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## **Attachments**

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

# **Submitted Information**

For: Mark O'Keefe Cc: Paul Tessier

Subject: Decorative Rock Network

Lodi, CA

**Date:** August 14, 2006

**Project:** 0607-09 PTP

Samples Submitted: 1 type of limestone

Sample	Туре	Color	Size
"Windrock Stone"	Limestone	Gray	Various

Submitted by: Mark O'Keefe

#### 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**

One type of limestone was submitted to AMT Laboratories by PROSOCO, Inc. with a request to determine if application of the cleaning 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 limestone was evaluated.

**New Construction Cleaning** – Sure Klean<sup>®</sup> Vana Trol<sup>®</sup> was tested at various dilutions to determine the optimum dilution for complete removal of laboratory applied Type N mortar from the submitted limestone while limiting surface alterations to the decorative finish. The surface alteration evaluation was visually determined based upon perceived discoloration or erosion/etching of the sample.

To simulate new construction soiling, the sample was placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall were positioned on top of the sample and filled with a wet mixture of Type N cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the sample for 10 minutes before removal.

Heavy deposits of mortar were removed with dry scraping after 24 hours. Prepared cleaning solutions were then evaluated for their effectiveness in removing residual Type N mortar after 7, 14, and 21 days of curing. A visual examination was also made to determine if the tested cleaner caused any surface alterations to the submitted sample based on the following:

<u>Surface Finish Removal</u> 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.

<u>Substrate Deterioration</u> 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.

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

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

**Protective Water Repellents** – Sure Klean<sup>®</sup> Weather Seal Natural Stone Treatment WB, Stand Off<sup>®</sup> Limestone & Marble Protector and Sure Klean<sup>®</sup> Weather Seal Siloxane PD were evaluated for their ability to provide water repellency to the submitted sample.

**Stain Repellency** – Stand Off<sup>®</sup> Limestone & Masonry Protector and Stand Off<sup>®</sup> Stone, Tile & Masonry Protector (STMP) were evaluated for their ability to repel stains from the submitted sample.

**Color and Sheen Enhancement** – Stand Off<sup>®</sup> Gloss 'N Guard WB was evaluated for its ability to provide color and sheen enhancement to the submitted sample.

## **Products Evaluated**

## **New Construction Cleaning Products Evaluated**

Sample	Product	Dilution
"Windrock Stone" Limestone	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	(1:6), (1:8)

## **Protective Water Repellent Products Evaluated**

Sample	Product	Dilution
	Sure Klean® Weather Seal Natural Stone Treatment WB	Concentrate
"Windrock Stone" Limestone	Stand Off® Limestone & Marble Protector	Concentrate
	Sure Klean® Weather Seal Siloxane PD	Concentrate

## **Stain Repellency Products Evaluated**

Sample	Product	Dilution
"Windrock Stone"	Stand Off <sup>®</sup> Limestone & Marble Protector	Concentrate
Limestone	Stand Off® Stone, Tile & Masonry Protector (STMP)	Concentrate

#### **Color and Sheen Enhancement Products Evaluated**

Sample	Product	Dilution
"Windrock Stone" Limestone	Stand Off <sup>®</sup> Gloss 'N Guard WB	Concentrate

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

## **New Construction Cleaning**

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

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

#### **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.
- 4. Pressure rinse thoroughly.\*

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

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

## **Cleaning Effectiveness (% Type N Mortar Removal)**

"Windrock Stone"				
Product	Dilution	7 day	14 day	21 day
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	100%	100%	98%
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	100%	100%	98%

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

Substrate: Limestone	Pigment	Pigment Color: "Windrock Stone"			
Product	Dilution	Dilution Surface Finish Removal Substrate Deterioration Color Change Staining			
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:6	0	0	0	0
Sure Klean <sup>®</sup> Vana Trol <sup>®</sup>	1:8	0	0	0	0

## **Photographs** - New Construction Cleaning

"Windrock Stone"; 7 Day Cleaning



"Windrock Stone"; 14 Day Cleaning



## **Photographs** – New Construction Cleaning

"Windrock Stone"; 21 Day Cleaning



## **Photographs** – Limiting Surface Alterations

## "Windrock Stone"; Limiting Surface Alterations



#### **Conclusions** - New Construction Cleaning

Based on the test results, Sure Klean® Vana Trol® performed well in removing excess mortar from the submitted sample. Sure Klean® Vana Trol® performed well in removing the mortar soils even after allowing the mortar to remain on the surface of the sample for 21 days under ideal curing conditions. In addition, Sure Klean® Vana Trol caused no noticeable surface alterations to the submitted sample.

It is recommended that the selected cleaner always be used in the lowest possible concentration. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction when using Type N mortar.

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

Recommendations for cleaning for the limestone submitted by Decorative Rock Network, Lodi, CA are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Sample	New Construction Cleaning (Type N mortar, 21 day cleaning)
"Windrock Stone" Limestone	Sure Klean <sup>®</sup> Vana Trol <sup>®</sup> (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 siliconate 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 siliconate water repellents, Natural Stone Treatment WB has been developed to help prevent surface staining during application.

**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 many other types of masonry surfaces. 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. Limestone & Marble Protector combines high quality siloxane resins with "oleophobic" resins to produce a penetrating water and oil repellent ideal for long-term protection against food, oil and waterborne staining. Unlike conventional penetrating oil repellent products, Limestone & Marble Protector has been modified to ensure effectiveness on limestone, marble and other calcareous or neutral pH surfaces.

**Sure Klean® Weather Seal Siloxane PD** – A ready-to-use, water-based silane/siloxane water repellent for concrete, GFRC, and most masonry and stucco surfaces. Siloxane PD penetrates more deeply than conventional water repellents. It helps masonry resist cracking, spalling, staining and other damage related to water intrusion. Low odor and alkaline stable, Siloxane PD is ideal for field and in-plant application.

## **Sample Preparation – Protective Water Repellents**

The submitted 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 wind blown rain conditions was performed. Tests were run with vertical 5.0-milliliter head pressures. Filled to 5.0 milliliters, a water absorption tube produces a 103 mph dynamic wind pressure. See RILEM II.4 Tech Note for additional information.

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

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

 $\underline{\mathbf{A}}$  = "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 <u>AA</u> Above Average water repellent performance would be reported for treatments which result in a loss of no more than:

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

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

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

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

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

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

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

AA = Above Average

 $\underline{\mathbf{A}}$  = Average

**BA** = Below Average

"Windrock Stone"	Results in mL loss	<u>Ranking</u>
Untreated Control	-0.2	
Sure Klean® Weather Seal Natural Stone Treatment WB	-0.0	AA
Stand Off® Limestone & Marble Protector	-0.0	<u>AA</u>
Sure Klean <sup>®</sup> Weather Seal Siloxane PD	-0.0	AA

## **Photographs** - Protective Water Repellents

## "Windrock Stone"; Horizontal RILEM II.4, 5.0 milliliters, 20 minutes



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

**Untreated Control** 

Sure Klean<sup>®</sup> Weather Seal Natural Stone Treatment WB

Stand Off® Limestone & Marble Protector

#### **Conclusions** – Protective Water Repellents

Test results indicate that all of the water repellents tested exhibited above average water repellency on the submitted sample. Stand Off<sup>®</sup> Limestone & Marble Protector caused a slight color enhancement to the submitted limestone. Neither of the other treatments tested caused any noticeable color change to the submitted sample.

#### **Recommendations** - Protective Water Repellents

Recommendations for water repellent treatments for the limestone submitted by Decorative Rock Network, Lodi, CA are provided in the chart below. Recommendations are based on the treatments that proved most effective at providing water repellency on the submitted sample.

Sample	Protective Water Repellents
"Windrock Stone" Limestone	Sure Klean <sup>®</sup> Weather Seal Natural Stone Treatment WB OR *Stand Off <sup>®</sup> Limestone & Marble Protector OR Sure Klean <sup>®</sup> Weather Seal Siloxane PD

\*NOTE: Stand Off<sup>®</sup> Limestone & Marble Protector is manufactured and marketed in compliance with USEPA AIM VOC regulations (40 CFR 59.403). Not suitable for sale in states and districts with more restrictive AIM VOC regulations. Available in regulation-exempt small container sizes.

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 submitted samples.

#### <u>Description of Products Evaluated</u> – Stain Repellency

#### Stain Repellent Treatments

**Stand Off**<sup>®</sup> **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 many other types of masonry surfaces. 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. Limestone & Marble Protector combines high quality siloxane resins with "oleophobic" resins to produce a penetrating water and oil repellent ideal for long-term protection against food, oil and waterborne staining. Unlike conventional penetrating oil repellent products, Limestone & Marble Protector has been modified to ensure effectiveness on limestone, marble and other calcareous or neutral pH surfaces.

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

#### Sample Preparation - Stain Repellency

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

## **Test Method** - Stain Repellency

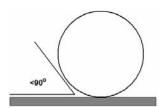
#### Surface Beading Evaluation

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

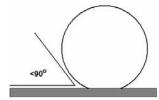
Note: Non-free flowing staining agents such as ketchup and mustard are applied in a globular fashion and therefore are not evaluated for their beading properties.

#### 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<sup>®</sup> 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.

## <u>Test Results</u> – Surface Beading

"Windrock Stone"									
Treatment	Coco- Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
Untreated Control	5	-	-	5	5	5	5	5	5
Limestone & Marble Protector	2	-	-	2	2	2	3	3	2
Stone, Tile & Masonry Protector (STMP)		-	-	2	2	2	3	3	2

## **Test Results** - Stain Repellency

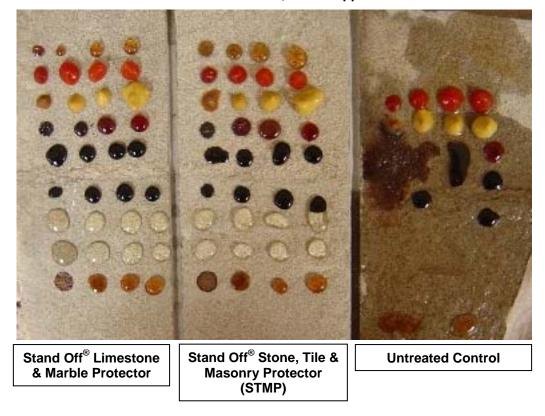
## % Removal

	"Windrock Stone"								
	Untreated Control								
	Coca-Cola	Ketchup	Mustard	Red Wine	Balsamic Vinegar	Soy Sauce	Olive Oil	Wesson Oil	Hot Coffee
24 hr	100%	100%	60%	60%	80%	100%	<1%	<1%	80%
4 hour	100%	100%	90%	60%	80%	100%	<1%	<1%	80%
1 hour	100%	100%	100%	60%	80%	100%	<1%	<1%	100%
10 min.	100%	100%	100%	60%	80%	100%	<1%	<1%	100%
	Stand Off <sup>®</sup> Limestone & Marble Protector								
	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%	95%	90%	100%
1 hour	100%	100%	100%	100%	100%	100%	95%	90%	100%
10 min.	100%	100%	100%	100%	100%	100%	95%	90%	100%
	Stand Off <sup>®</sup> 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%	90%	100%	100%	95%	95%	98%
4 hour	100%	100%	100%	98%	100%	100%	100%	95%	100%
1 hour	100%	100%	100%	100%	100%	100%	100%	95%	100%
10 min.	100%	100%	100%	100%	100%	100%	100%	98%	100%

<sup>\*</sup>Indicates etching occurred due to the acidic nature of the staining agents.

## **Photographs** – Stain Repellency

"Windrock Stone"; Stains Applied



"Windrock Stone"; Stains Removed



#### **Conclusions** - Stain Repellency

Based upon laboratory evaluations, both treatments evaluated improved the surface beading of the sample. However, Stand Off<sup>®</sup> Stone, Tile & Masonry Protector (STMP) was the most effective treatment in improving the sample's resistance to the applied stains, especially to the oils. In addition, Stand Off<sup>®</sup> Limestone & Marble Protector caused a slight color enhancement to the submitted sample. Stand Off<sup>®</sup> Stone, Tile & Masonry Protector (STMP) did not alter the appearance of the submitted sample in any way.

#### Recommendations - Stain Repellency

Recommendations for stain resistance treatment for the limestone submitted by Decorative Rock Network, Lodi, CA are provided in the chart below. Recommendations are based on the treatment that proved most effective for providing stain repellency on the submitted sample.

Sample	Stain Repellent	Maintenance Cleaner		
"Windrock Stone"	Stand Off <sup>®</sup> Stone, Tile & Masonry Protector	Enviro Klean <sup>®</sup> 2010 All		
Limestone	(STMP)	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.

## **Color and Sheen Enhancement**

This evaluation determines the effectiveness of the evaluated product in providing color and sheen enhancement to the submitted sample.

## <u>Description of Products Evaluated</u> – Color and Sheen Enhancement

**Stand Off® Gloss 'N Guard WB** – A highly durable polyurethane protective coating for tile, pavers, terrazzo and other polished and unpolished masonry. Gloss 'N Guard WB dries to a high-gloss finish, which enhances the natural beauty of treated surfaces – both horizontal and vertical. Gloss 'N Guard WB's water-based formula offers several improvements on similar solvent-based products. No solvent odor, easy soap and water cleanup, and reduced fire-hazards make the treatment safe and easy to use, as well as effective. In addition, Gloss 'N Guard WB complies with all known regulations limiting Volatile Organic Compound (VOC) content.

#### Sample Preparation - Color and Sheen Enhancement

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

#### Test Method - Color and Sheen Enhancement

Stand Off<sup>®</sup> Gloss 'N Guard WB was applied by brush in accordance with the application instructions in the current PROSOCO, Inc. Product Data Sheet.

## **Test Results** – Color and Sheen Enhancement

"Windrock Stone"					
Treatment	Color Enhancement	Sheen Enhancement			
Stand Off <sup>®</sup> Gloss 'N Guard WB	2	3			

Scale: 0 - No Enhancement; Dull

1 - Slight Enhancement

2 - Moderate Enhancement

3 - Significant Enhancement

# **Photograph** – Color and Sheen Enhancement

## "Windrock Stone"; Treatment Applied



#### Recommendations - Color and Sheen Enhancement

Recommendations for color and sheen enhancement for the limestone submitted by Decorative Rock Network, Lodi, CA are provided in the chart below. Recommendations are based on the treatment that proved most effective in providing color and sheen enhancement to the submitted sample.

Sample	Color Enhancement	Sheen Enhancement
"Windrock Stone" Limestone	Stand Off <sup>®</sup> Gloss 'N Guard WB	Stand Off <sup>®</sup> Gloss 'N Guard WB

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

Christopher A. Moore

Project Testing Laboratory Technician

CAM



# Decorative Rock Network 639 E. Lockeford St. Lodi, CA 95240



Project No. 0607-09 PTP

Prepared For: PROSOCO

Prepared By:
AMT Laboratories
August 2006