		
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean [®] Safety Klean	1:3	100%	100%	100%



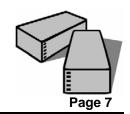


Test Results - New Construction Cleaning; Type N Mortar

% removal

	"Buff"			
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean® Safety Klean	1:3	100%	100%	100%
	"Champag	ne"		
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean® Safety Klean	1:3	100%	100%	100%
	"Dolphin G	ray"		
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean® Safety Klean	1:3	100%	100%	100%
	"Rice White"			
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%
Enviro Klean® Safety Klean	1:2	100%	100%	100%
Enviro Klean [®] Safety Klean	1:3	100%	100%	100%





Test Results - New Construction Cleaning; Sanded Grout

% removal

"Bı	uff"				
Product	Dilution	3 day	7 day		
Sure Klean [®] Vana Trol [®]	1:6	100%	99%		
Sure Klean [®] Vana Trol [®]	1:8	99%	98%		
Enviro Klean [®] Safety Klean	1:2	99%	98%		
Enviro Klean [®] Safety Klean	1:3	99%	98%		
"Cham	pagne"				
Product	Dilution	3 day	7 day		
Sure Klean [®] Vana Trol [®]	1:6	100%	100%		
Sure Klean [®] Vana Trol [®]	1:8	100%	99%		
Enviro Klean [®] Safety Klean	1:2	100%	99%		
Enviro Klean [®] Safety Klean	1:3	98%	98%		
"Dolphi	n Gray"				
Product	Dilution	3 day	7 day		
Sure Klean [®] Vana Trol [®]	1:6	100%	100%		
Sure Klean [®] Vana Trol [®]	1:8	100%	100%		
Enviro Klean [®] Safety Klean	1:2	100%	99%		
Enviro Klean [®] Safety Klean	1:3	99%	99%		
"Rice	"Rice White"				
Product	Dilution	3 day	7 day		
Sure Klean [®] Vana Trol [®]	1:6	100%	100%		
Sure Klean [®] Vana Trol [®]	1:8	100%	100%		
Enviro Klean [®] Safety Klean	1:2	100%	100%		
Enviro Klean [®] Safety Klean	1:3	100%	100%		





Test Results – Color Uniformity

Substrate: Concrete Paver		Pigment Color: "Bu	uff"
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Sure Klean [®] Vana Trol [®]	1:6	4	4
Sure Klean [®] Vana Trol [®]	1:8	4	4
Enviro Klean® Safety Klean	1:2	4	4
Enviro Klean® Safety Klean	1:3	4	4
Substrate: Concrete Paver		Pigment Color: "Cl	nampagne"
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Sure Klean [®] Vana Trol [®]	1:6	4	4
Sure Klean [®] Vana Trol [®]	1:8	4	4
Enviro Klean® Safety Klean	1:2	4	4
Enviro Klean [®] Safety Klean	1:3	4	4
Substrate: Concrete Paver		Pigment Color: "Do	olphin Gray"
	Dilution	Pigment Color: "Do Aggregate Exposure	Surface Pigment
Substrate: Concrete Paver	Dilution 1:6		
Substrate: Concrete Paver Product			Surface Pigment
Substrate: Concrete Paver Product Sure Klean® Vana Trol®	1:6	Aggregate Exposure	Surface Pigment Alteration/Removal 4
Substrate: Concrete Paver Product Sure Klean® Vana Trol® Sure Klean® Vana Trol®	1:6 1:8	Aggregate Exposure 4 4	Surface Pigment Alteration/Removal 4
Product Sure Klean® Vana Trol® Sure Klean® Vana Trol® Enviro Klean® Safety Klean	1:6 1:8 1:2	Aggregate Exposure 4 4 4 4 4	Surface Pigment Alteration/Removal 4 4 4
Product Sure Klean® Vana Trol® Sure Klean® Vana Trol® Sure Klean® Vana Trol® Enviro Klean® Safety Klean Enviro Klean® Safety Klean Substrate: Concrete Paver Product	1:6 1:8 1:2	Aggregate Exposure 4 4 4 4 4	Surface Pigment Alteration/Removal 4 4 4 4 4
Product Sure Klean® Vana Trol® Sure Klean® Vana Trol® Sure Klean® Vana Trol® Enviro Klean® Safety Klean Enviro Klean® Safety Klean Substrate: Concrete Paver	1:6 1:8 1:2 1:3	Aggregate Exposure 4 4 4 4 Pigment Color: "Ri	Surface Pigment Alteration/Removal 4 4 4 4 ce White" Surface Pigment
Product Sure Klean® Vana Trol® Sure Klean® Vana Trol® Sure Klean® Vana Trol® Enviro Klean® Safety Klean Enviro Klean® Safety Klean Substrate: Concrete Paver Product	1:6 1:8 1:2 1:3	Aggregate Exposure 4 4 4 4 Pigment Color: "Ri Aggregate Exposure	Surface Pigment Alteration/Removal 4 4 4 4 ce White" Surface Pigment
Product Sure Klean® Vana Trol® Sure Klean® Vana Trol® Sure Klean® Vana Trol® Enviro Klean® Safety Klean Enviro Klean® Safety Klean Substrate: Concrete Paver Product Sure Klean® Vana Trol®	1:6 1:8 1:2 1:3 Dilution	Aggregate Exposure 4 4 4 Pigment Color: "Ri Aggregate Exposure 4	Surface Pigment Alteration/Removal 4 4 4 4 ce White" Surface Pigment Alteration/Removal

Scale used for reporting results of both categories:

0 – Worst match to through-body

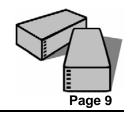
3 - Good match to through-body

1 – Poor match to through-body

4 - Best match to through-body

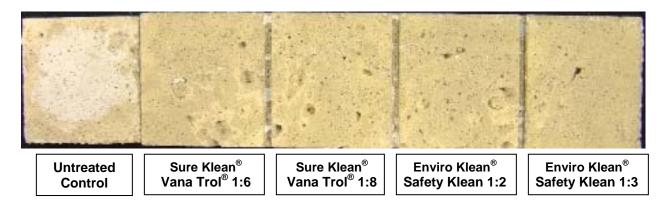
2 - Fair match to through-body



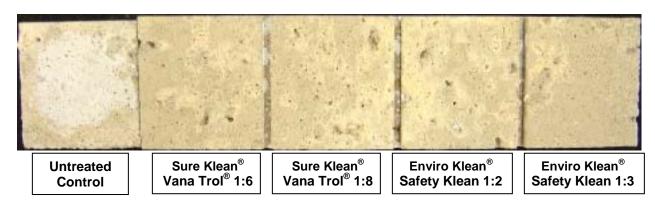


<u>Photographs</u> – New Construction Cleaning; Type S Mortar

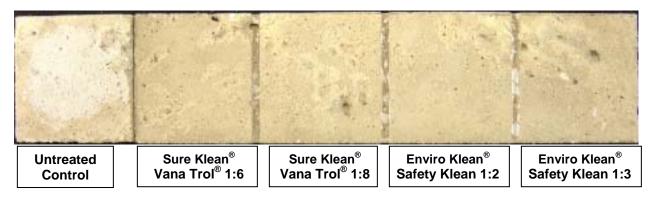
"Buff"; 3 Day Cleaning



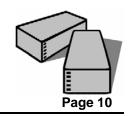
"Buff"; 7 Day Cleaning



"Buff"; 14 Day Cleaning

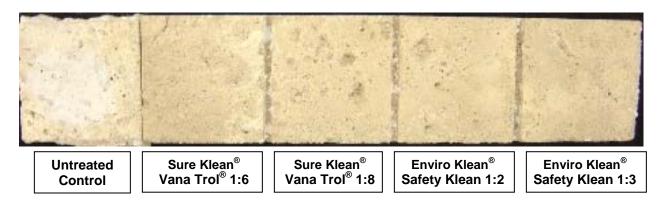




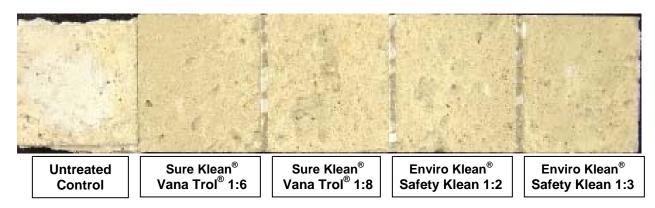


Photographs - New Construction Cleaning; Type N Mortar

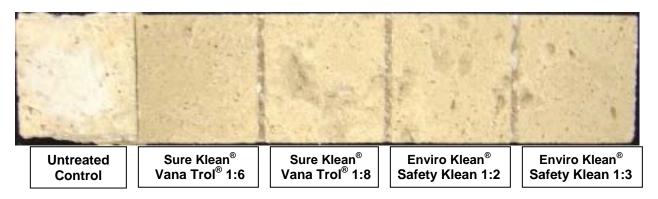
"Buff"; 7 Day Cleaning



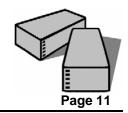
"Buff"; 14 Day Cleaning



"Buff"; 21 Day Cleaning







Photographs – New Construction Cleaning; Sanded Grout

"Buff"; 3 Day Cleaning



"Buff"; 7 Day Cleaning

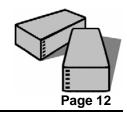


Photographs - Color Uniformity

"Buff"; Through-body







Conclusions – New Construction Cleaning

Based on the test results, both Sure Klean® Vana Trol® and Enviro Klean® Safety Klean in all dilutions tested performed well in removing excess mortar and grout from the submitted samples. In addition, both products provided good color uniformity when compared with the through-body color of the submitted concrete pavers. Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure.

Recommendations - New Construction Cleaning

Recommendations for cleaning for the concrete pavers submitted by Peacock Enterprises, Atmore, AL are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar and grout while providing the best match to the through-body color of the concrete pavers.

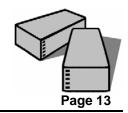
Sample	New Construction Cleaning (Type S mortar, 14 day cleaning)
All Submitted Concrete Pavers	Sure Klean [®] Vana Trol [®] (1:8) OR Enviro Klean [®] Safety Klean (1:3)

Sample	New Construction Cleaning (Type N mortar, 21 day cleaning)
All Submitted Concrete Pavers	Sure Klean [®] Vana Trol [®] (1:8) OR Enviro Klean [®] Safety Klean (1:3)

Sample	New Construction Cleaning (Sanded Grout, 7 day cleaning)
All Submitted Concrete Pavers	Sure Klean [®] Vana Trol [®] (1:8) OR Enviro Klean [®] Safety Klean (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

<u>Description of Products Evaluated</u> – Protective Water Repellents

Consolideck® Saltguard® — A general-purpose silane/siloxane water repellent and chloride screen for concrete and masonry. Saltguard® protects horizontal and vertical surfaces from moisture intrusion and chemical attack of chloride salts, reducing rebar corrosion and surface spalling. Saltguard® may be used on horizontal surfaces such as sidewalks, tile and brick pavers. It also provides excellent protection for retaining walls, bridge pilings and other vertical areas. In coastal areas, Saltguard® protects against salt air by reducing chloride penetration. Saltguard® also prevents deep-seated staining by mud splashes and other waterborne contaminants.

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.

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.

Sample Preparation – Protective Water Repellents

The submitted pavers were scored, allowed to dry, and to reabsorb atmospheric humidity for 24 hours prior to treatment. All products were applied by brush in accordance with the recommendations in the PROSOCO, Inc. product guide. All treatments were allowed to cure for at least 14 days prior to testing.

Test Methods – Protective Water Repellents

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

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





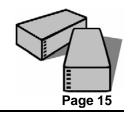
Test Results – Protective Water Repellents

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

RESULTS

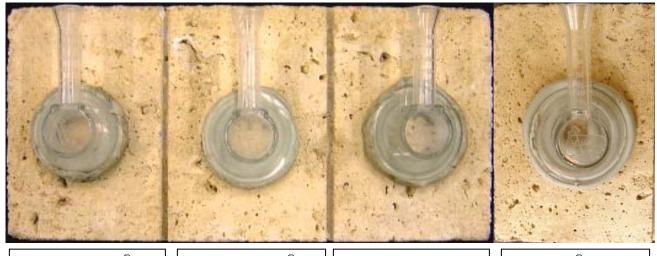
KESOLIS
46 mph
60 mph
60 mph
60 mph
<40 mph
59 mph
58 mph
59 mph
<40 mph
59 mph
59 mph
59 mph
47 mph
60 mph
60 mph
60 mph





Photographs - Protective Water Repellents

"Champagne"; RILEM Testing



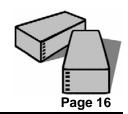
Consolideck[®]
Saltguard[®]

Consolideck[®] Saltguard[®] WB

Untreated Control

Stand Off® SLX100 Water & Oil Repellent





Conclusions – Protective Water Repellents

Based upon laboratory evaluations, Consolideck[®] Saltguard[®], Consolideck[®] Saltguard[®] WB, and Stand Off[®] SLX100 Water & Oil Repellent provided above average water repellency to each of the submitted samples. None of the treatments altered the appearance of the samples in any way.

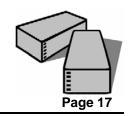
Recommendations - Protective Water Repellents

Recommendations for water repellency treatment for each type of concrete paver submitted by Peacock Enterprises, Atmore, AL 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	Water Repellents
All Submitted Concrete Pavers	Consolideck [®] Saltguard [®] OR Consolideck [®] Saltguard [®] WB OR Stand Off [®] SLX100 Water & Oil Repellent

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.

<u>Description of Products Evaluated</u> - Stain Repellency

Stain Repellent Treatments

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.

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.

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.

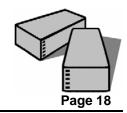
Staining Agents Evaluated

<u>Products</u>	Temperature
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, allowed to dry and absorb atmospheric moisture for 24 hours prior to treatment. The method of application for protective treatments consisted of a brush application in accordance with PROSOCO, Inc.'s 2005 Product Guide.





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 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°



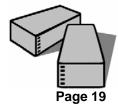
5. Wetting beyond the contact area (darkening); angle is flat.



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.

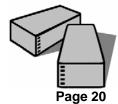




Test Results – Surface Beading

	"Buff"								
	Coco- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	3	-	-	3	3	3	5	5	4
STMP	2	-	-	2	2	2	3	3	2
SLX100	2	-	-	2	2	2	2	2	2
			6	'Champag	ne"		•		
	Coco- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	3	-	-	3	3	3	5	5	4
STMP	2	-	-	2	2	2	3	3	2
SLX100	2	-	-	2	2	2	2	2	2
			"	Dolphin G	ray"				
	Coco- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	3		-	3	3	3	5	5	4
STMP	2	-	-	2	2	2	3	3	2
SLX100	2	-	-	2	2	2	2	2	2
"Rice White"									
	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
STMP	2	-	-	2	2	2	2	2	2
SLX100	1	-	-	1	1	1	2	2	1





Test Results - Stain Repellency

					"Buff"				
	Untreated Control								
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	100%	100%	100%	100%	70%	70%	100%
4 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%
1 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%
10 min.	100%	100%	100%	100%	100%	100%	70%	70%	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 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%
4 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Stand Off®	SLX100 W	ater & Oil R	epellent					
	Coca- 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 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%

		"Champagne"								
	Untreated Control									
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee	
24 hr	100%	100%	95%	100%	100%	100%	70%	70%	100%	
4 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%	
1 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%	
10 min.	100%	100%	100%	100%	100%	100%	70%	70%	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 hr	100%	100%	100%	100%	100%	100%	100%	100%	100%	
4 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%	
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Stand Off®	SLX100 Wa	ater & Oil R	epellent						
	Coca- 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 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%	
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%	
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%	





Test Results - Stain Repellency

	"Dolphin Gray"								
	Untreated	Control							
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	10%	100%	100%	100%	70%	70%	100%
4 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%
1 hour	100%	100%	100%	100%	100%	100%	70%	70%	100%
10 min.	100%	100%	100%	100%	100%	100%	70%	70%	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 hr	100%	100%	100%	100%	100%	100%	90%	90%	100%
4 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Stand Off®	SLX100 W	ater & Oil Ro	epellent					
	Coca- 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 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%

	"Rice White"								
	Untreated Control								
	Coca- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	95%	90%	60%	60%	60%	70%	70%	60%
4 hour	100%	100%	90%	60%	60%	60%	70%	70%	60%
1 hour	100%	100%	90%	60%	60%	60%	70%	70%	80%
10 min.	100%	100%	95%	100%	100%	100%	70%	70%	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 hr	100%	100%	100%	100%	100%	100%	100%	90%	100%
4 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%
	Stand Off®	SLX100 W	ater & Oil R	epellent					
	Coca- 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 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	100%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	100%	100%



Photographs - Stain Repellency

"Dolphin Gray"; Stains Applied



Stand Off® SLX100 Water & Oil Repellent

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

Untreated Control

"Dolphin Gray"; 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. Neither of the treatments altered the appearance of the submitted samples in any way.

Recommendations - Stain Repellency

Recommendations for stain resistance treatment for the concrete pavers submitted by Peacock Enterprises, Atmore, AL are provided in the chart below. Recommendations are based on the treatments that proved most effective for providing stain repellency on the submitted concrete pavers.

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

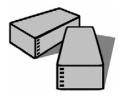
The ability of a stain repellent treatment to prevent staining is affected by a variety of factors. Therefore, onsite testing should be carried out for all installations with the recommended systems to ensure job site workmanship yields equivalent results.

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.

Christopher A. Moore

Project Testing Laboratory Technician

CAM



Laboratory Report

Pallet Tag Program Evaluation

Peacock Enterprises Atmore, AL

Project No. 0504-08 PTP

Prepared For:

Peacock Enterprises P.O. Box 519 Atmore, AL 36504-0519

Prepared By:



PROSOCO, Inc. June 2005