

Pallet Tag Program Laboratory Report

Fibrobeton Sarasota, FL



Project No. 2010-08 PTP

Prepared For:



Prepared By:

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February 2021



LABORATORY REPORT

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- SUBJECT: Fibrobeton Sarasota, FL Pallet Tag Evaluation

 DATE:
 February 25, 2021

 PROJECT:
 2010-08 PTP

SAMPLES SUBMITTED:

Sample	Manufacturer	Color	Texture	Size
(4) GFRC Panel	Fibrobeton	White	Sandblasted	11.5" x 11.5" 7.5" x 7.5"
(3) GFRC Panel	Fibrobeton	Gray	Smooth	11.5" x 11.5"

SUBMITTED BY: Efe Yetisener Fibrobeton 6162 Clark Center Avenue Sarasota, FL 34238

PURPOSE OF TEST:

- To determine the most appropriate PROSOCO, Inc. new construction cleaner(s) for the submitted samples.
- To determine the suitability of Enviro Klean® Klean 'N Release Cleaner as a maintenance cleaner for the submitted samples.
- To evaluate the color and sheen enhancement characteristics of the requested PROSOCO® treatments on the submitted samples.
- To determine the effectiveness of appropriate PROSOCO, Inc. products in preventing the penetration of, and simplifying the removal of, graffiti staining on the submitted samples.



PRODUCTS EVALUATED:

New Construction Cleaning	Dilution:
Sure Klean® Light Duty Concrete Cleaner	1:6
Enviro Klean® Safety Klean	1:3

Maintenance Cleaning	Dilution:	
Enviro Klean® Klean 'N Release Cleaner	1:10	

Graffiti Resistance	Dilution:
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15	N/A*
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	N/A*
PROSOCO T2343 Anti-Graffiti Treatment	N/A*

Graffiti Removal	Dilution:
Defacer Eraser® Graffiti Remover	N/A*
Enviro Klean® SafStrip® 8	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® Light Duty Concrete Cleaner and Enviro Klean® Safety Klean were evaluated to determine the optimal concentration of cleaner which leaves the external surface looking most like the uncleaned surface of the GFRC panel.

<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:

- 1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Data Sheet.
- 3. Reapply cleaning solution; do not let cleaner dry into natural stone.
- 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 45 degree fan spray tip was used for rinsing.



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning

Finish: Sandblasted	Name: White Fibrobeton GFRC Panel				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Light Duty Concrete Cleaner	1:6	0	0	0	0
Safety Klean	1:3	0	0	0	0

Sandblasted White Fibrobeton GFRC Panel After Cleaning





TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning

Finish: Smooth	Name: Gray Fibrobeton GFRC Panel				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Light Duty Concrete Cleaner	1:6	0	0	0	0
Safety Klean	1:3	0	0	0	0

Smooth Gray Fibrobeton GFRC Panel After Cleaning





CONCLUSIONS: New Construction Cleaning

In the cleaning tests conducted, none of the new construction cleaners caused any change in appearance to the submitted samples.

When choosing the most appropriate product for the desired result:

- For common construction stains, efflorescence, and metallic staining Test Sure Klean® Light Duty Concrete Cleaner
- For an effective, safe alternative to acidic cleaning compounds Test Enviro Klean® Safety Klean

It is recommended that the selected cleaners always be used in the lowest possible concentration.

RECOMMENDATIONS: New Construction Cleaning

Recommendations for cleaning for each type of GFRC panel submitted by Fibrobeton, Sarasota, FL 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
Sandblasted White Fibrobeton GFRC Panel	Sure Klean® Light Duty Concrete Cleaner (1:6)
Smooth Gray Fibrobeton GFRC Panel	Enviro Klean® Safety Klean (1:3)

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.



TEST METHODS: Maintenance Cleaning

Enviro Klean® Klean 'N Release Cleaner was evaluated to determine if it leaves the external surface looking like the uncleaned surface of the GFRC panel.

<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:

- 1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Data Sheet.
- 3. Reapply cleaning solution; do not let cleaner dry into natural stone.
- 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 45 degree fan spray tip was used for rinsing.



TEST RESULTS AND PHOTOGRAPHS: Maintenance Cleaning

Finish: Sandblasted	Name: White Fibrobeton GFRC Panel				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Klean 'N Release Cleaner	1:10	0	0	0	0

Sandblasted White Fibrobeton GFRC Panel After Cleaning



Finish: Smooth	Name: Gray Fibrobeton GFRC Panel				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Klean 'N Release Cleaner	1:10	0	0	0	0

Smooth Gray Fibrobeton GFRC Panel After Cleaning





CONCLUSIONS: Maintenance Cleaning

Enviro Klean® Klean 'N Release Cleaner caused no change in appearance to any of the submitted samples.

It is recommended that the selected cleaner always be used in the lowest possible concentration.

RECOMMENDATIONS: Maintenance Cleaning

Recommendations for cleaning for each type of GFRC panel submitted by Fibrobeton, Sarasota, FL are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the uncleaned surface.

Sample	Maintenance Cleaning
Sandblasted White Fibrobeton GFRC Panel	Enviro Klean® Klean 'N Release Cleaner
Smooth Gray Fibrobeton GFRC Panel	(1:10)

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 samples were cleaned with Sure Klean® Light Duty Concrete Cleaner diluted with six 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 a brushing application in accordance with the current PROSOCO, Inc. Product Data Sheet instructions. The treatments were 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 samples.

The following scale was used for reporting results of both categories:
0 – No enhancement compared to untreated control
1 – Slight enhancement compared to untreated control
2 – Moderate enhancement compared to untreated control
3 – Significant enhancement compared to untreated control



TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement

Sandblasted White Fibrobeton GFRC Panel	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	1	0
PROSOCO T2343 Anti-Graffiti Treatment	0	0

Sandblasted White Fibrobeton GFRC Panel with Treatments





TEST RESULTS AND PHOTOGRAPHS: Color and Sheen Enhancement (cont.)

Smooth Gray Fibrobeton GFRC Panel	Color Enhancement	Sheen Enhancement
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra	1	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15	2	0
Sure Klean® Weather Seal Blok-Guard® & Graffiti Control II	1	0
PROSOCO T2343 Anti-Graffiti Treatment	0	1

Smooth Gray Fibrobeton GFRC Panel with Treatments





CONCLUSIONS: Color and Sheen Enhancement

The treatments evaluated provided a range of color enhancement results, from no change to a moderate change depending on the treatment and the sample. Enhancement levels may vary by substrate color, lighting, orientation application method, and other variables. Always test in the field to confirm intended results.

Worth noting, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 applied to the smooth gray Fibrobeton GFRC panel resulted in uneven color enhancement. This likely resulted from the brushing application method used and excess material being left on the surface due to the density of the submitted sample. On-site testing should always be conducted to ensure desired results.

None of the treatments evaluated provided any sheen enhancement except for PROSOCO T2343 Anti-Graffiti Treatment, and that was only on the smooth gray Fibrobeton GFRC panel. On-site testing should always be conducted to ensure desired 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.

TEST METHODS: Graffiti Resistance

This evaluation compares the effectiveness of graffiti control treatments in preventing staining of enamel spray paint and permanent markers.

Graffiti comes in many forms, many of which are low quality, readily available spray paints and markers. While those forms of graffiti are most common and may be easier to remove, the testing below was conducted with the graffiti types we have found to be the most resilient and hardest to remove in order to provide you with a "worst case scenario." Always test in field conditions to verify intended performance.

Spray paint and markers were applied as graffiti agents to the untreated and treated surfaces five days after application of the graffiti resistant products. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Enviro Klean® SafStrip® 8 and Defacer Eraser® Graffiti Remover.

Chemical cleaners were evaluated using the following procedure:

1. Apply the product to a dry surface, soiled with graffiti.

2.	Allow appropriate dwell time and periodically agitate:
	SafStrip® 8
	Graffiti Remover 5 minutes
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- 3. Rinse thoroughly until water runs clear. *
- 4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.

***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.

Graffiti removal was evaluated visually using a scale from 0 to 10, with 0 indicating no removal of the graffiti agent and 10 indicating complete removal of the graffiti agent.



TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance

Sandblasted White Fibrobeton GFRC Panel					
Untreated Control	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	3	3	3	3	3.0
Graffiti Remover	3	3	3	3	3.0
Blok-Guard® & Graffiti Control	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	8	10	9	10	9.3
Graffiti Remover	8	9	8	9	8.5
Blok-Guard [®] & Graffiti Control 15	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	8	10	9	10	9.3
Graffiti Remover	9	10	8	10	9.3
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	7	10	9	10	9.0
Graffiti Remover	8	9	8	9	8.5
Blok-Guard® & Graffiti Control Ultra 15	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	10	10	9	10	9.8
Graffiti Remover	10	10	9	10	9.8
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	6	5	5	5	5.3
Graffiti Remover	7	5	5	5	5.5
T2343 Anti-Graffiti Treatment	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	8	3	3	3	4.3
Graffiti Remover	7	3	3	3	4.0



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TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)



1 = SafStrip® 8 2 = Graffiti Remover

Sandblasted White Fibrobeton GFRC Panel



TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)

Smooth Gray Fibrobeton GFRC Panel					
Untreated Control	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	3	4	3	3	3.3
Graffiti Remover	3	3	3	3	3.0
Blok-Guard® & Graffiti Control	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	3	4	3	3	3.3
Graffiti Remover	3	3	3	3	3.0
Blok-Guard® & Graffiti Control 15	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	4	8	8	8	7.0
Graffiti Remover	6	5	5	5	5.3
Blok-Guard® & Graffiti Control Ultra	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	5	7	7	6	6.3
Graffiti Remover	5	7	6	6	6.0
Blok-Guard [®] & Graffiti Control Ultra 15	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	8	8	8	8	8.0
Graffiti Remover	9	8	7	6	7.5
Blok-Guard® & Graffiti Control II	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	5	7	6	6	6.0
Graffiti Remover	6	5	5	5	5.3
T2343 Anti-Graffiti Treatment	Red Paint	Black Marker	Red Marker	Blue Marker	Avg. Removal
SafStrip® 8	9	7	7	5	7.0
Graffiti Remover	8	5	7	5	6.3



TEST RESULTS AND PHOTOGRAPHS: Graffiti Resistance (cont.)



Smooth Gray Fibrobeton GFRC Panel



CONCLUSIONS: Graffiti Resistance

Based on the laboratory evaluations, graffiti removal was improved when the submitted samples were treated with most of the graffiti resistance treatments.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15, and Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15 were the most effective treatments on the sandblasted white Fibrobeton GFRC panels.

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15, Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15, and PROSOCO T2343 Anti-Graffiti Treatment were the most effective treatments on the smooth gray Fibrobeton GFRC panels.

Enviro Klean® SafStrip® 8 and Defacer Eraser® Graffiti Remover were both effective when removing graffiti from the submitted samples. Enviro Klean® SafStrip® 8 was the most effective product on the smooth gray Fibrobeton GFRC panels.

On-site testing is always recommended to ensure the desired result. Heavy graffiti staining may require more than one application of the graffiti remover.



RECOMMENDATIONS: Graffiti Control

Recommendations for graffiti control for each type of GFRC panel submitted by Fibrobeton, Sarasota, FL are provided in the chart below. Recommendations are based on the treatment(s) that proved most effective on average for providing graffiti repellency and the product that was most effective on average at removing the graffiti on all types submitted. Heavy graffiti staining may require more than one application of the graffiti remover.

Sample	Graffiti Repellents	Graffiti Removers
Sandblasted White Fibrobeton GFRC Panel	 ¹Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15 OR ²Sure Klean® Weather Seal Blok-Guard® & Graffiti Control OR ²Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 OR ²Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 	Enviro Klean® SafStrip® 8 OR Defacer Eraser [®] Graffiti Remover
Smooth Gray Fibrobeton GFRC Panel	 ¹Sure Klean® Weather Seal Blok-Guard® & Graffiti Control Ultra 15 OR ²Sure Klean® Weather Seal Blok-Guard® & Graffiti Control 15 OR ²PROSOCO T2343 Anti-Graffiti Treatment 	¹ Enviro Klean® SafStrip® 8 OR ² Defacer Eraser® Graffiti Remover

NOTE: "1" indicates the most effective product and "2" indicates the second most effective product.

Please refer to the Product Data Sheet or visit <u>www.prosoco.com/voccompliance</u> to confirm VOC compliance with individual district or state regulations.

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. Quere Conadoll

J. Lucas Comadoll Project Testing Technician

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</u> (30) 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.