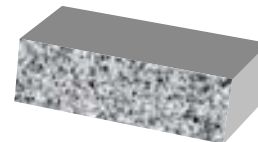




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PROSOCO, Inc.

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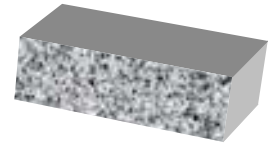
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ATTACHMENTS

- Attachment #1 – PHOTO A & B
- Technical Services TECH Note RILEM Test Method No. II.4
- Product Data literature for all products evaluated



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FOR: Ed Marcin
cc: Jack James
Paul Tessier

SUBJECT: Western Brick Company
1603 Spur 529
Rosenberg, Texas 77471

DATE: August 27, 2001

PROJECT: 0107-02 BP

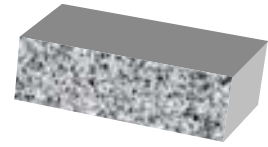
SAMPLES SUBMITTED: Eleven types of concrete bricks

Sample	Color/Finish	Size
"Olde Texas"	Red/Gray	2½" x 9½" x 2½"
"French Antique"	Tan	2½" x 9½" x 2½"
"Santa Rosa"	Dark Red	2½" x 9½" x 2½"
"Oyster Pearl"	Gray	2½" x 9½" x 2½"
"Mesquite"	Brown	2½" x 9½" x 2½"
"Olde Orleans"	Brown	2½" x 9½" x 2½"
"Glacier White"	White	2½" x 9½" x 2½"
"Greymohr"	Gray	2½" x 9½" x 2½"
"Austin Blend"	Tan	2½" x 9½" x 2½"
"Omaha Tan"	Tan	2½" x 9½" x 2½"
"Crimson"	Red	2½" x 9½" x 2½"

Submitted by: Jack James



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PURPOSE OF TESTING

Eleven colors of integrally colored concrete bricks with large, small and fine aggregate were submitted for testing using PROSOCO, Inc.'s new construction cleaning and water repellent products.

A. Cleaning Concrete Bricks – Sure Klean® Custom Masonry Cleaner and Sure Klean® Concrete Brick Cleaner* was evaluated at various dilutions for removal of laboratory applied mortar.

To simulate new construction soiling, all concrete bricks 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 concrete brick and filled with a wet mixture of Ash Grove® Type S cementitious mortar. The wet, mortar-filled cylinder is allowed to remain in contact with the concrete brick for 10 minutes before removal.

Soiled concrete bricks are allowed to dry before test cleaning.

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

B. Surface Alteration Testing – Sure Klean® Custom Masonry Cleaner and Sure Klean® Concrete Brick Cleaner was tested at various dilutions to determine if a cleaning program implemented to remove excess mortar and related new construction soiling would otherwise alter the appearance of cleaned surfaces. Surface Alteration was evaluated visually based upon perceived discoloration or erosion/etching of the concrete brick.

Aggregate Exposure is the visual examination of the concrete brick comparing aggregate exposure of the untreated control surface to surfaces cleaned with selected product(s) at given dilutions.

Surface Pigment Alteration/Removal is the visual examination of the concrete brick comparing the surface pigmentation of the untreated control to surfaces cleaned with selected product(s) at given dilutions.

Matrix Erosion is the visual examination comparing the untreated control surface to surfaces cleaned with selected products at given dilutions looking for any potential erosion/digestion of the cementitious matrix of the concrete brick.

Staining 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 all categories:

0 – no change	3 – heavy
1 – slight	4 – excessive
2 – moderate	

NOTE: When cleaning integrally colored concrete brick.

Integrally colored concrete bricks frequently have high amounts of pigments concentrated on the surface. Variation of surface pigment concentrations from one concrete brick to the next creates a blotchy appearance in the completed wall. Allowed to remain on the surface of the concrete brick, the weakly bound pigment will weather and streak, further detracting from the appearance of the completed concrete brick wall.

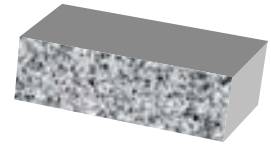
In addition to removing excess mortar and construction related soiling, the goal of any cleaning operation undertaken on integrally colored concrete brick should include removal of unnaturally high concentrations of surface pigment. By revealing the natural through-body color on the integrally colored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

C. Protective Water Repellents – Sure Klean® Weather Seal Siloxane PD and Sure Klean® Custom Masonry Sealer were evaluated for their ability to provide water repellency to the concrete bricks.

*In the original report, this product was called Sure Klean® Burnished Custom Masonry Cleaner. This report was revised when the product name was changed.



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CLEANING PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All Submitted Concrete Brick	Sure Klean® Custom Masonry Cleaner	(1:2), (1:4), (1:6)
	Sure Klean® Concrete Brick Cleaner	(1:2), (1:3)

SURFACE ALTERATION PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All Submitted Concrete Brick	Sure Klean® Custom Masonry Cleaner	(1:2), (1:4), (1:6)
	Sure Klean® Concrete Brick Cleaner	(1:2), (1:3)

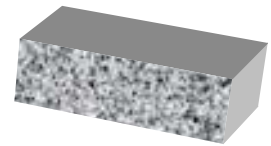
WATER REPELLENT PRODUCTS EVALUATED

SAMPLE	PRODUCT	DILUTION
All Submitted Concrete Brick	Sure Klean® Custom Masonry Sealer	Concentrate
	Sure Klean® Weather Seal Siloxane PD	Concentrate

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



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PROSOCO, Inc.

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SECTION A – CLEANING INTEGRALLY COLORED CONCRETE BRICKS

DESCRIPTION OF PRODUCTS EVALUATED – Cleaners

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. Liquid concentrate for dilution with 2-6 parts water. Apply by brush or low-pressure spray.

Sure Klean® Concrete Brick Cleaner – Removes common construction and atmospheric staining from concrete brick 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. Concrete Brick 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:

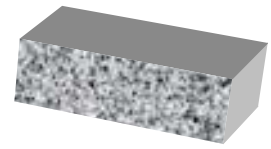
1. Prewet the surface with water.
2. Apply the cleaner at the appropriate dilutions.
3. Allow appropriate exposure time.

Custom Masonry Cleaner	3 minutes
Concrete Brick Cleaner	5 minutes
4. Reapply the product 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.



PALLET CARD PROGRAM LABORATORY REPORT



TEST RESULTS – Cleaning

Sample	Cleaner	Dilution	Cure	Effectiveness				
All Colors of concrete bricks	Custom Masonry Cleaner	1:2	3 day	100%				
		1:4		100%				
		1:6		100%				
				1:2	7 day	100%		
				1:4		100%		
				1:6		100%		
						1:2	14 day	100%
						1:4		100%
						1:6		100%

Sample	Cleaner	Dilution	Cure	Effectiveness		
All Colors of concrete bricks	Concrete Brick Cleaner	1:2	3 day	98%		
		1:3		98%		
				1:2	7 day	98%
				1:3		98%
				1:2	14 day	98%
				1:3		98%

CONCLUSIONS – Cleaning

Based on the test data, all of the submitted block samples were efficiently cleaned with each dilution of Sure Klean® Custom Masonry Cleaner and Sure Klean® Concrete Brick Cleaner. 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® Concrete Brick Cleaner tested affected the substrate in a similar manner, removing heavy concentrations of pigmented matrix from the concrete bricks, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete brick.

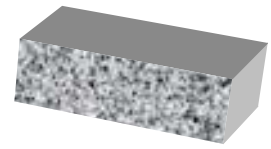
RECOMMENDED PRODUCTS AND DILUTIONS – Cleaning

Based on these evaluations, all of the dilutions of Sure Klean® Custom Masonry Cleaner and Sure Klean® Concrete Brick Cleaner tested can be recommended for job-site testing on all colors of the concrete brick submitted by Western Brick Company, Rosenberg, TX. They all are effective in removing excess mortar, and they all assist in improving the color and uniformity of these concrete blocks. 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.

NOTE: To remove excess mortar while minimizing aggregate exposure and color enhancement, clean within 7 days of completion using Sure Klean® Custom Masonry Cleaner diluted with 6 parts fresh water or Sure Klean® Concrete Brick Cleaner diluted with 3 parts fresh water.



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SECTION B – SURFACE ALTERATIONS

DESCRIPTION OF PRODUCTS EVALUATED – Surface Alterations

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. Liquid concentrate for dilution with 2-6 parts water. Apply by brush or low-pressure spray.

Sure Klean® Concrete Brick Cleaner – Removes common construction and atmospheric staining from concrete brick 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. Concrete Brick Cleaner adds depth to colors and brightens white matrices and exposed aggregate.

TEST METHOD – Surface Alterations

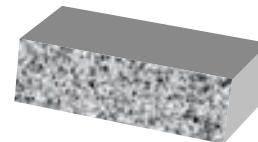
Dilution ratios refer to mixtures of parts concentrated cleaner : parts fresh water. Chemical cleaners were evaluated using the following procedure:

1. Prewet the surface with water.
2. Apply the cleaner at the appropriate dilutions.
3. Allow appropriate exposure time.
 - Custom Masonry Cleaner 3 minutes
 - Concrete Brick Cleaner 5 minutes
4. Reapply the product 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.



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TEST RESULTS – Surface Alterations

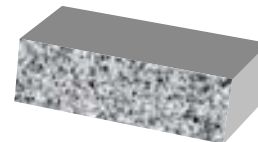
Substrate: “Olde Texas”		Pigment Color: Red/Gray			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: “French Antique”		Pigment Color: Tan			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: “Santa Rosa”		Pigment Color: Dark red			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	1	0	1	0
Custom Masonry Cleaner	1:4	1	0	1	0
Custom Masonry Cleaner	1:6	1	0	1	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: “Oyster Pearl”		Pigment Color: Gray			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0

Scale used for reporting results of all categories

- | | |
|---------------|---------------|
| 0 – no change | 3 – heavy |
| 1 – slight | 4 – excessive |
| 2 – moderate | |



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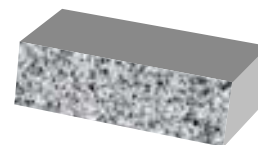
Substrate: "Mesquite"		Pigment Color: Brown			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: "Olde Orleans"		Pigment Color: Brown			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	1	0	1	0
Custom Masonry Cleaner	1:4	1	0	1	0
Custom Masonry Cleaner	1:6	1	0	1	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: "Glacier White"		Pigment Color: White			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	1	0	1	0
Custom Masonry Cleaner	1:4	1	0	1	0
Custom Masonry Cleaner	1:6	1	0	1	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: "Greymohr"		Pigment Color: Gray			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	1	0	1	0
Custom Masonry Cleaner	1:4	1	0	1	0
Custom Masonry Cleaner	1:6	1	0	1	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: "Austin Blend"		Pigment Color: Tan			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0

Scale used for reporting results of all categories

- | | |
|---------------|---------------|
| 0 – no change | 3 – heavy |
| 1 – slight | 4 – excessive |
| 2 – moderate | |



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Substrate: "Omaha Tan"		Pigment Color: Tan			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0
Substrate: "Crimson"		Pigment Color: Red			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Custom Masonry Cleaner	1:2	2	0	2	0
Custom Masonry Cleaner	1:4	2	0	2	0
Custom Masonry Cleaner	1:6	2	0	2	0
Concrete Brick Cleaner	1:2	2	0	2	0
Concrete Brick Cleaner	1:3	2	0	2	0

Scale used for reporting results of all categories

- | | |
|---------------|---------------|
| 0 – no change | 3 – heavy |
| 1 – slight | 4 – excessive |
| 2 – moderate | |

NOTE: See Attachment #1 "PHOTO A" for visual surface alterations.

CONCLUSIONS – Surface Alterations

Based on the test data, all dilutions of Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Concrete Brick Cleaner tested affected the substrate in a similar manner, removing heavy concentrations of pigmented matrix from the concrete bricks, exposing small and large aggregate, and enhancing the natural appearance.

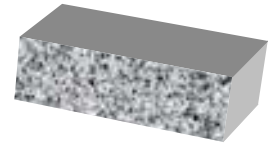
RECOMMENDED PRODUCTS AND DILUTIONS – Surface Alterations

Based on these evaluations, all of the dilutions of Sure Klean[®] Custom Masonry Cleaner and Sure Klean[®] Concrete Brick Cleaner tested can be recommended for job-site testing on all colors of the concrete bricks submitted by Western Brick Company, Rosenberg, TX. They all are effective in removing excess mortar and assist in improving the color and uniformity of these concrete bricks. 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.

NOTE: To remove excess mortar while minimizing aggregate exposure and color enhancement, clean within 7 days of completion using Custom Masonry Cleaner diluted with 6 parts fresh water.



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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, and concrete block without altering the natural appearance. Custom Masonry Sealer penetrates and fills pores to prevent water penetration through exterior walls exposed to normal weathering as well as long-lasting protection against many types of graffiti.

Sure Klean® Weather Seal Siloxane PD – A pre-diluted, ready-to-use, water-based silane/siloxane water repellent. Designed for use on concrete and masonry surfaces. Siloxane PD penetrates more deeply than conventional water or solvent-based water repellents. Low odor and alkaline stable, Siloxane PD is ideal for field or in-plant application.

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 2 weeks prior to testing.

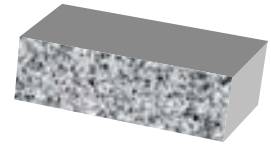
TEST METHODS – Protective Water Repellents

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.



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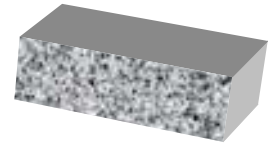
TEST RESULTS – Protective Water Repellents

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

	RESULTS
“Olde Texas” Red/Gray	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	55 mph
“French Antique” Tan	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	56 mph
“Santa Rosa” Dark red	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph
“Oyster Pearl” Gray	
Untreated Control	<40 mph
Custom Masonry Sealer	59 mph
Siloxane PD	55 mph
“Mesquite” Brown	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph
“Olde Orleans” Brown	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph
“Glacier White” White	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph



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PROSOCO, Inc.

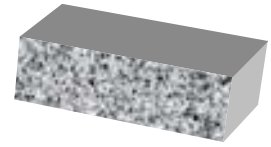
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	RESULTS
"Greymohr" Gray	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph
"Austin Blend" Buff/Sandstone	
Untreated Control	52 mph
Custom Masonry Sealer	58 mph
Siloxane PD	60 mph
"Omaha Tan" Tan	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	60 mph
"Crimson" Red	
Untreated Control	<40 mph
Custom Masonry Sealer	60 mph
Siloxane PD	56 mph

NOTE: See Attachment # 1 "PHOTO B" for visual color enhancement



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CONCLUSIONS - Protective Water Repellents

Based upon laboratory evaluations, all of the water repellents tested exhibited above average water repellency on all types of concrete bricks. Sure Klean[®] Custom Masonry Sealer also enhanced the natural color of the submitted samples, while Sure Klean[®] Weather Seal Siloxane PD did not alter the natural appearance of the concrete bricks in any way.

RECOMMENDATIONS - PROTECTIVE WATER REPELLENTS

Based on evaluations, Sure Klean[®] Custom Masonry Sealer and Sure Klean[®] Weather Seal Siloxane PD can be recommended for job-site testing to provide water repellency for the samples submitted by Western Brick Company, Rosenberg, TX. Sure Klean[®] Custom Masonry Sealer can also be recommended for enhancing the natural color of the concrete bricks.

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.

Donald M. Muathe

Donald Muathe
Technical Analyst
DMM/

PHOTO A: "Santa Rosa" brick

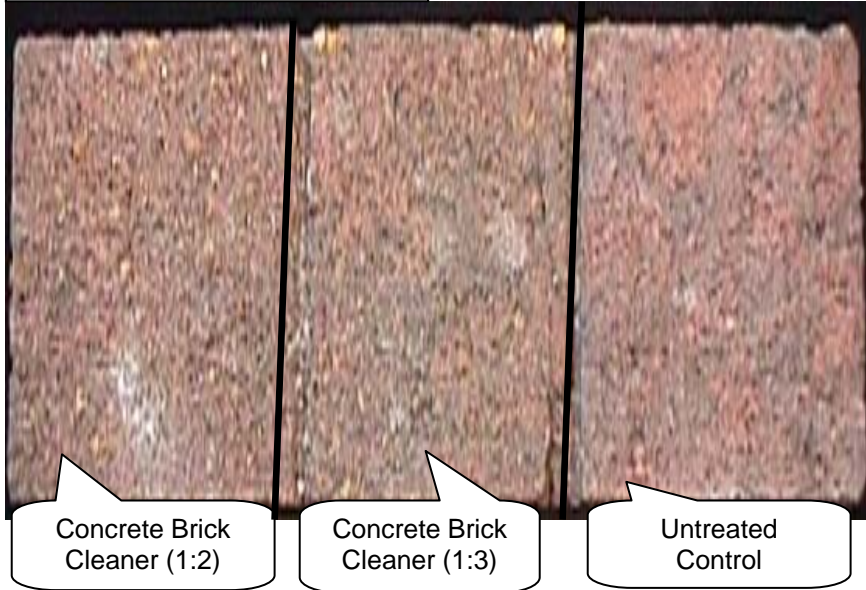
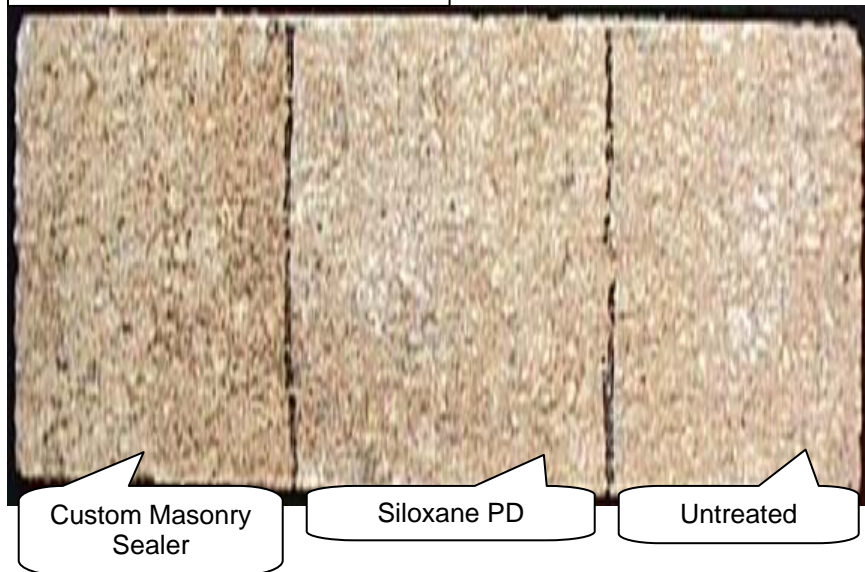
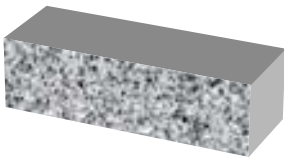


PHOTO B: "Austin Blend" brick





Laboratory Report

Pallet Card Evaluation

**Western Brick Company
Rosenberg, TX**

Project No. 0107-02 PC

Prepared For:

Ed Marcin

**Western Brick Company
1603 Spur 529
Rosenberg, TX 77471**

Prepared By:



***PROSOCO, Inc.
August 2001***