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Pallet Tag Program Laboratory Report Antique Brick & Block Little Rock, AR



Project No. 2111-01 PTP

Prepared For:



Prepared By:

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January 2022



Laboratory Report

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FOR: Mike Dickey, Dickey Sales, LLC

cc: Clay Witt, PROSOCO, Inc. Jake Boyer, PROSOCO, Inc.

Al Morris, PROSOCO, Inc.

SUBJECT: Antique Brick & Block DATE: January 10, 2022

Little Rock, AR PROJECT: 2111-01 PTP Pallet Tag Evaluation

SAMPLES SUBMITTED: One type of natural stone

Туре	Name	e Finish	Size
Quartzitic Sandsto	ne "Oakville Bl	ue Ice" Natural Cleft	(2) 17 ¾" x 17 ¾"

SUBMITTED BY: Mike Dickey



PURPOSE OF TEST:

- To determine the most appropriate PROSOCO, Inc. new construction cleaner(s) for the submitted samples.
- To evaluate the color and sheen enhancement characteristics of specific PROSOCO, Inc. products on the submitted samples.
- To determine the most appropriate PROSOCO, Inc. water repellent(s) for the submitted samples.

PRODUCTS EVALUATED:

New Construction Cleaning	Dilution:
Sure Klean® 600	1:6; 1:8
Sure Klean® Light Duty Concrete Cleaner	1:2, 1:3
Enviro Klean® Safety Klean	1:2, 1:3
Sure Klean® Vana Trol®	1:6; 1:8

Color and Sheen Enhancement	Dilution:
Sure Klean® Weather Seal Paver Enhancer	N/A*
Sure Klean® Weather Seal Color Enhancer VOC	N/A*
Sure Klean® Weather Seal Gloss 'N Guard	N/A*
Sure Klean® Weather Seal Gloss 'N Guard WB	N/A*

Water Repellency	Dilution:
Sure Klean® Weather Seal Natural Stone Treatment	N/A*
Sure Klean® Weather Seal Natural Stone Treatment WB Plus	N/A*
PROSOCO® SL100 Water Repellent	N/A*
Sure Klean® Weather Seal Siloxane PD	N/A*
Sure Klean® Weather Seal Paver Enhancer	N/A*
Sure Klean® Weather Seal Color Enhancer VOC	N/A*

*NOTE: Per the product data sheet instructions, only use the product in concentrate. Do not dilute.



TEST METHODS: New Construction Cleaning

Sure Klean® 600, Sure Klean® Light Duty Concrete Cleaner, Enviro Klean® Safety Klean, and Sure Klean® Vana Trol® were evaluated to determine the optimal concentration of cleaner which leaves the external surface looking most like the uncleaned surface of the submitted natural stone.

<u>Surface Finish Removal</u> is the visual examination of the sample comparing the surface finish of the uncleaned 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 uncleaned surface 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 uncleaned surface to the 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.

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

- 0 No change compared to uncleaned surface
- 1 Slight change compared to uncleaned surface
- 2 Moderate change compared to uncleaned surface
- 3 Significant change compared to uncleaned surface

Cleaning Procedure:

- Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Data Sheet.
- 2. Allow for an appropriate dwell time and periodically agitate:

600	5 minutes
Light Duty Concrete Cleaner	5 minutes
Safety Klean	5 minutes
Vana Trol®	5 minutes

- 3. Reapply cleaning solution; do not let cleaner dry into sample.
- 4. Rinse thoroughly with plenty of fresh water.*
- 5. Allow the sample to dry for at least 18 hours and visually examine.
- 6. Compare the uncleaned surfaces to the cleaned surfaces for the best match.

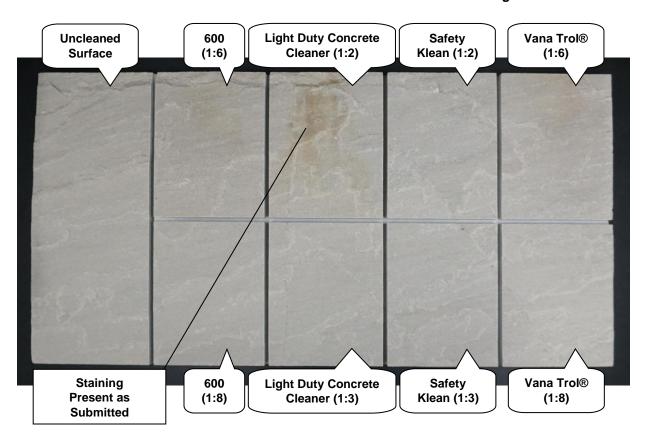
^{*}Rinsing Equipment – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 40 degree fan spray tip was used for rinsing.



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning

Name: "Oakville Blue Ice" – Quartzitic Sandstone					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600	1:6	0	0	0	0
600	1:8	0	0	0	0
Light Duty Concrete Cleaner	1:2	0	0	0	0
Light Duty Concrete Cleaner	1:3	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0

"Oakville Blue Ice" - Quartzitic Sandstone After Cleaning





CONCLUSIONS: New Construction Cleaning

In all of the cleaning tests conducted, none of the new construction cleaners caused any change to the appearance of the submitted natural stone.

As shown in the photograph on page 4, staining was present on the submitted samples upon submission prior to any testing being conducted.

When choosing the most appropriate product for the desired result:

- For new masonry surfaces that do not contain manganese or other metallic additives Test Sure Klean® 600
- For common construction and atmospheric staining Test Sure Klean® Light Duty Concrete Cleaner
- For an effective, safe alternative to acidic cleaning compounds Test Enviro Klean® Safety Klean
- For new masonry surfaces that are subject to vanadium, manganese, and other metallic stains Test Sure Klean® Vana Trol®

It is recommended that the selected cleaners always be used in the lowest possible concentration. Apply all products in accordance with the manufacturer's recommendations provided on container labels and product data sheets. On-site testing should be conducted to determine the most appropriate cleaning product and procedures for a particular project. See product literature for additional application and product information.

RECOMMENDATIONS: New Construction Cleaning

Recommendations for cleaning for each type of natural stone submitted by Antique Brick & Block, Little Rock, AR are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the uncleaned surface.

Sample	New Construction Cleaning
"Oakville Blue Ice" – Quartzitic Sandstone	Sure Klean® 600 (1:6) or (1:8) OR Sure Klean® Light Duty Concrete Cleaner (1:2) or (1:3) OR Enviro Klean® Safety Klean (1:2) or (1:3) OR Sure Klean® Vana Trol® (1:6) or (1:8)

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.

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



SAMPLE PREPARATION: Treatment Application

Prior to treatment application, the submitted natural stone samples were cleaned with Sure Klean® Vana Trol® diluted with eight parts water in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. After the samples had dried for at least 24 hours, the treatments were applied in accordance with the current PROSOCO, Inc. Product Data Sheet instructions and allowed to cure for at least 72 hours prior to testing.

TEST METHODS: Color and Sheen Enhancement

After 72 hours, a visual evaluation was made comparing the untreated control surface to the treated surface to determine the effectiveness of the evaluated products in providing color and/or sheen enhancement to the submitted natural stone samples.

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

- 0 No enhancement compared to untreated surface
- 1 Slight enhancement compared to untreated surface
- 2 Moderate enhancement compared to untreated surface
- 3 Significant enhancement compared to untreated surface

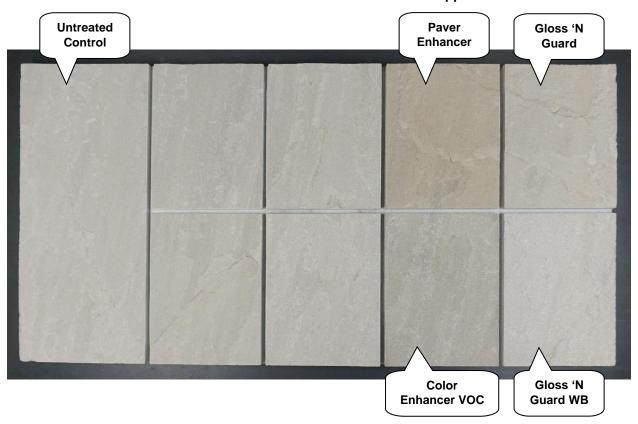
NOTE: Due to the surface irregularities and varying nature of the natural stone, the substrate's color and sheen enhancement may vary from one area of the sample to another, as well as from sample to sample.



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement

"Oakville Blue Ice" – Quartzitic Sandstone	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Paver Enhancer	3	0
Sure Klean® Weather Seal Color Enhancer VOC	2	0
Sure Klean® Weather Seal Gloss 'N Guard	3	0
Sure Klean® Weather Seal Gloss 'N Guard WB	1	1

"Oakville Blue Ice" - Quartzitic Sandstone After Application





CONCLUSIONS - Color and Sheen Enhancement

The treatments evaluated provided a range of color enhancement results, from a slight change in appearance to a significant change depending on the treatment. Sure Klean® Weather Seal Gloss 'N Guard WB was the only treatment that provided sheen enhancement.

Please refer to pages 6-8 of the report for individual recommendations based on the desired result.

Enhancement levels may vary by substrate, color, lightning, orientation, application method, and other variables. Always test in the field to confirm intended results.

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

RECOMMENDATIONS: Color and Sheen Enhancement

Recommendations for color and sheen enhancement for each type of natural stone submitted by Antique Brick & Block, Little Rock, AR are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Color and Sheen Enhancement
"Oakville Blue Ice" – Quartzitic Sandstone	Please refer to pages 6-8 of the report for individual recommendations based on the desired result.

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



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

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

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

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

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

EXAMPLE: If RILEM tubes applied to an untreated sample result in loss of 5.0 ml of water or more, then:

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

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





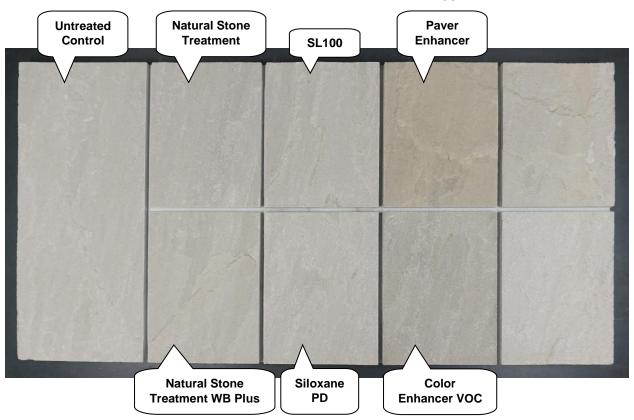
TEST RESULTS AND PHOTOGRAPHS: Protective Water Repellents

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

 $\underline{\mathbf{AA}}$ = Above Average $\underline{\mathbf{A}}$ = Average $\underline{\mathbf{BA}}$ = Below Average

"Oakville Blue Ice" – Quartzitic Sandstone	Results in mL loss	Ranking
Untreated Control	-0.0	
Sure Klean® Weather Seal Natural Stone Treatment	-0.0	<u>AA</u>
Sure Klean® Weather Seal Natural Stone Treatment WB Plus	-0.0	<u>AA</u>
PROSOCO® SL100® Water Repellent	-0.0	<u>AA</u>
Sure Klean® Weather Seal Siloxane PD	-0.0	<u>AA</u>
Sure Klean® Weather Seal Paver Enhancer	-0.0	<u>AA</u>
Sure Klean® Weather Seal Color Enhancer VOC	-0.0	<u>AA</u>

"Oakville Blue Ice" - Quartzitic Sandstone After Application





CONCLUSIONS: Protective Water Repellents

Based on the laboratory evaluations, all of the treatments provided good water repellent protection to the submitted natural stone samples. Although the untreated control in the 20 minute RILEM test absorbed no water, the treatments will likely provide long-term water repellent protection and help to prevent water-related staining.

Application of Sure Klean® Weather Seal Natural Stone Treatment, PROSOCO® SL100® Water Repellent, and Sure Klean® Weather Seal Siloxane PD did not result in any change to the appearance of the submitted sample.

Application of Sure Klean® Weather Seal Natural Stone Treatment WB Plus resulted in a slight change to the appearance of the submitted sample.

Please refer to the "Color and Sheen Enhancement" section of the report for Sure Klean® Weather Seal Paver Enhancer and Sure Klean® Weather Seal Color Enhancer VOC appearance information.

RECOMMENDATIONS: Protective Water Repellents

Recommendations for water repellency for each type of natural stone submitted by Antique Brick & Block, Little Rock, AR are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective.

Sample	Water Repellency	
"Oakville Blue Ice" – Quartzitic Sandstone	Sure Klean® Weather Seal Natural Stone Treatment OR Sure Klean® Weather Seal Natural Stone Treatment WB Plus OR PROSOCO® SL100® Water Repellent OR Sure Klean® Weather Seal Siloxane PD OR Sure Klean® Weather Seal Paver Enhancer OR Sure Klean® Weather Seal Color Enhancer VOC	

Apply all products in accordance with the manufacturer's recommendation provided on container labels and product data sheets. Because the severity of graffiti varies from location to location, on-site testing should be conducted to determine the most appropriate graffiti control product and procedure for a particular project.

J. Lucas Comadoll

QC/Project Testing Technician

J. Succes Conadoll

ALL SAMPLES SUPPLIED FOR THE ABOVE EVALUATION WILL BE DISPOSED OF <u>THIRTY (30) DAYS</u> AFTER THE ISSUE DATE OF THIS REPORT. IF SAMPLES ARE TO BE RETAINED FOR ADDITIONAL TESTING OR RETURNED TO THE SENDER, PROVIDE WRITTEN INSTRUCTIONS TO THE LABORATORY WITHIN <u>THIRTY (30) DAYS</u> OF THE ISSUE DATE OF THIS REPORT.

Recommendations made within this report are based on laboratory test applications and observations. Final determination of the suitability of a product and/or procedure should be made only after thorough job testing on actual surfaces.