



PALLET CARD PROGRAM LABORATORY REPORT

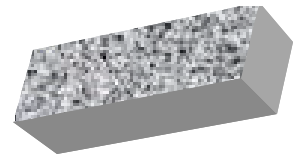


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ATTACHMENTS

Attachment #1 – PHOTO A & B

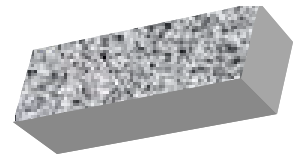
Attachment #2 – PHOTO C

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

Product Data literature for all products evaluated



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FOR: Stephanie Rakotz
cc: Joe Talecki
John Bourne

SUBJECT: Margran Assoc. Inc.
Newark, NJ

DATE: December 14, 2001

PROJECT: 0110-28 PC

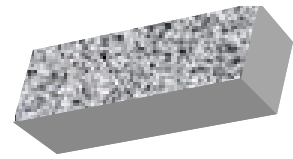
SAMPLES SUBMITTED: One honed marble tile, one honed limestone tile, and two types of slate tile.

Sample	Color/Finish	Size
(1) Honed marble tile	"Light green"	12" x 12" x ½"
(1) Honed limestone tile	"Tan/peach"	12" x 12" x ½"
(2) Slate tile	"Green/rust"	12" x 12" x ½"
(2) Slate tile	"Gray/rust"	12" x 12" x ½"

Submitted by: Joe Talecki



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PURPOSE OF TESTING

One marble tile, one limestone tile, and two different slate tiles were submitted to PROSOCO, Inc.'s Testing Laboratory with a request to determine if application of the cleaning products evaluated will produce any surface alterations during new construction/maintenance cleaning operations. Additionally, the effectiveness of water repellents and stain repellents suitable for these substrates as well as treatments for color enhancement will be evaluated.

- A. Surface Alteration Testing** – Enviro Klean[®] 2010 All Surface Cleaner, Stand Off[®] Rinseless Cleaner, and Stand Off[®] Heavy Duty Detergent were tested to determine if a cleaning program implemented for new construction/maintenance cleaning would otherwise alter the appearance of cleaned surfaces. Surface Alteration was evaluated visually based upon perceived discoloration or erosion/etching of the samples.

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.

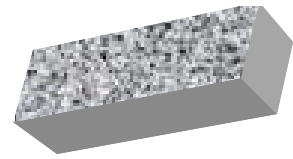
Color Change is the visual examination comparing the color of the untreated control surface to color of surfaces cleaned with selected products at given dilutions.

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

- B. Water Repellent Evaluation** – Stand Off[®] SLX100 Water & Oil Repellent and Stand Off[®] Limestone & Marble Protector were evaluated on the submitted samples for their ability to provide water repellency using RILEM Test Method No. II.4.
- C. Stain Repellent Evaluation** – Stand Off[®] SLX100 Water & Oil Repellent, Stand Off[®] Limestone & Marble Protector, Stand Off[®] Stone, Tile, & Masonry Protector, and Stand Off[®] Gloss 'N Guard were evaluated on the submitted samples for their ability to provide stain repellency to the submitted samples.
- D. Color Enhancement** – Stand Off[®] Gloss 'N Guard was evaluated on the submitted samples for its ability to enhance the natural color of the submitted samples in relative comparison to the untreated surface's water-saturated appearance.



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SURFACE ALTERATION PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All submitted samples	Enviro Klean [®] 2010 All Surface Cleaner	1:10
	Stand Off [®] Rinseless Cleaner	1:10
	Stand Off [®] Heavy Duty Detergent	1:2

WATER REPELLENT PRODUCTS EVALUATED

SAMPLE	PRODUCT
All submitted samples	Stand Off [®] SLX100 Water & Oil Repellent
	Stand Off [®] Limestone & Marble Protector

STAIN REPELLENT PRODUCTS EVALUATED

SAMPLE	PRODUCT
All submitted samples	Stand Off [®] SLX100 Water & Oil Repellent
	Stand Off [®] Limestone & Marble Protector
	Stand Off [®] Stone, Tile, & Masonry Protector
	Stand Off [®] Gloss 'N Guard

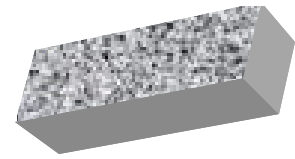
COLOR ENHANCING PRODUCTS EVALUATED

SAMPLE	PRODUCT
All submitted samples	Stand Off [®] Gloss 'N Guard

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



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SECTION A – SURFACE ALTERATIONS

DESCRIPTION OF PRODUCTS EVALUATED – Surface Alterations

Enviro Klean® 2010 All Surface Cleaner – A “next-generation” product for cleaning and degreasing light-to-heavy soiled stone, tile, masonry and much more. It’s dilutable for home-use on windows, bathroom tub and tile, countertops and more. It’s concentrated for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces. It is water-rinsable and contains no harsh acids, caustics or solvents.

Stand Off® Rinseless Cleaner – A concentrated formula designed for general cleaning of masonry, ceramic tile, grout, natural stone and many other hard surfaces. This neutral cleaner is ideal for interior or exterior applications for removing stains and soiling.

Stand Off® Heavy Duty Detergent – A concentrated formula designed for cleaning heavily stained masonry surfaces. This nonacidic detergent is ideal for interior or exterior applications. It normally will not affect polished surfaces. Always test.

TEST METHOD – Surface Alterations

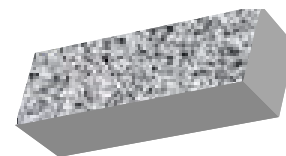
Dilution ratios refer to mixtures of concentrated cleaner : fresh water. Chemical cleaners were evaluated using the following procedure

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

2010 All Surface Cleaner	5 minutes
Rinseless Cleaner	5 minutes
HD Detergent	5 minutes
4. Rinse thoroughly with gentle agitation under running water.



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Test Results – Surface Alterations

Substrate: Honed marble tile		Color: "Light green"		
Product	Dilution	Substrate Deterioration	Color Change	Staining
2010 All Surface Cleaner	1:10	0	0	0
Rinseless Cleaner	1:10	0	0	0
HD Detergent	1:2	0	0	0
Substrate: Honed limestone tile		Color: "Tan/peach"		
Product	Dilution	Substrate Deterioration	Color Change	Staining
2010 All Surface Cleaner	1:10	0	0	0
Rinseless Cleaner	1:10	0	0	0
HD Detergent	1:2	0	0	0
Substrate: Slate tile		Color: "Green/rust"		
Product	Dilution	Substrate Deterioration	Color Change	Staining
2010 All Surface Cleaner	1:10	0	0	0
Rinseless Cleaner	1:10	0	0	0
HD Detergent	1:2	0	0	0
Substrate: Slate tile		Color: "Gray/rust"		
Product	Dilution	Substrate Deterioration	Color Change	Staining
2010 All Surface Cleaner	1:10	3	3	0
Rinseless Cleaner	1:10	3	3	0
HD Detergent	1:2	3	3	0
Water	--	3	3	0

0 – no change

1 – slight change

2 – moderate change

3 – heavy change

4 – excessive change

CONCLUSIONS – Surface Alterations

Test results indicate that all of the cleaners tested removed heavy amounts of the top surface layer from the "gray/rust" colored slate resulting in a color change. Fresh water also had the same effect, suggesting that the surface of the "gray/rust" colored slate is very sensitive to abrasion in general. The cleaners caused no visible surface alterations to any of the other samples tested.

To facilitate cleaning while minimizing any surface alterations, use gentle agitation while rinsing with fresh water at low pressure (garden hose strength).

NOTE: See Attachment #1 "PHOTO A".

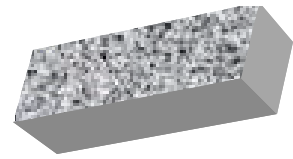
RECOMMENDATIONS – Surface Alterations

Based on these evaluations, Enviro Klean[®] 2010 All Surface Cleaner, Stand Off[®] Rinseless Cleaner, and Stand Off[®] Heavy Duty Detergent can be recommended for the marble, limestone, and "green/rust" slate samples submitted by Margran Assoc. Inc., Newark, NJ. To minimize any surface alterations on the submitted samples, use gentle agitation while rinsing with fresh water at low pressure (garden hose strength).

The most appropriate cleaner and dilution should be determined on the specific job site, and will be dependent primarily on the nature and severity of soiling present at that location.



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SECTION B – PROTECTIVE WATER REPELLENTS

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

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

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

DESCRIPTIONS OF PRODUCTS EVALUATED – Protective Water Repellents

Stand Off[®] SLX100 Water & Oil Repellent – Combines water and oil repellency to prevent staining by waterborne or oily substances and many types of graffiti. This modified “neat” silane system offers invisible protection and low volatility.

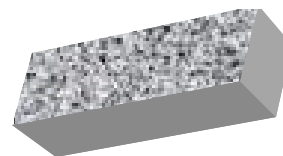
Stand Off[®] Limestone & Marble Protector – A clear penetrating water and oil repellent suitable for use on interior or exterior calcareous surfaces such as limestone, marble and travertine. It’s also suitable for sandstone, granite and slate, and many other types of masonry surfaces. Stand Off[®] Limestone & Marble protector penetrates deeply to provide surface and subsurface protection without forming a glossy surface film. Treated surfaces retain their natural color, texture and appearance.

SAMPLE PREPARATION – Protective Water Repellents

The submitted samples were allowed to dry, and reabsorb atmospheric humidity for 24 hours prior to treatment. Treatments were applied in a single saturating application. All treatments were allowed to cure at least 72 hours prior to testing.



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TEST METHODS – Protective Water Repellents

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

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

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

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

A = “Average” correlates to less than or equal to 50% of the maximum untreated absorption

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

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

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

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

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

Test Results – Protective Water Repellents

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

AA = Above Average

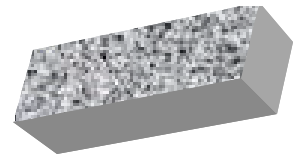
AA = Average

BA = Below Average

“Light green” honed marble tile	Results	Ranking
Untreated Control	0.5 mL loss	---
SLX100	0.0 mL loss	AA
LMP	0.0 mL loss	AA
“Tan/peach” honed limestone tile	Results	Ranking
Untreated Control	0.2 mL loss	---
SLX100	0.0 mL loss	AA
LMP	0.0 mL loss	AA
“Green/rust” slate tile	Results	Ranking
Untreated Control	1.2 mL loss	---
SLX100	0.0 mL loss	AA
LMP	0.0 mL loss	AA
“Gray/rust” slate tile	Results	Ranking
Untreated Control	0.3 mL loss	---
SLX100	0.0 mL loss	AA
LMP	0.0 mL loss	AA



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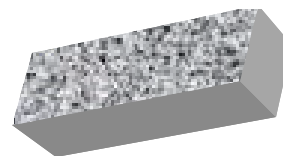
CONCLUSIONS – Protective Water Repellents

Based upon laboratory evaluations, both of the water repellents tested exhibited above average water repellency on all of the submitted samples.

RECOMMENDATIONS – Protective Water Repellents

Based on evaluations, both Stand Off[®] SLX100 Water & Oil Repellent and Stand Off[®] Limestone & Marble Protector can be recommended for job-site testing to provide water repellency for the marble, limestone, and the two slate samples submitted by Margran Assoc. Inc., Newark, NJ.

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.



SECTION C – PROTECTIVE STAIN REPELLENTS

The testing described below evaluates the suitability of stain protection treatments.

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

1. Ease of application
2. Color change
3. Removal of staining substances

DESCRIPTIONS OF PRODUCTS EVALUATED – Protective Stain Repellents

Protective Stain Repellents:

Stand Off® SLX100 Water & Oil Repellent – Combines water and oil repellency to prevent staining by waterborne or oily substances and many types of graffiti. This modified “neat” silane system offers invisible protection and low volatility.

Stand Off® Limestone & Marble Protector – A clear penetrating water and oil repellent suitable for use on interior or exterior calcareous surfaces such as limestone, marble and travertine. It’s also suitable for sandstone, granite and slate, and many other types of masonry surfaces. Stand Off® Limestone & Marble protector penetrates deeply to provide surface and subsurface protection without forming a glossy surface film. Treated surfaces retain their natural color, texture and appearance.

Stand Off® Stone, Tile & Masonry Protector – A penetrating oil and stain repellent. This easy-to-use, low-VOC, low-odor protective treatment improves the stain resistance and simplifies maintenance cleaning or interior and exterior stone, quarry tile, concrete and masonry surfaces. Surfaces treated with STMP resist staining from oil, food and waterborne matter while retaining their natural color, texture, and breathability.

Stand Off® Gloss ‘N Guard – A highly durable, VOC-compliant, protective coating for tile, pavers, terrazzo and other polished and unpolished masonry. Gloss ‘N Guard dries to a high-gloss finish that enhances the natural beauty of treated surfaces.

Products Evaluated for Stain Removal:

Enviro Klean® 2010 All Surface Cleaner – Dilution: 1 part concentrate : 10 parts fresh water

Food and Oil Products Evaluated:

Temperature:

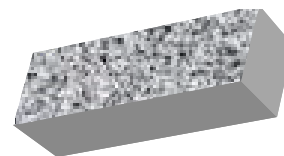
Coca-Cola®	~75°F
Mustard	~75°F
Red Wine	~75°F
Balsamic Vinegar	~75°F
Vegetable Oil	~250°F

SAMPLE PREPARATION – Protective Stain Repellents

The submitted samples were cut and allowed to dry, and reabsorb atmospheric humidity for 24 hours prior to treatment. The treatment method consisted of a single saturating application and allowed to cure at least 72 hours prior to testing.



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TEST METHODS – Protective Stain Repellents

Surface Beading

The food and oil products were applied to the test areas. 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” indicates the smallest angle of contact (<90°) which correlates to “above average” repellency. A rating of “3 or 4” indicates “average” repellency. A rating of “5 or greater” indicates that the oil quickly absorbed into the substrate and correlates to “below average” repellency.

Stain Resistance

The soiling agents were allowed to dwell on the treated and untreated substrate for times of 24 hours, 7 hours, 4 hours, and 1 hour. The test areas were then cleaned with Stand Off® 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.

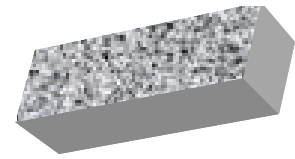
TEST RESULTS – Surface Beading

“Light green” honed marble tile				
Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control				
5	N/A	5	5	5
SLX100				
1	N/A	2	2	3
LMP				
1	N/A	3	2	4
STMP				
2	N/A	3	3	4
Gloss ‘N Guard				
3	N/A	4	4	5
“Tan/peach” honed limestone tile				
Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control				
5	N/A	5	5	5
SLX100				
1	N/A	3	2	2
LMP				
1	N/A	3	3	4
STMP				
2	N/A	3	3	3
Gloss ‘N Guard				
3	N/A	4	3	5

Rating System: 1 & 2 Above Average
 3 & 4 Average
 5 Below Average
 N/A Not a free flowing liquid



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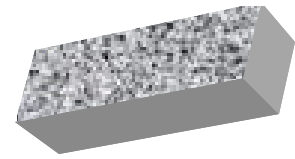
TEST RESULTS – Surface Beading Continued

“Green/rust” slate tile				
Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control				
4	N/A	5	5	5
SLX100				
1	N/A	3	2	3
LMP				
1	N/A	3	2	5
STMP				
2	N/A	3	3	4
Gloss ‘N Guard				
3	N/A	5	4	5
“Gray/rust” slate tile				
Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control				
4	N/A	5	5	5
SLX100				
1	N/A	2	1	3
LMP				
1	N/A	2	2	4
STMP				
2	N/A	3	3	4
Gloss ‘N Guard				
3	N/A	4	3	5

Rating System: 1 & 2 Above Average
 3 & 4 Average
 5 Below Average
 N/A Not a free flowing liquid



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TEST RESULTS – Protective Stain Repellents

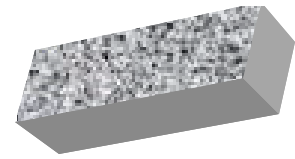
“Light green” honed marble tile					
	Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control					
24hr	98%	99%	99%	99%	50%
7hr	98%	100%	100%	100%	50%
4hr	98%	100%	100%	100%	50%
1hr	98%	100%	100%	100%	50%
SLX100					
24hr	100%	100%	100%	100%	98%
7hr	100%	100%	100%	100%	98%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%
LMP					
24hr	100%	100%	100%	100%	50%
7hr	100%	100%	100%	100%	50%
4hr	100%	100%	100%	100%	50%
1hr	100%	100%	100%	100%	50%
STMP					
24hr	100%	100%	100%	100%	99%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%
Gloss ‘N Guard					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%

% Removal of stain following maintenance cleaning.

* Indicates etching of surface treatment due to the acidic nature of the staining agent.



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TEST RESULTS – Protective Stain Repellents Continued

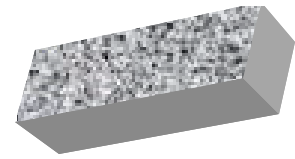
“Tan/peach” honed limestone tile					
	Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control					
24hr	100%	100%	100%	100%*	50%
7hr	100%	100%	100%	100%*	50%
4hr	100%	100%	100%	100%*	60%
1hr	100%	100%	100%	100%*	60%
SLX100					
24hr	100%*	100%*	100%*	100%*	98%
7hr	100%*	100%*	100%*	100%*	99%
4hr	100%*	100%*	100%*	100%*	99%
1hr	100%*	100%*	100%*	100%*	99%
LMP					
24hr	100%*	100%*	100%*	100%*	50%
7hr	100%*	100%*	100%*	100%*	50%
4hr	100%*	100%*	100%*	100%*	60%
1hr	100%*	100%*	100%*	100%*	60%
STMP					
24hr	100%*	100%*	100%*	100%*	100%
7hr	100%*	100%*	100%*	100%*	100%
4hr	100%	100%	100%*	100%*	100%
1hr	100%	100%	100%*	100%*	100%
Gloss ‘N Guard					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%

% Removal of stain following maintenance cleaning.

* Indicates etching of surface treatment due to the acidic nature of the staining agent.



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TEST RESULTS – Protective Stain Repellents Continued

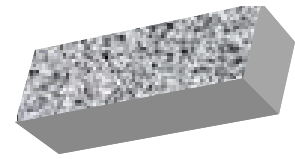
“Green/rust” slate tile					
	Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control					
24hr	100%	100%	100%	100%	70%
7hr	100%	100%	100%	100%	70%
4hr	100%	100%	100%	100%	70%
1hr	100%	100%	100%	100%	80%
SLX100					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%
LMP					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%
STMP					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%
Gloss ‘N Guard					
24hr	100%	100%	100%	100%	100%
7hr	100%	100%	100%	100%	100%
4hr	100%	100%	100%	100%	100%
1hr	100%	100%	100%	100%	100%

% Removal of stain following maintenance cleaning.

* Indicates etching of surface treatment due to the acidic nature of the staining agent.



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TEST RESULTS – Protective Stain Repellents Continued

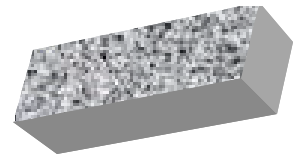
“Gray/rust” slate tile					
	Coca-Cola®	Mustard	Red Wine	Balsamic Vinegar	Vegetable Oil
Untreated Control					
24hr	98%	95%	100%	98%	20%
7hr	98%	98%	100%	98%	20%
4hr	100%	99%	100%	98%	20%
1hr	100%	100%	100%	98%	20%
SLX100					
24hr	98%	98%	98%	100%	80%
7hr	100%	100%	100%	100%	85%
4hr	100%	100%	100%	100%	90%
1hr	100%	100%	100%	100%	90%
LMP					
24hr	100%	97%	100%	100%	10%
7hr	100%	99%	100%	100%	10%
4hr	100%	100%	100%	100%	10%
1hr	100%	100%	100%	100%	10%
STMP					
24hr	100%	100%	98%	98%	80%
7hr	100%	100%	100%	98%	80%
4hr	100%	100%	100%	100%	80%
1hr	100%	100%	100%	100%	80%
Gloss ‘N Guard					
24hr	100%	100%	100%	100%	90%
7hr	100%	100%	100%	100%	90%
4hr	100%	100%	100%	100%	95%
1hr	100%	100%	100%	100%	100%

% Removal of stain following maintenance cleaning.

* Indicates etching of surface treatment due to the acidic nature of the staining agent.



PALLET CARD PROGRAM LABORATORY REPORT



CONCLUSIONS – Protective Stain Repellents

In tests conducted on the submitted samples Stand Off[®] Gloss 'N Guard exhibited the least desirable beading characteristics, but it provided the best stain protection on all of the substrates. Stand Off[®] Stone, Tile, & Masonry Protector (STMP) provided the next best protection, followed by Stand Off[®] SLX100. Stand Off[®] Limestone & Marble Protector performed nearly as well as Stand Off[®] STMP, except for repelling the vegetable oil where it was able to penetrate and stain the substrates. Stand Off[®] SLX100 Water & Oil Repellent provided the best beading characteristics. Stand Off[®] Gloss 'N Guard left a matte gloss on the marble and limestone samples and left a high gloss on the two slate samples. It also greatly enhanced the natural color of all the submitted samples, whereas the other treatments did not alter the natural appearance in any way.

All staining agents except for the oil were able to etch the surface of the “tan/peach” limestone, but Stand Off[®] Gloss 'N Guard was able to prevent the etching. The “gray/rust” slate tile was not very receptive to our treatments. Several of the staining agents, mostly the oil, were able to penetrate the surface. The surface of this slate is also very soft and the cleaning process is able to erode the top layer.

NOTE: See Attachment #1 “PHOTO B”.

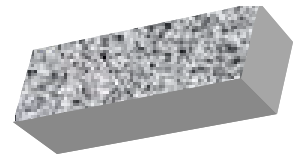
RECOMMENDATIONS – Protective Stain Repellents

Based on test results, Stand Off[®] Gloss 'N Guard, Stand Off[®] Stone, Tile, & Masonry Protector, and Stand Off[®] SLX100 Water & Oil Repellent can be recommended for job-site testing for stain repellency on the marble, limestone, and slate samples submitted by Margran Assoc. Inc., Newark, NJ.

Refer to product data sheets for further information regarding application instructions.



PALLET CARD PROGRAM LABORATORY REPORT



SECTION D – COLOR ENHANCEMENT

The testing described below evaluates the degree of color enhancement that the treatments provide to the samples.

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

1. Ease of application
2. Color change
3. Removal of staining substances

DESCRIPTIONS OF PRODUCT EVALUATED – Color Enhancement

Stand Off® Gloss 'N Guard – A highly durable, VOC-compliant, protective coating for tile, pavers, terrazzo and other polished and unpolished masonry. Gloss 'N Guard dries to a high-gloss finish that enhances the natural beauty of treated surfaces.

SAMPLE PREPARATION – Color Enhancement

The submitted samples were allowed to dry, and reabsorb atmospheric humidity for 24 hours prior to treatment. Method of treatment consisted of one thin application. All treatments were allowed to cure at least 72 hours prior to testing.

TEST METHODS – Color Enhancement

Color enhancement is evaluated visually based on the appearance of the treatment applied. This includes color changes and/or darkening.

For purpose of this evaluation, treatments that produce “no enhancement” do not alter the natural appearance of the substrate and are rated with a value of 1. Untreated substrates are rated a value of 0.

Treatments that provide the same degree of darkening as water-saturated examples of the substrate are rated with a value of 5.

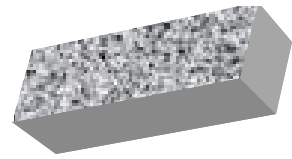
A value of 2 is estimated to be 25% of the water-saturated degree of darkening.

A value of 3 is estimated to be 50% of the water-saturated degree of darkening.

A value of 4 is estimated to be 75% of the water-saturated degree of darkening.



PALLET CARD PROGRAM LABORATORY REPORT



PROSOCO, Inc.

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Test Results – Color Enhancement

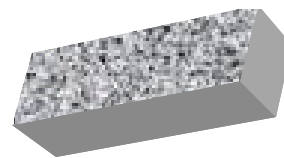
“Light green” honed marble tile	
Treatment	Enhancement
Untreated Control	0
Gloss ‘N Guard	5
“Tan/peach” honed limestone tile	
Treatment	Enhancement
Untreated Control	0
Gloss ‘N Guard	5
“Green/rust” slate tile	
Treatment	Enhancement
Untreated Control	0
Gloss ‘N Guard	5
“Gray/rust” slate tile	
Treatment	Enhancement
Untreated Control	0
Gloss ‘N Guard	5

Scale used for reporting results:

- | | |
|-----------------------|--------------------|
| 0 – Untreated Control | 3 – 50% Darkening |
| 1 – No Enhancement | 4 – 75% Darkening |
| 2 – 25% Darkening | 5 – 100% Darkening |



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PROSOCO, Inc.

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CONCLUSIONS – Color Enhancement

Based upon laboratory evaluations, Stand Off[®] Gloss 'N Guard was able to provide color enhancement to all of the submitted samples. It provided enough color enhancement to equal the water saturated control. Stand Off[®] Gloss 'N Guard also provided a matte gloss to the marble and limestone samples and a high gloss to the slate samples.

NOTE: See Attachment #2 "PHOTO C".

RECOMMENDATIONS – Color Enhancement

Based on evaluations, Stand Off[®] Gloss 'N Guard can be recommended for job-site testing to provide color enhancement and gloss to the samples submitted by Margran Assoc. Inc., Newark, NJ.

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

Jason L. Anderson
Materials Testing Technician

JLA/



Attachment #1

PHOTO A – “Gray/rust” slate tile after cleaning

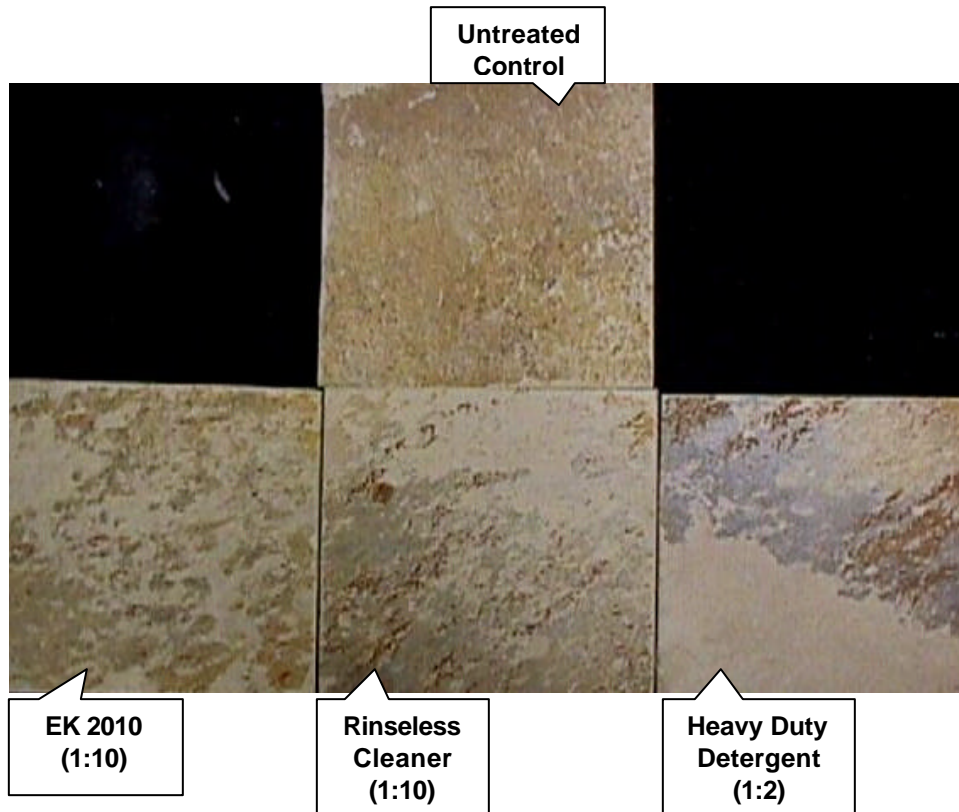
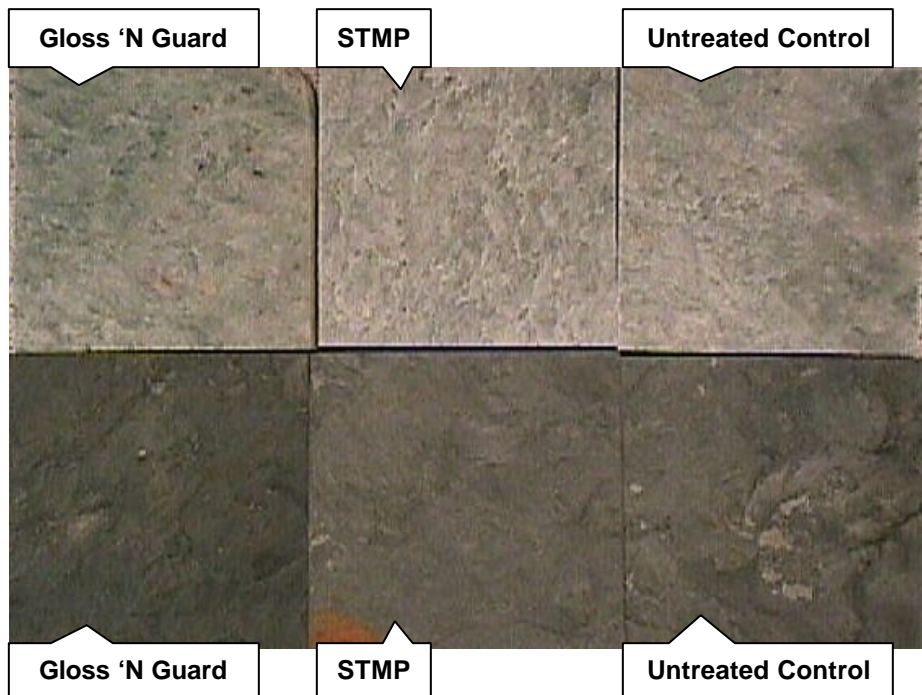


PHOTO B – “Light green” honed marble tile and “green/rust slate tile after staining

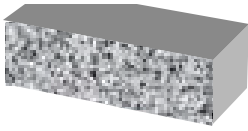




Attachment #2

PHOTO C – “Gray/rust” slate tile after color enhancement





Laboratory Report

Pallet Card Evaluation

**Margran Assoc. Inc.
Newark, NJ**

Project No. 0110-28 PC

Prepared For

Stephanie Rakotz
Margran Assoc. Inc.
16 Herbert St.
Newark, NJ 07105

Prepared By:



***PROSOCO, Inc.
December 2001***