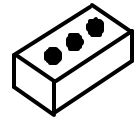




# PALLET CARD PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

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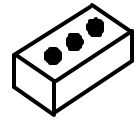
Attachment #1 – PHOTO A

Technical Services TECH Note RILEM Test Method No. II.4

Product Data literature for all products evaluated



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**PROSOCO, Inc.**

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**FOR:** Mark Link  
**cc:** Mike Burdette  
Paul Tessier

**SUBJECT:** Boral Bricks Inc. (Plants 3, 5, & 6)  
Augusta, GA

**DATE:** December 7, 2001

**PROJECT:** 0107-19 PC

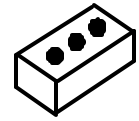
**SAMPLES SUBMITTED:** 12 different styles of clay brick.

Sample	Color/Finish	Size
1 sleeve of "Atlanta Buff"	Buff clay brick	2" x 7½" x 3½"
1 sleeve of "Clayburne"	Red clay w/ white/black sandy finish	2" x 7½" x 3½"
1 sleeve of "Dark Pink"	Dark pink clay brick	2" x 7½" x 3½"
1 sleeve of "Dark Gray"	Dark gray clay brick	2" x 7½" x 3½"
1 sleeve of "Light Gray"	Light gray clay brick	2" x 7½" x 3½"
1 sleeve of "Oxford Red"	Red clay w/ red sandy finish	2" x 7½" x 3½"
1 sleeve of "White Stone"	Red clay w/ white sandy finish	3" x 8" x 3"
1 sleeve of "Tan"	Tan clay brick	2" x 7½" x 3½"
1 sleeve of "Burgundy"	Dark red clay brick	2" x 7½" x 3½"
1 sleeve of "Pink"	Pink clay brick	2" x 7½" x 3½"
1 sleeve of "Chocolate"	Dark brown clay brick	2" x 7½" x 3½"
1 sleeve of "Monticello"	Red clay w/ red sandy finish	2" x 7½" x 3½"

Submitted by: Mike Burdette



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PROSOCO, Inc.

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## PURPOSE OF TESTING:

Twelve styles of clay brick were submitted to PROSOCO, Inc.'s Testing Laboratory with a request to determine if application of the products evaluated will produce any surface alteration during new construction cleaning operations. Additionally, the effectiveness of water repellents, suitable for clay brick masonry, will be evaluated.

**A. New Construction Cleaning** – Sure Klean® Vana Trol®, Sure Klean® 600 Detergent, and Sure Klean® 101 Lime Solvent were evaluated for removal of laboratory applied mortar.

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

Soiled 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 N mortar staining after 7, 14, and 21 days of curing.

**B. Surface Alterations** – Sure Klean® Vana Trol®, Sure Klean® 600 Detergent, and Sure Klean® 101 Lime Solvent were 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 masonry unit.

Surface Finish Removal is the visual examination of the brick comparing the surface finish of the untreated control surface to the surface finish cleaned with selected product(s) at given dilutions.

Substrate Deterioration is the visual examination of the brick comparing the surface of the untreated control to surfaces cleaned with selected product(s) at given dilutions looking for any potential erosion/digestion of the brick.

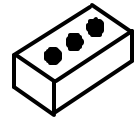
Color Change is the visual examination comparing the color of the untreated control surface to color of surfaces cleaned with selected products at given dilutions.

Staining is the visual examination for changes that are the result of a chemical reaction that leaves a staining precipitate.

**C. Protective Water Repellents** – Sure Klean® Weather Seal Siloxane PD was evaluated on the submitted samples for its ability to provide water repellency.



# PALLET CARD PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

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### CLEANING PRODUCTS EVALUATED

SAMPLE	TREATMENT	DILUTION
All submitted brick samples	Sure Klean® Vana Trol®	1:6, 1:8
"Clayburne", "Dark Pink", "Oxford Red", "White Stone" and "Monticello" brick samples	Sure Klean® 600 Detergent	1:6, 1:8
	Sure Klean® 101 Lime Solvent	1:6, 1:8

### SURFACE ALTERATION PRODUCTS EVALUATED

SAMPLE	TREATMENT	DILUTION
All submitted brick samples	Sure Klean® Vana Trol®	1:6, 1:8
"Clayburne", "Dark Pink", "Oxford Red", "White Stone" and "Monticello" brick samples	Sure Klean® 600 Detergent	1:6, 1:8
	Sure Klean® 101 Lime Solvent	1:6, 1:8

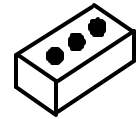
### PROTECTIVE WATER REPELLENT PRODUCT EVALUATED

SAMPLE	TREATMENT	DILUTION
All submitted brick samples	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 – NEW CONSTRUCTION CLEANING**

### **DESCRIPTION OF PRODUCTS EVALUATED – New Construction Cleaning**

These cleaning trials were conducted to determine the optimal cleaning/cure time combination to most efficiently remove Ash Grove<sup>®</sup> Type N mortar from the submitted fired clay bricks.

Ash Grove<sup>®</sup> Type N cementitious mortar was prepared in compliance with the manufacturers instructions, applied to the brick surface and allowed to cure for 7, 14, and 21 days prior to removal with high pressure water rinse using pressure rinsing equipment and chemical assist. The removal of gray Ash Grove<sup>®</sup> Type N cementitious masonry cement mortar after 7, 14, and 21 days of curing was visually evaluated.

**Sure Klean<sup>®</sup> Vana Trol<sup>®</sup>** – A concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Use on: gray, brown, white and most light-colored brick; natural stone; cast stone. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-25 parts water. Apply by brush or low-pressure spray.

**Sure Klean<sup>®</sup> 600 Detergent** – A general purpose, concentrated acidic cleaner for brick, tile and concrete surfaces. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-25 parts water. Apply by brush or low-pressure spray.

**Sure Klean<sup>®</sup> 101 Lime Solvent** – A concentrated acidic cleaner for dark-colored brick and tile surfaces which are not subject to metallic oxidation. Safely removes excess mortar and construction dirt. Removes construction dirt and excess mortar with simple cold water rinse. Liquid concentrate for dilution with 4-8 parts water.

### **TEST METHOD – New Construction Cleaning**

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

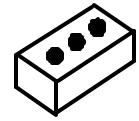
1. Prewet the surface with water.
2. Apply the cleaner.
3. Allow the appropriate dwell time, as specified.
 

Vana Trol <sup>®</sup> .....	5 minutes
600 Detergent .....	5 minutes
101 Lime Solvent.....	3 minutes
4. Pressure rinse thoroughly.

\* 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 – New Construction Cleaning**

**% Mortar Removal**

**“Atlanta Buff”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	100%	100%	100%

**“Clayburne”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	100%	100%	100%
SK 600 Detergent (1:6)	100%	100%	100%
SK 600 Detergent (1:8)	100%	100%	100%
SK 101 Lime Solvent (1:6)	100%	100%	100%
SK 101 Lime Solvent (1:8)	100%	100%	100%

**“Dark Pink”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	100%	100%	100%
SK 600 Detergent (1:6)	100%	100%	100%
SK 600 Detergent (1:8)	100%	100%	100%
SK 101 Lime Solvent (1:6)	100%	100%	100%
SK 101 Lime Solvent (1:8)	100%	100%	100%

**“Dark Gray”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	100%	100%	100%

**“Light Gray”**

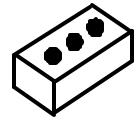
	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	100%	100%	100%

**“Oxford Red”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol <sup>®</sup> (1:6)	100%	100%	100%
SK Vana Trol <sup>®</sup> (1:8)	95%	95%	95%
SK 600 Detergent (1:6)	100%	100%	100%
SK 600 Detergent (1:8)	95%	95%	95%
SK 101 Lime Solvent (1:6)	100%	100%	100%
SK 101 Lime Solvent (1:8)	95%	95%	95%



# PALLET CARD PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

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**TEST RESULTS – New Construction Cleaning continued**

**“White Stone”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%
SK 600 Detergent (1:6)	100%	100%	100%
SK 600 Detergent (1:8)	100%	100%	100%
SK 101 Lime Solvent (1:6)	100%	100%	100%
SK 101 Lime Solvent (1:8)	100%	100%	100%

**“Tan”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%

**“Burgundy”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%

**“Pink”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%

**“Chocolate”**

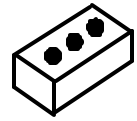
	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%

**“Monticello”**

	<u>7 day</u>	<u>14 day</u>	<u>21 day</u>
SK Vana Trol® (1:6)	100%	100%	100%
SK Vana Trol® (1:8)	100%	100%	100%
SK 600 Detergent (1:6)	100%	100%	100%
SK 600 Detergent (1:8)	100%	100%	100%
SK 101 Lime Solvent (1:6)	100%	100%	100%
SK 101 Lime Solvent (1:8)	100%	100%	100%



# PALLET CARD PROGRAM LABORATORY REPORT



### CONCLUSIONS – New Construction Cleaning

Based on the test results, all the cleaners and dilutions tested on each brick type performed extremely well in removing excess mortar smears on the submitted brick samples even after 21 days of curing.

It is also recommended that the selected cleaners always be used in the lowest possible concentration, typically a 1:8 dilution of cleaner to fresh water. They should be rinsed with the lowest pressure of water as practical, garden hose strength preferred, to minimize removal of the decorative sand finish. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential adverse affect on the decorative sand finish, clean within 7 days of construction.

### RECOMMENDED PRODUCTS AND DILUTIONS – New Construction Cleaning

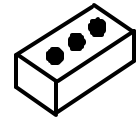
Sample	Sure Klean® Vana-Trol®	Sure Klean® 600 Detergent	Sure Klean® 101 Lime Solvent
“Atlanta Buff”	1:8	*	*
“Clayburne”	1:8	1:8	1:8
“Dark Pink”	1:8	1:8	1:8
“Dark Gray”	1:8	*	*
“Light Gray”	1:8	*	*
“Oxford Red”	1:8	1:8	1:8
“White Stone”	1:8	1:8	1:8
“Tan”	1:8	*	*
“Burgundy”	1:8	*	*
“Pink”	1:8	*	*
“Chocolate”	1:8	*	*
“Monticello”	1:8	1:8	1:8

\* Product not tested due to potential metallic staining from reaction with brick content.





# PALLET CARD PROGRAM LABORATORY REPORT



## SECTION B – SURFACE ALTERATIONS

### DESCRIPTION OF PRODUCTS EVALUATED – Surface Alterations

**Sure Klean® Vana Trol®** – A concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Use on: gray, brown, white and most light-colored brick; natural stone; cast stone. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-25 parts water. Apply by brush or low-pressure spray.

**Sure Klean® 600 Detergent** – A general purpose, concentrated acidic cleaner for brick, tile and concrete surfaces. Dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-25 parts water. Apply by brush or low-pressure spray.

**Sure Klean® 101 Lime Solvent** – A concentrated acidic cleaner for dark-colored brick and tile surfaces which are not subject to metallic oxidation. Safely removes excess mortar and construction dirt. Removes construction dirt and excess mortar with simple cold water rinse. Liquid concentrate for dilution with 4-8 parts water.

### TEST METHOD – Surface Alterations

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

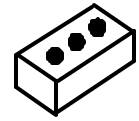
1. Prewet the surface with water.
2. Apply the cleaner.
3. Allow the appropriate dwell time, as specified.
 

Vana Trol® .....	5 minutes
600 Detergent .....	5 minutes
101 Lime Solvent.....	3 minutes
4. Pressure rinse thoroughly.

\* 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 – Surface Alterations**

<b>Substrate: "Atlanta Buff"</b>		<b>Pigment Color: Buff clay brick</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate: "Clayburne"</b>		<b>Pigment Color: Red clay w/ white/black sandy finish</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	1	0	0	0
SK Vana Trol®	1:8	1	0	0	0
SK 600 Detergent	1:6	1	0	0	0
SK 600 Detergent	1:8	1	0	0	0
SK 101 Lime Solvent	1:6	1	0	0	0
SK 101 Lime Solvent	1:8	1	0	0	0
<b>Substrate: "Dark Pink"</b>		<b>Pigment Color: Dark pink clay brick</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
SK 600 Detergent	1:6	0	0	0	0
SK 600 Detergent	1:8	0	0	0	0
SK 101 Lime Solvent	1:6	0	0	0	0
SK 101 Lime Solvent	1:8	0	0	0	0
<b>Substrate: "Dark Gray"</b>		<b>Pigment Color: Dark gray clay brick</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate: "Light Gray"</b>		<b>Pigment Color: Light gray clay brick</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate: "Oxford Red"</b>		<b>Pigment Color: Red clay w/ red sandy finish</b>			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	1	0	0	0
SK Vana Trol®	1:8	1	0	0	0
SK 600 Detergent	1:6	1	0	0	0
SK 600 Detergent	1:8	1	0	0	0
SK 101 Lime Solvent	1:6	1	0	0	0
SK 101 Lime Solvent	1:8	1	0	0	0

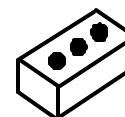
Scale used for reporting results of all categories

0 – no change  
1 – slight  
2 – moderate

3 – heavy  
4 – excessive



# PALLET CARD PROGRAM LABORATORY REPORT



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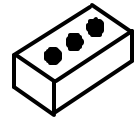
**TEST RESULTS – Surface Alterations Continued**

<b>Substrate:</b> "White Stone"		<b>Pigment Color:</b> Red clay w/ white sandy finish			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	1	0	0	0
SK Vana Trol®	1:8	1	0	0	0
SK 600 Detergent	1:6	1	0	0	0
SK 600 Detergent	1:8	1	0	0	0
SK 101 Lime Solvent	1:6	1	0	0	0
SK 101 Lime Solvent	1:8	1	0	0	0
<b>Substrate:</b> "Tan"		<b>Pigment Color:</b> Tan clay brick			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate:</b> "Burgundy"		<b>Pigment Color:</b> Dark red clay brick			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate:</b> "Pink"		<b>Pigment Color:</b> Pink clay brick			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate:</b> "Chocolate"		<b>Pigment Color:</b> Dark brown clay brick			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	0	0	0	0
SK Vana Trol®	1:8	0	0	0	0
<b>Substrate:</b> "Monticello"		<b>Pigment Color:</b> Red clay w/ red sandy finish			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
SK Vana Trol®	1:6	1	0	0	0
SK Vana Trol®	1:8	1	0	0	0
SK 600 Detergent	1:6	1	0	0	0
SK 600 Detergent	1:8	1	0	0	0
SK 101 Lime Solvent	1:6	1	0	0	0
SK 101 Lime Solvent	1:8	1	0	0	0

Scale used for reporting results of all categories	
0 – no change	3 – heavy
1 – slight	4 – excessive
2 – moderate	



# PALLET CARD PROGRAM LABORATORY REPORT



**PROSOCO, Inc.**

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## CONCLUSIONS – Surface Alterations

Test results show that the products tested caused only slight surface alterations on brick types “Clayburne”, “Oxford Red”, “White Stone”, and “Monticello”. The cleaning procedures used were able to remove a slight amount of the sandy finish. Using a low-pressure rinse can minimize surface finish removal. Those styles without the sandy surface finish had no visual surface alterations.

**NOTE:** See Attachment #1 “PHOTO A”.

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## RECOMMENDATIONS – Surface Alterations

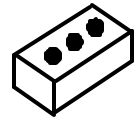
All the cleaners and dilutions tested on each brick type can be recommended for the brick styles submitted by Boral Bricks Inc., Augusta, GA. Cleaners should be used in the lowest possible concentration. Rinse thoroughly with low water pressure, garden hose strength, to minimize removal of the decorative sand finish. Conduct all cleaning within seven days of soiling to facilitate easier removal of excess mortar and construction dirt.

Apply all products in accordance with the manufacturer’s recommendation provided on container labels and product data sheets. On-site testing should always be conducted to determine the most appropriate cleaning product and procedures for a particular project.

See product literature for additional application and product information.



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PROSOCO, Inc.

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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® Weather Seal Siloxane PD** – A low odor, alkaline stable, water-based blend of silanes and oligomeric alkoxysiloxanes. Sure Klean® Weather Seal Siloxane PD is supplied pre-diluted and is designed for use on concrete and clay masonry surfaces. Sure Klean® Weather Seal Siloxane PD penetrates more deeply than conventional water or solvent-based water repellents.

## **SAMPLE PREPARATION – Protective Water Repellents**

The submitted brick were cut, oven dried and allowed to reabsorb atmospheric humidity for 24 hours prior to treatment. The treatment method consisted of two 10-second immersions with a 20-second absorption period between immersions to simulate a wet-on-wet application. All treatments were allowed to cure for 14 days prior to testing.

## **TEST METHODS – Protective Water Repellents**

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

The water absorption tube test simulating wind driven and wind blown rain conditions was also performed. Tests were run with 5.0-milliliter head pressures. Filled to 5 milliliters, a water absorption tube produces a 98 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 ml of water or more, then:

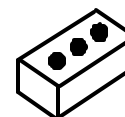
A rating of **AA** *Above Average* water repellent performance would require loss of no more than  $5 \text{ ml} \times 20\% = 1 \text{ ml}$ .

A rating of **A** *Average* water repellent performance would require loss of no more than  $5 \text{ ml} \times 50\% = 2.5 \text{ ml}$ .

A rating of **BA** *Below Average* water repellent performance would be reported for treatments which result in a loss of more than  $50\% \times 5 \text{ ml} = 2.5 \text{ ml}+$ .



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**TEST RESULTS – Protective Water Repellents**

**Water Absorption Tube Test: RILEM II.4, 5.0 milliliters, 20 Minutes**

**AA = Above Average**

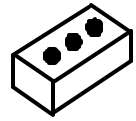
**AA = Average**

**BA = Below Average**

<b>“Atlanta Buff”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	0.53 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Clayburne”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	0.60 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Dark Pink”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	0.00 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Dark Gray”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	3.00 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Light Gray”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	1.03 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Oxford Red”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	1.63 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“White Stone”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	4.17 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Tan”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	1.60 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Burgundy”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	1.00 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Pink”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	0.00 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Chocolate”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	0.50 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>
<b>“Monticello”</b>	<b>Results</b>	<b>Ranking</b>
Untreated Control	3.07 mL loss	---
Siloxane PD	0.00 mL loss	<b>AA</b>



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## CONCLUSIONS – Protective Water Repellents

Based upon laboratory evaluations, Sure Klean<sup>®</sup> Weather Seal Siloxane PD exhibited above average water repellency on all brick types.

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## RECOMMENDED PRODUCTS – Protective Water Repellents

Based on test results, Sure Klean<sup>®</sup> Weather Seal Siloxane PD provided excellent water-repellent protection on all of the brick types submitted by Boral Bricks Inc., Augusta, GA. This product is recommended for job-site evaluation where these brick types are incorporated in the building's façade.

It must be pointed out that in any installation, the brick are a single component of the masonry facade. The ability of a water repellent treatment to prevent the ingress of water is affected by a variety of other factors, therefore on-site testing should be carried out for all installations with the recommended systems to ensure job site workmanship yields equivalent 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 water-repellent product and procedures for a particular project. See product literature for additional application and product information.

Jason L. Anderson  
Materials Testing Technician

JLA/

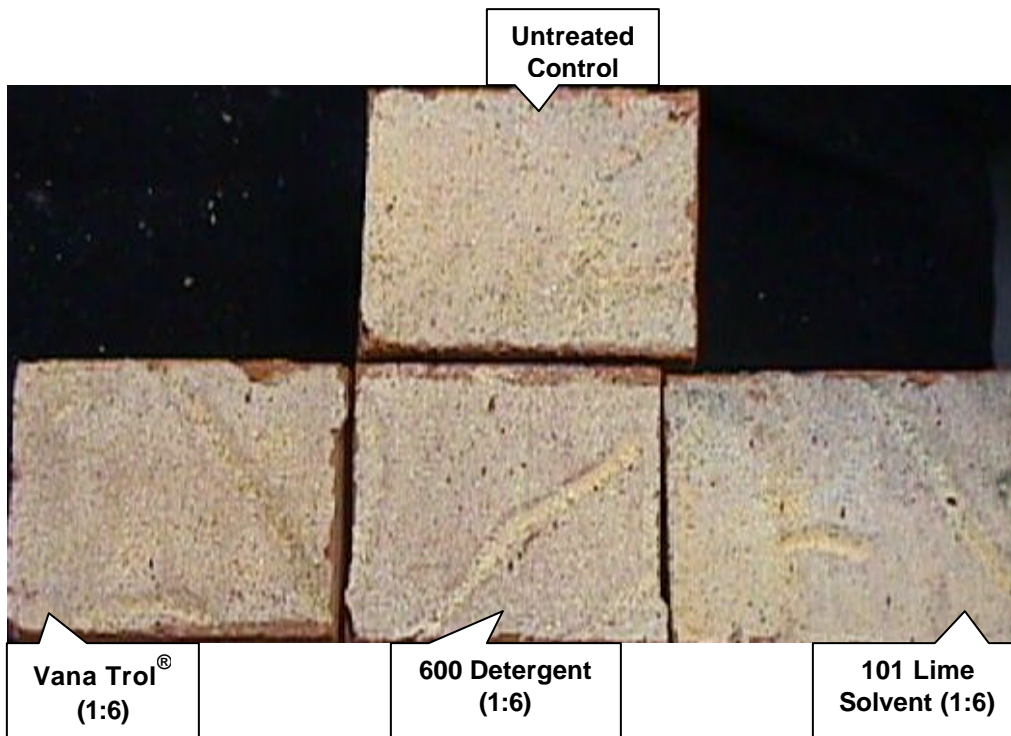


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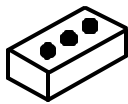
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Attachment #1

PHOTO A – “Clayburne” after 7 day cleaning.







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*Laboratory Report*

**Pallet Card Evaluation**

**Boral Bricks Inc.  
1449 Doug Barnard Parkway  
Augusta, GA 30906**

*Project No. 0107-19 PC*

*Prepared For:*

**Mark Link**

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*Prepared By:*



***PROSOCO, Inc.  
December 2001***