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ATTACHMENTS
Technical Services TECH Note RILEM Tube Test Procedures
Product Data literature for all products evaluated
FOR: Mike Dickey
cc: Paul Tessier

SUBJECT: Midwest Block & Brick
Kansas City, MO

DATE: November 2, 2004

PROJECT: PTP 0407-21

SAMPLES SUBMITTED: Two types of smooth-face “Cherokee Block” CMU’s with “Hamburger” color system and “Master Builders” integral water repellent

<table>
<thead>
<tr>
<th>Block</th>
<th>Name</th>
<th>Color</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth-face CMU</td>
<td>“White Coral”</td>
<td>Pink/White</td>
<td>8” x 16” x 4”</td>
</tr>
<tr>
<td>Smooth-face CMU</td>
<td>“Grey Moonlight”</td>
<td>Gray</td>
<td></td>
</tr>
</tbody>
</table>

Submitted by: Paul Tessier

* It was previously reported that lower dilutions of the selected new construction cleaners removed the surface pigment of the submitted block more easily.
PURPOSE OF TESTING:

Two types of integrally colored smooth-face blocks; both with large, small and fine aggregate were submitted for testing using PROSOCO’s new construction cleaning, water repellent products, and graffiti control products.

A. Cleaning Concrete Masonry Units: Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner were evaluated for removal of laboratory applied mortar.

To simulate new construction soiling, all concrete masonry units (CMU’s) are placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall are positioned on top of each CMU and filled with a wet mixture of Type S mortar. The wet, mortar-filled cylinder is allowed to remain in contact with the CMU for 10 minutes before removal.

Heavy deposits of mortar are removed with dry scraping after 24 hours. Prepared cleaning solutions are then evaluated for their effectiveness in removing residual Type S Mortar staining after 3 days, 7 days, and 14 days of curing*.

B. Color Uniformity Testing* - Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner were evaluated at various dilutions to determine the optimal concentration of cleaner that leaves the external surface looking most like the natural through-body color of the CMU.

Color uniformity was evaluated by comparing aggregate exposure and surface pigment alternation/removal of each cleaned surface compared to the natural through-body color of the CMU.

Aggregate Exposure is the visual examination comparing aggregate exposure of the interior, through-body section of CMU to surfaces cleaned with selected product(s) at given dilutions.

Surface Pigment Alteration/Removal* is the visual examination comparing the pigmentation of the interior, through-body section of the CMU to surfaces cleaned with selected product(s) at given dilutions.

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

- 0 – Worst match to through-body
- 1 – Poor match to through-body
- 2 – Fair match to through-body
- 3 – Good match to through-body
- 4 – Best match to through-body

NOTE: When cleaning integrally colored CMU.

Integrally colored concrete masonry units (CMU’s) frequently have high amounts of pigments concentrated on the surface of the cured concrete unit. Variation of surface pigment concentrations from one CMU to the next creates a blotchy appearance in the completed wall. Allowed to remain on the surface of the CMU, the weakly bound pigment will weather and streak, further detracting from the appearance of the completed CMU wall.

In addition to removing excess mortar and construction related soiling, the goal of any cleaning operation undertaken on an integrally colored CMU should include removal of unnaturally high concentrations of surface pigment. By revealing the natural through-body color on the integrally colored unit, the overall color uniformity and weathering resistance of the completed CMU wall is improved.

C. Protective Water Repellents – Sure Klean® Custom Masonry Sealer and Sure Klean® Weather Seal Siloxane WB Concentrate were evaluated for their ability to provide water repellency to the submitted samples.

D. Graffiti Control – Sure Klean® Custom Masonry Sealer was evaluated for its ability to control graffiti on the submitted samples. Sure Klean® Fast Acting Stripper and Defacer Eraser® Graffiti Wipe were evaluated for their ability to remove graffiti from the submitted samples.
## PRODUCTS EVALUATED FOR CLEANING AND COLOR UNIFORMITY

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Product</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Custom Masonry Cleaner</td>
<td>1:6, 1:10*</td>
</tr>
<tr>
<td></td>
<td>Sure Klean® Burnished Custom Masonry Cleaner</td>
<td>1:3</td>
</tr>
</tbody>
</table>

*NOTE:* The dilution of Sure Klean® Custom Masonry Cleaner with ten parts water tested is not a typical concentration used in new construction cleaning. This higher dilution of Sure Klean® Custom Masonry Cleaner was used in response to the report that the surface pigment removes easily with lower dilutions.

## WATER REPELLENT PRODUCTS EVALUATED

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Product</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Custom Masonry Sealer</td>
<td>Concentrate</td>
</tr>
<tr>
<td></td>
<td>Sure Klean® Weather Seal Siloxane WB Concentrate</td>
<td>1:9</td>
</tr>
</tbody>
</table>

## GRAFFITI CONTROL PRODUCTS EVALUATED

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Product</th>
<th>Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Custom Masonry Sealer</td>
<td>Concentrate</td>
</tr>
</tbody>
</table>

## GRAFFITI REMOVAL PRODUCTS EVALUATED

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Fast Acting Stripper</td>
</tr>
<tr>
<td></td>
<td>Defacer Eraser® Graffiti Wipe</td>
</tr>
</tbody>
</table>
SECTION A – CLEANING INTEGRALLY COLORED CMU’s

DESCRIPTION OF PRODUCTS EVALUATED

These cleaning trials were conducted to determine the optimal cleaning/cure time combination.

**Sure Klean® Custom Masonry Cleaner** – A general purpose, concentrated acidic cleaner for most custom masonry and colored concrete. Removes concrete splashes, excess mortar, mud, heavy efflorescence and surface soiling, leaving the masonry clean and uniform with no acid burning or streaking. Apply by brush or low-pressure spray.

**Sure Klean® Burnished Custom Masonry Cleaner** – Removes common construction and atmospheric staining from custom masonry and other architectural concrete surfaces. This general-purpose, non-etching acidic cleaner removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Burnished Custom Masonry Cleaner adds depth to colors and brightens white matrices and exposed aggregate.

TEST METHOD – Cleaning

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

1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
3. Allow appropriate dwell time for each cleaner:
   - Custom Masonry Cleaner.................................................................3 minutes
   - Burnished Custom Masonry Cleaner ........................................3-5 minutes
4. Reapply the products and moderately agitate with a brush.
5. Pressure rinse thoroughly.*
6. Allow the surface to dry for at least 18 hours and visually examine.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.
## TEST RESULTS – Cleaning

### % Removal of Type S mortar

#### “White Coral” Smooth-face CMU

<table>
<thead>
<tr>
<th>Product</th>
<th>Dilution</th>
<th>3 day</th>
<th>7 day</th>
<th>14 day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Masonry Cleaner</td>
<td>1:6</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Custom Masonry Cleaner</td>
<td>1:10</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Burnished Custom Masonry Cleaner</td>
<td>1:3</td>
<td>95%</td>
<td>95%</td>
<td>90%</td>
</tr>
</tbody>
</table>

#### “Grey Moonlight” Smooth-face CMU

<table>
<thead>
<tr>
<th>Product</th>
<th>Dilution</th>
<th>3 day</th>
<th>7 day</th>
<th>14 day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Masonry Cleaner</td>
<td>1:6</td>
<td>100%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Custom Masonry Cleaner</td>
<td>1:10</td>
<td>100%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Burnished Custom Masonry Cleaner</td>
<td>1:3</td>
<td>95%</td>
<td>90%</td>
<td>90%</td>
</tr>
</tbody>
</table>
PHOTOGRAPHS- Cleaning

“White Coral” Smooth-face CMU; 3 Day Cleaning

Sure Klean® Custom Masonry Cleaner 1:6

Sure Klean® Custom Masonry Cleaner 1:10

Sure Klean® Burnished Custom Masonry Cleaner 1:3

“White Coral” Smooth-face CMU; 7 Day Cleaning

Sure Klean® Custom Masonry Cleaner 1:6

Sure Klean® Custom Masonry Cleaner 1:10

Sure Klean® Burnished Custom Masonry Cleaner 1:3
PHOTOGRAPHS- Cleaning

“White Coral” Smooth-face CMU; 14 Day Cleaning

- Sure Klean® Custom Masonry Cleaner 1:6
- Sure Klean® Custom Masonry Cleaner 1:10
- Sure Klean® Burnished Custom Masonry Cleaner 1:3
CONCLUSIONS – Cleaning

Based on the test data, all of the submitted block samples were efficiently cleaned with a dilution of the selected PROSOCO Inc. cleaning product. Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure.

All dilutions of Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner, removing slight to heavy concentrations of pigmented matrix from smooth-face blocks, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit.

RECOMMENDED PRODUCTS AND DILUTIONS – CLEANING

Recommendations for cleaning for each type of CMU submitted by Midwest Block and Brick, Kansas City, MO, are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar.

<table>
<thead>
<tr>
<th>Block</th>
<th>New Construction Cleaning (Type S mortar, 14 day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Custom Masonry Cleaner (1:10)</td>
</tr>
<tr>
<td></td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>Sure Klean® Burnished Custom Masonry Cleaner (1:3)</td>
</tr>
</tbody>
</table>

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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered through a 15-40 degree fan spray often produces best cleaning 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 cleaning product and procedures for a particular project. See product literature for additional application and product information.
SECTION B – COLOR UNIFORMITY:

DESCRIPTION OF PRODUCTS EVALUATED – Color Uniformity:

**Sure Klean® Custom Masonry Cleaner** – A general purpose, concentrated acidic cleaner for most custom masonry and colored concrete. Removes concrete splashes, excess mortar, mud, heavy efflorescence and surface soiling, leaving the masonry clean and uniform with no acid burning or streaking. Apply by brush or low-pressure spray.

**Sure Klean® Burnished Custom Masonry Cleaner** – Removes common construction and atmospheric staining from custom masonry and other architectural concrete surfaces. This general-purpose, non-etching acidic cleaner removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Burnished Custom Masonry Cleaner adds depth to colors and brightens white matrices and exposed aggregate.

TEST METHOD – Color Uniformity Testing:

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

1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
3. Allow appropriate dwell time, as specified.
   - Custom Masonry Cleaner
   - Burnished Custom Masonry Cleaner
4. Reapply the products and moderately agitate with a brush.
5. Pressure rinse thoroughly.*
6. Allow the sample to dry for at least 18 hours and visually examine.
7. Break the sample in half and compare the through-body surfaces to the cleaned surfaces for the best match.

*Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.
TEST RESULTS – Color Uniformity

<table>
<thead>
<tr>
<th>Substrate: Smooth-face CMU</th>
<th>Pigment Color: “White Coral”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Dilution</td>
</tr>
<tr>
<td>Custom Masonry Cleaner 1:6</td>
<td>4</td>
</tr>
<tr>
<td>Custom Masonry Cleaner 1:10</td>
<td>3</td>
</tr>
<tr>
<td>Burnished Custom Masonry Cleaner 1:3</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substrate: Smooth-face CMU</th>
<th>Pigment Color: “Grey Moonlight”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>Dilution</td>
</tr>
<tr>
<td>Custom Masonry Cleaner 1:6</td>
<td>4</td>
</tr>
<tr>
<td>Custom Masonry Cleaner 1:10</td>
<td>3</td>
</tr>
<tr>
<td>Burnished Custom Masonry Cleaner 1:3</td>
<td>3</td>
</tr>
</tbody>
</table>
PHOTOGRAPHS – Color Uniformity

“White Coral” Smooth-face; Through-body

Sure Klean® Custom Masonry Cleaner (1:6)    Sure Klean® Custom Masonry Cleaner (1:10)    Sure Klean® Burnished Custom Masonry Cleaner (1:3)    Through-body color
CONCLUSIONS: COLOR UNIFORMITY:

Most dilutions of Sure Klean® Custom Masonry Cleaner and Sure Klean® Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner. Higher concentrations of cleaner removed moderate to heavy concentrations of pigmented matrix, exposing small and large aggregate. Lower concentrations of cleaner removed slight to moderate concentrations of pigmented matrix, exposing small and large aggregate. All dilutions enhanced the natural appearance of the integrally colored CMU.

RECOMMENDATIONS – COLOR UNIFORMITY

Recommendations for color uniformity for each type of CMU submitted by Midwest Block and Brick, Kansas City, MO, are provided in the chart below. Recommendations are based on the optimum dilution that provides the best color uniformity.

<table>
<thead>
<tr>
<th>Block</th>
<th>Color Uniformity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU's</td>
<td>Sure Klean® Custom Masonry Cleaner (1:10) OR</td>
</tr>
<tr>
<td></td>
<td>Sure Klean® Burnished Custom Masonry Cleaner (1:3)</td>
</tr>
</tbody>
</table>

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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered though a 15-40 degree fan spray often produces best cleaning 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 cleaning product and procedures for a particular project. See product literature for additional application and product information.
SECTION C – 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:

**Sure Klean ® Custom Masonry Sealer** – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, architectural concrete block, precast concrete, wood and porous masonry. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering.

**Sure Klean ® Weather Seal Siloxane WB Concentrate** – A concentrated water repellent designed for dilution with fresh water at the jobsite. This solvent-free blend of siloxanes and oligomeric alkoxyalkoxysiloxanes mixes easily with water to produce a penetrating water repellent ideal for application to dense or porous masonry surfaces. An effective alternative to conventional solvent-based silanes or siloxanes, Siloxane WB penetrates and chemically bonds deep within the masonry substrate to provide long-lasting protection against water-related staining or deterioration. Will not darken, produce a surface film or impair the natural breathing characteristics of treated surfaces.

SAMPLE PREPARATION – Protective Water Repellents:

The submitted blocks were scored, allowed to dry, and to reabsorb atmospheric humidity for 24 hours prior to treatment. The treatment method consisted of a wet-on-wet brush application. All treatments were allowed to cure at least 3 days prior to testing.

TEST METHODS – Protective Water Repellents:

**Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes**

The water absorption tube test simulating wind driven rain conditions was performed. This test simulates 60 mile per hour wind driven rain conditions for a period of 20 minutes. See Technical Services TECH Note RILEM Tube Test Procedures.
TEST RESULTS – Protective Water Repellents:

Water Absorption Tube Test: RILEM II.4, 60 mph, 20 Minutes

<table>
<thead>
<tr>
<th></th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“White Coral” Smooth-face CMU</strong></td>
<td></td>
</tr>
<tr>
<td>Untreated Control</td>
<td>&lt; 40 mph</td>
</tr>
<tr>
<td>Custom Masonry Sealer</td>
<td>59 mph</td>
</tr>
<tr>
<td>Siloxane WB 1:9</td>
<td>57 mph</td>
</tr>
<tr>
<td><strong>“Grey Moonlight” Smooth-face CMU</strong></td>
<td></td>
</tr>
<tr>
<td>Untreated Control</td>
<td>&lt; 40 mph</td>
</tr>
<tr>
<td>Custom Masonry Sealer</td>
<td>59 mph</td>
</tr>
<tr>
<td>Siloxane WB 1:9</td>
<td>56 mph</td>
</tr>
</tbody>
</table>
PHOTOGRAPHS- Protective Water Repellents

"White Coral" Smooth-face CMU- RILEM Testing

Sure Klean® Custom Masonry Sealer  
Untreated Control  
Sure Klean® Weather Seal Siloxane WB (1:9)
CONCLUSIONS - Protective Water Repellents

Based upon laboratory evaluations, Sure Klean® Custom Masonry Sealer and Sure Klean® Weather Seal Siloxane WB Concentrate diluted with nine parts water provided excellent water repellency to all submitted samples. In addition, Sure Klean® Custom Masonry Sealer enhanced the appearance of each CMU.

RECOMMENDATIONS - PROTECTIVE WATER REPELLENTS

Recommendations for water repellency treatment for each type of CMU submitted by Midwest Block and Brick, Kansas City, MO, are provided in the chart below. Recommendations are based on the treatment that proved most effective and can provide water repellency on all types submitted.

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Water Repellents</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU's</td>
<td>Sure Klean® Custom Masonry Sealer OR Sure Klean® Weather Seal Siloxane WB Concentrate 1:9</td>
</tr>
</tbody>
</table>

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 D – GRAFFITI CONTROL

DESCRIPTION OF PRODUCTS EVALUATED

These trials were conducted to determine the optimal graffiti control treatment.

Graffiti Control Treatments

Sure Klean® Custom Masonry Sealer – A clear, solvent-based silicone elastomer formulated to weatherproof concrete block and other porous masonry material. Sure Klean® Custom Masonry Sealer protects masonry surfaces from repeated graffiti attacks without altering the natural appearance.

Products Evaluated for Graffiti Removal

Defacer Eraser® Graffiti Wipe – An easy-to-use graffiti remover that does not contain methanol, methylene chloride or other “halogenated” solvents prohibited on many projects. Graffiti Wipe removes a variety of graffiti stains from most smooth masonry, wood and metal surfaces.

Sure Klean® Fast Acting Stripper – A thixotropic stripping compound formulated specifically for removal of high strength paints and coatings such as epoxies, polyurethanes, and floor enamels. Additionally, Fast Acting Stripper dissolves most spray paints, marking pens, lacquers and other graffiti.

Graffiti Agents

Interior/Exterior Spray Paint (Red)
Permanent Marker (Green)
Permanent Marker (Red)
Permanent Marker (Black)
SAMPLE PREPARATION – Graffiti Control

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

Sections of the concrete samples were treated with one coat of Sure Klean® Custom Masonry Sealer, in accordance with PROSOCO, Inc.’s Product Guide application instructions and then allowed to cure for at least one day. At the end of the one-day cure period, a visual adverse effects evaluation was made and then the graffiti agents were applied to the substrates.

Spray paint and markers were applied as graffiti agents to all treated surfaces no sooner than one day following application of Sure Klean® Custom Masonry Sealer. Removal of the graffiti agents was attempted 24 hours after application of the graffiti agents, using Defacer Eraser® Graffiti Wipe and Sure Klean® Fast Acting Stripper.

TEST METHOD – Graffiti Control

Chemical cleaners were evaluated using the following procedure:

1. Apply the product to a dry surface, soiled with graffiti.
2. Allow appropriate dwell time:
   - Graffiti Wipe...........................................................................................................5 minutes
   - Fast Acting Stripper ............................................................................................20 minutes
3. Pressure rinse thoroughly until water runs clear. *
4. Allow the surface to dry thoroughly and visually examine to determine effectiveness.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.
## TEST RESULTS – Graffiti Control

### % Removal

<table>
<thead>
<tr>
<th></th>
<th>Untreated Control</th>
<th>Red Paint</th>
<th>Black Marker</th>
<th>Green Marker</th>
<th>Red Marker</th>
<th>% Avg. Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fast Acting Stripper</strong></td>
<td></td>
<td>90%</td>
<td>80%</td>
<td>20%</td>
<td>85%</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Graffiti Wipe</strong></td>
<td></td>
<td>95%</td>
<td>70%</td>
<td>20%</td>
<td>70%</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Custom Masonry Sealer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fast Acting Stripper</strong></td>
<td></td>
<td>95%</td>
<td>99%</td>
<td>95%</td>
<td>95%</td>
<td>96%</td>
</tr>
<tr>
<td><strong>Graffiti Wipe</strong></td>
<td></td>
<td>95%</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
<td>91%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Untreated Control</th>
<th>Red Paint</th>
<th>Black Marker</th>
<th>Green Marker</th>
<th>Red Marker</th>
<th>% Avg. Removal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fast Acting Stripper</strong></td>
<td></td>
<td>85%</td>
<td>99%</td>
<td>50%</td>
<td>95%</td>
<td>82%</td>
</tr>
<tr>
<td><strong>Graffiti Wipe</strong></td>
<td></td>
<td>90%</td>
<td>80%</td>
<td>50%</td>
<td>70%</td>
<td>73%</td>
</tr>
<tr>
<td><strong>Custom Masonry Sealer</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fast Acting Stripper</strong></td>
<td></td>
<td>95%</td>
<td>100%</td>
<td>95%</td>
<td>99%</td>
<td>97%</td>
</tr>
<tr>
<td><strong>Graffiti Wipe</strong></td>
<td></td>
<td>99%</td>
<td>100%</td>
<td>90%</td>
<td>95%</td>
<td>96%</td>
</tr>
</tbody>
</table>
PHOTOGRAPHS – Graffiti Control

“White Coral” Smooth-face CMU Before Graffiti Removal

“White Coral” Smooth-face CMU After Graffiti Removal

Sure Klean® Custom Masonry Sealer

Untreated Control

Sure Klean® Fast Acting Stripper

Defacer Eraser® Graffiti Wipe

Sure Klean® Fast Acting Stripper

Defacer Eraser® Graffiti Wipe
CONCLUSIONS – Graffiti Control

Based upon laboratory evaluations, graffiti removal was improved when the submitted samples were treated with Sure Klean® Custom Masonry Sealer prior to graffiti application. In addition, Sure Klean® Custom Masonry Sealer enhanced the appearance of the CMU’s.

RECOMMENDATIONS – GRAFFITI CONTROL

Recommendations for graffiti control treatment for each type of CMU submitted by Midwest Block and Brick, Kansas City, MO, are provided in the chart below. Recommendations are based on the treatment that proved most effective for providing graffiti repellency and the product that was most effective at removing the graffiti on all types submitted.

<table>
<thead>
<tr>
<th>Block Type</th>
<th>Graffiti Repellent</th>
<th>Graffiti Removers</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Submitted CMU’s</td>
<td>Sure Klean® Custom Masonry Sealer</td>
<td>Sure Klean® Fast Acting Stripper OR Defacer Eraser® Graffiti Wipe</td>
</tr>
</tbody>
</table>

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.

For the most severe graffiti cases Sure Klean® Fast Acting Stripper is recommended for job-site testing. For mild graffiti cases, Defacer Eraser® Graffiti Wipe is recommended for job-site testing. See product literature for additional application and product information.

Christopher A. Moore
Project Testing Laboratory Technician

CAM
Laboratory Report

Pallet Tag Program Evaluation

Midwest Block and Brick
Kansas City, MO

Project No. 0407-21 PTP

Prepared For:

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PROSOCO, Inc.
November 2004