

LABORATORY REPORT

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FOR: Grazyna Cumming, Realstone Systems

cc: Mark Donze, PROSOCO, Inc.

SUBJECT: Realstone Tempered Glazed Tiles DATE: June 20, 2018

Troy, MI PROJECT: 1805-05 CLNN AE

New Construction Cleaning and Maintenance Cleaning Evaluation

SAMPLES SUBMITTED:

<u>Sample</u>	<u>Size</u>
(2) samples of black leather tiles*	5 ½" x 3" x ¼" and 8" x 3" x ¼"
(3) samples of "Ruby" red glazed tiles	
(2) samples of "Marine" turquoise glazed tiles	11 ½" x 3" x ¼"
(1) sample of "Gunmetal" silver glazed tiles	

SUBMITTED BY: Grazyna Cumming

National Marketing Manager

Realstone Systems 1170 Souter St. Troy, MI 48083

PURPOSE OF TEST:

- To determine if an appropriate PROSOCO, Inc. new construction cleaner for removing excess polymer modified grout causes any adverse effects to the submitted glazed tiles.
- To determine an appropriate PROSOCO, Inc. maintenance cleaner for the submitted glazed tiles.
- To determine the most appropriate PROSOCO, Inc. cleaner to remove adhesive residue from clear protective wrapping from the surface of the glazed tiles.

*NOTE: No testing was conducted on the leather tiles. An appropriate leather cleaner should be used.



PRODUCTS EVALUATED:

New Construction Cleaning	Dilution:
PROSOCO SafEtch®	1:2

Maintenance Cleaning	Dilution:
Enviro Klean® 2010 All Surface Cleaner	Concentrate

Removal of Adhesive	Dilution:
PROSOCO Cleaner/Degreaser	1:4
Enviro Klean® 2010 All Surface Cleaner	Concentrate

TEST METHODS: New Construction Cleaning

Cleaning Procedure:

- 1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Guide instructions.
- 3. Reapply cleaning solution; do not let cleaner dry into masonry.
- 4. Rinse thoroughly with plenty of fresh water.*

*Rinsing Equipment – Rinsing was conducted using garden hose strength pressure.

The samples were visually inspected 24-hours after cleaning to determine whether the cleaner had any adverse effects on the samples.



TEST RESULTS: New Construction Cleaning

"Ruby" Tempered Glazed Tile		
Product	Dilution	Appearance
SafEtch®	1:2	No change in appearance

"Marine" Tempered Glazed Tile		
Product	Dilution	Appearance
SafEtch®	1:2	No change in appearance

"Gunmetal" Tempered Glazed Tile		
Product	Dilution	Appearance
SafEtch®	1:2	No change in appearance

CONCLUSIONS – New Construction Cleaning

In the cleaning tests conducted, PROSOCO SafEtch® did not cause any adverse effects to any of the submitted glazed tiles.



PHOTOGRAPHS: New Construction Cleaning









TEST METHODS: Removal of Adhesive

Cleaning Procedure:

- 1. Apply cleaning solution according to PROSOCO, Inc. Product Data Sheet instructions.
- 3. Reapply cleaning solution; do not let cleaner dry into masonry.
- 4. Rinse thoroughly with plenty of fresh water.*

*Rinsing Equipment – Rinsing was conducted using garden hose strength pressure.

The samples were visually inspected 24-hours after cleaning.

TEST RESULTS: Removal of Adhesive

"Ruby" Tempered Glazed Tile		
Product	Dilution	% Effectiveness
Cleaner/Degreaser	1:4	100%
2010 All Surface Cleaner	Concentrate	0%

"Marine" Tempered Glazed Tile		
Product	Dilution	% Effectiveness
Cleaner/Degreaser	1:4	100%
2010 All Surface Cleaner	Concentrate	0%

"Gunmetal" Tempered Glazed Tile		
Product	Dilution	% Effectiveness
Cleaner/Degreaser	1:4	100%
2010 All Surface Cleaner	Concentrate	0%



CONCLUSIONS – Removal of Adhesive

In the cleaning tests conducted, PROSOCO Cleaner/Degreaser diluted with four parts water removed 100% of the adhesive residue from the submitted tempered glazed tiles. Enviro Klean® 2010 All Surface Cleaner in concentrate was not effective in removing the adhesive residue.

Neither product caused any adverse effects to the glazed tiles.

PHOTOGRAPH: Removal of Adhesive





RECOMMENDATIONS:

New Construction Cleaning

Based on the laboratory test results, PROSOCO SafEtch® can be recommended to remove excess polymer modified grout from the surface of the "Ruby", "Marine", and "Gunmetal" tempered glazed tiles from Realstone Systems in Troy, MI. To facilitate easier removal of excess grout while minimizing any potential surface alterations, clean within 3 days of construction.

Maintenance Cleaning

Enviro Klean® 2010 All Surface Cleaner can be recommended for general maintenance cleaning on the submitted glazed tiles.

Removal of Adhesive

PROSOCO Cleaner/Degreaser diluted with four parts water can be recommended to remove adhesive residue from the surface of the submitted glazed tiles.

The below application procedures must be followed:

Procedure for PROSOCO SafEtch®:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for application instructions.

SafEtch® may be diluted with up to three parts clean water, depending on the nature and severity of soiling. Always pour water into empty bucket first, then carefully add concentrate. Refer to test panel results for recommended dilution for intended use.

Exterior Application

- 1. Use clean water to thoroughly prewet surface to be cleaned. On vertical surfaces, work from the bottom to the top.
- 2. Apply liberally using low-pressure spray (50 psi max), roller or densely filled (tampico) masonry washing brush. Do not apply with high-pressure spray. Do not atomize.
- 3. Let the cleaning solution dwell 3 to 5 minutes. Reapply. Do not let cleaning solution "dry into" the surface. If solution starts to dry, reapply.
- 4. Rinse the treated area thoroughly with clean water using high-pressure spray. On vertical surfaces, work from the bottom to the top, keeping lower surfaces rinsed clean and free of cleaner residue.

SPECIFIER NOTE: Light scrubbing of the surface improves cleaning results especially where high pressure rinsing equipment is not available.

SPECIFIER NOTE: The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400 to 1000 psi with a water flow rate of 6 to 8 gallons per minute delivered through a 15 to 45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet. Rinse with clean water, covering each section of the surface with a concentrated stream of water.

Interior Application

Proper ventilation is necessary. Follow exterior application procedures. If pressure-rinsing is not possible, use a sponge or soft-fibered brush to rinse thoroughly with clean water.

Cleanup

Clean tools and equipment with fresh water.



Procedure for Enviro Klean® 2010 All Surface Cleaner:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for 2010 All Surface Cleaner. Use in concentrate or dilute 2010 All Surface Cleaner concentrate with 1-10 parts water. Refer to Product Data Sheet for recommended dilution for intended use.

- 1. Working from bottom to top, prewet the surface with clean water.
- 2. Apply the diluted cleaning solution to the masonry surface using a brush or low-pressure spray.
- 3. Let the cleaner stay on the surface 1-10 minutes, based on testing. Gently scrub heavily soiled areas.
- 4. Working from bottom to top, rinse the surface thoroughly with clean water. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.
- 5. Repeat steps 1 through 4 if necessary.

Note: Do not let cleaning solution dry on the surface. If drying occurs, lightly wet surfaces with fresh water and reapply the cleaner in a gentle scrubbing manner.

Procedure for PROSOCO Cleaner/Degreaser:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for PROSOCO Cleaner/Degreaser.

Dilution

Dilute Cleaner/Degreaser concentrate with 4-200 parts water. Refer to Product Data Sheet for recommended dilution for intended use.

- 1. Remove loose debris and heavy buildups.
- 2. Apply diluted cleaning solution liberally. If spraying, do not atomize.
- 3. Let solution dwell 1-3 minutes.
- 4. Reapply and scrub vigorously.
- 5. Water rinse thoroughly to remove all residues.

Cleanup

Clean tools and equipment with fresh water.

Thorough on-site testing must be conducted before attempting overall application of any product.

Courtney A. Murdock, CDT Project Testing Director

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ALL SAMPLES SUPPLIED FOR THE ABOVE EVALUATION WILL BE DISPOSED OF <u>NINETY</u> (90) DAYS 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>NINETY</u> (90) DAYS 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.