

PROSOCO Inc.

PALLET TAG PROGRAM LABORATORY REPORT



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Product Data literature for all products evaluated





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FOR: Bart Riemer cc: Paul Tessier

Steve Dean

SUBJECT: I-XL Industries Ltd.

Medicine Hat, AB, CANADA

DATE: October 10, 2003

PROJECT: 0308-19 PTP

SAMPLES SUBMITTED: (42) types of clay bricks

Sample	Color/Finish	Size	
(5) "101 Red"	Red smooth/"Smooth Pressed"	7 ¾" x 3 ½" x 2 ¼"	
(4) "201 Red"	Bright red/"Wire-Cut"		
(5) "Amber"	Brown/"Wire-Cut"		
(5) "Bear's Paw"	Brown, black/"Wire-cut Manganese Sand Coating"		
(4) "Belgravia"	Red, black, white spots/"Purple Engobe & Limestone"		
(5) "Black"	Black/"Wire-Cut"		
(5) "Brown Variegated"	Dark red with black edge/"Matt Texture"		
(5) "Buff"	Cream, smooth/"Pressed Smooth"		
(4) "Capilano"	Green swirl/"Blue-Grey Engobe"		
(5) "Champagne Buff"	Buff/"Wire-Cut"		
(5) "Chateau Grey"	Buff, smooth/"Pressed Smooth"		
(5) "Chocolate Brown"	Brown/"Wire-Cut"		
(4) "Cinnamon"	Light red with white swirls/"White & Black Engobe"		
(5) "Coral"	Cream/"Wire-Cut"		
(4) "Coventry"	Light red with white texture/Pink Sand Engobe		
(5) "Cream"	Cream/"Wire-Cut"		
(5) "Dark Tweed"	Light red, smooth/"Pressed Smooth"		
(5) "Dove Grey"	Grey/"Wire-Cut"		
(4) "Dutch Molde"	Molde" Orange with white texture/"Black & White Engobe"		
(5) "Fall Tan"	Light orange/"Wire-Cut"		
(5) "Ferric Red"	Bright red/"Wire-Cut"		
(4) "Georgian Grey"	Light red with tan/"Grey Engobe"		
(4) "Granville"	Grey with white swirls/"Black & White Engobe"		
(5) "Grayburn Mod"	Grey, smooth/"Pressed Smooth"		
(4) "Kitsilano"	Grey, textured/"Black & White Engobe"		
(5) "Kootenay Brown"	Brown, smooth/"Pressed Smooth"		
(4) "Lava Sand"	Dark maroon, purple/"Purple & Black Engobe"		
(5) "Light Tweed"	Tan, smooth/"Pressed Smooth"		





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Sample	Color/Finish	Size
(4) "Malahat"	Brown, red with white/"Black & White Engobe, Heritage Texture"	
(5) "Maroon"	Maroon, smooth/"Pressed Smooth"	
(5) "Montego Brown"	Red smooth/"Pressed Smooth"	
(4) "Old Scona"	Light red, black/"White & Black Sand"	
(4) "Old Yale"	Red with cream texture/"Limestone & White Engobe"	
(5) "Plum Red"	Red with brown edges/"Wire-Cut"	
(5) "Prairie Dusk"	Orange/"Wire Cut"	
(4) "Queenston"	Red with grey/white/"Limestone"	7 ¾" x 3 ½" x 2 ¼"
(4) "Robson"	Dark grey/"Black Engobe & Sand"	1 74 X 3 /2 X Z /4
(5) "Sandstone"	Light green/"Wire-Cut"	
(4) "Silverado"	l) "Silverado" Light tan, textured/"Black & White Engobe"	
(5) "Sonora"	5) "Sonora" Light brown/"Wire-Cut"	
(4) "Whistler"	Light brown/finish not known	
(4) "Williamsburg"	Dark red with black edge/"Red Engobe"	

Submitted by: Bart Riemer





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PURPOSE OF TESTING:

Forty-two different types of clay bricks 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 repellent treatments and graffiti control products suitable for clay brick masonry will also be evaluated.

A. New Construction Cleaning – Sure Klean[®] Vana Trol[®] and Sure Klean[®] 600 Detergent were evaluated for removal of laboratory applied mortar.

To simulate new construction soiling, all bricks were placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall were positioned on top of each brick and filled with a wet mixture of Ash Grove[®] Type N cementitious mortar. The wet mortar-filled cylinder was allowed to remain in contact with the brick for 10 minutes before removal.

Soiled bricks were allowed to dry before test cleaning.

Heavy deposits of mortar were removed with dry scraping after 24 hours. Prepared cleaning solutions were then evaluated for their effectiveness in removing residual Ash Grove[®] Type N mortar after 14 and 21 days of curing.

B. Limiting Surface Alterations – Sure Klean[®] Vana Trol[®] and Sure Klean[®] 600 Detergent 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.

<u>Surface Finish Removal</u> 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.

<u>Substrate Deterioration</u> 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.

<u>Color Change</u> is the visual examination comparing the color of the untreated control surface to 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.

- **C.** Water Repellent Evaluation Sure Klean® Weather Seal Siloxane PD and Sure Klean® Weather Seal Siloxane WB Concentrate in various dilutions were evaluated on the submitted samples for their ability to provide water repellency.
- **D.** Graffiti Control Evaluation Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control was evaluated for its ability to control graffiti on the submitted samples. Defacer Eraser[®] Graffiti Wipe and Sure Klean[®] Fast Acting Stripper were evaluated for their ability to remove graffiti from the submitted samples.





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PRODUCTS EVALUATED FOR CLEANING AND LIMITING SURFACE ALTERATIONS

SAMPLE	TREATMENT	DILUTION
"101 Red", "201 Red", "Coventry", "Ferric Red", "Maroon", "Montego Brown", "Plum	Sure Klean [®] 600 Detergent	1:6, 1:8
Red", "Prairie Dusk", "Williamsburg"	Sure Klean [®] Vana Trol [®]	1:6, 1:8
All Other Submitted Clay Brick	Sure Klean [®] Vana Trol [®] Only	1:6, 1:8

WATER REPELLENT PRODUCTS EVALUATED

SAMPLE	SAMPLE TREATMENT	
All Cub reitted Clay	Sure Klean [®] Weather Seal Siloxane PD	Concentrate
All Submitted Clay Bricks	Sure Klean [®] Weather Seal Siloxane WB Concentrate	1:9, 1:14

GRAFFITI CONTROL PRODUCTS EVALUATED

SAMPLE	TREATMENT
All Submitted clay bricks	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control

GRAFFITI REMOVAL PRODUCTS EVALUATED

SAMPLE	TREATMENT
	Defacer Eraser [®] Graffiti Wipe
	Sure Klean [®] Fast Acting Stripper

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





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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 Type N mortar from the submitted fired clay bricks.

Ash Grove[®] Type N cementitious mortar was prepared in compliance with the manufacturers instructions, applied to the brick surface and allowed to cure for 14 and 21 days. Mortar removal was accomplished using chemical assistance and a high-pressure water rinse with pressure rinsing equipment. The removal of Ash Grove[®] Type N cementitious masonry cement mortar was visually evaluated after 14 and 21 days of curing.

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 4-10 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. 600 Detergent dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-12 parts water. Apply by brush or low-pressure spray.

NOTE: Sure Klean[®] 600 Detergent may not be suitable for cleaning buff-colored brick and brick with manganese or other metallic additives. Therefore, for these types of brick, Sure Klean[®] Vana Trol[®] was the only product evaluated.

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 [®]	3-5 minutes
600 Detergent	3-5 minutes

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

% Removal

"101 Red"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%
Sure Klean [®] 600 Detergent	1:6	100%	100%
Sure Klean 600 Detergent	1:8	100%	100%

"201 Red"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	95%	95%
Sure Kleari Varia 110i	1:8	90%	90%
Sure Klean [®] 600 Detergent	1:6	95%	95%
Sure Klean 600 Detergent	1:8	90%	90%

"Amber"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	98%	98%
Sure Kleari Varia 110i	1:8	98%	98%

"Bear's Paw"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
Sure Kleari Varia 110i	1:8	99%	99%

"Belgravia"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
Sure Rieari Varia 1101	1:8	99%	99%





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Test Results – New Construction Cleaning (continued)

% Removal

"Black"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 1101	1:8	100%	100%

"Brown Variegated"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	95%	95%
Sure Kleari Varia 110i	1:8	95%	95%

"Buff"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Suite Niedii Valla 1101	1:8	100%	100%

"Capilano"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieam Vana 110	1:8	100%	100%

"Champagne Buff"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 1101	1:8	100%	100%





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Test Results – New Construction Cleaning (continued)

"Chateau Grey"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol	1:6	100%	100%
Sure Rieari Varia 1101	1:8	100%	100%

"Chocolate Brown"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol	1:6	98%	98%
Sure Kleari Varia ITOI	1:8	98%	98%

"Cinnamon"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Coral"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol	1:6	99%	99%
Sure Klean Vana Trol	1:8	99%	99%

"Coventry"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
	1:8	95%	95%
Sure Klean® 600 Detergent	1:6	100%	100%
Sure Klean 600 Detergent	1:8	95%	95%





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Test Results – New Construction Cleaning (continued)

"Cream"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
Sure Kleari Varia 110i	1:8	99%	99%

"Dark Tweed"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 1101	1:8	100%	100%

"Dove Grey"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	90%
Sure Riedii Vana 1101	1:8	100%	90%

"Dutch Molde"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 110i	1:8	100%	100%

"Fall Tan"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Suite Riedii Valla 1101	1:8	100%	100%





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Test Results – New Construction Cleaning (continued)

"Ferric Red"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	98%	98%
	1:8	98%	98%
Sure Klean [®] 600 Detergent	1:6	98%	98%
Sure Klean 600 Detergent	1:8	98%	98%

"Georgian Grey"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 1101	1:8	100%	95%

"Granville"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Rieari Varia 110i	1:8	100%	100%

"Grayburn Mod"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Kitsilano"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%





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Test Results – New Construction Cleaning (continued)

"Kootenay Brown"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Lava Sand"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	98%	98%
Sure Kleari Varia 110i	1:8	95%	95%

"Light Tweed"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Malahat"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
	1:8	100%	100%

"Maroon"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
	1:8	100%	100%
Sure Klean [®] 600 Detergent	1:6	100%	100%
Sure Klean 600 Detergent	1:8	100%	100%





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Test Results – New Construction Cleaning (continued)

"Montego Brown"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
	1:8	100%	100%
Sure Klean [®] 600 Detergent	1:6	100%	100%
Sure Klean 600 Detergent	1:8	100%	100%

"Old Scona"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
Sure Rieari Varia 1101	1:8	99%	99%

"Old Yale"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Plum Red"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	95%	95%
	1:8	95%	95%
Sure Klean® 600 Detergent	1:6	95%	95%
Sure Klean 600 Detergent	1:8	95%	95%

"Prairie Dusk"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	95%	95%
	1:8	95%	95%
Sure Klean [®] 600 Detergent	1:6	95%	95%
Sure Klean 600 Detergent	1:8	95%	95%





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Test Results - New Construction Cleaning (continued)

"Queenston"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Robson"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	98%	98%
Sure Riearr Varia 1101	1:8	95%	95%

"Sandstone"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Kleari Varia 110i	1:8	100%	100%

"Silverado"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	100%	100%
Sure Riedii Varia 1101	1:8	100%	100%

"Sonora"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	98%	98%
Sure Rieari Varia 1101	1:8	98%	98%





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Test Results – New Construction Cleaning (continued)

"Whistler"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
Sure Klean Vana Irol	1:8	99%	99%

"Williamsburg"

Product	Dilution	14 day	21 day
Sure Klean [®] Vana Trol [®]	1:6	99%	99%
	1:8	95%	95%
Sure Klean [®] 600 Detergent	1:6	99%	99%
	1:8	95%	95%

CONCLUSIONS – New Construction Cleaning

Based on the test results, Sure Klean[®] Vana Trol and/or Sure Klean[®] 600 Detergent in all dilutions tested performed extremely well in removing excess mortar smears on the submitted clay bricks. Both products performed well in removing the mortar soils even after allowing the mortar to remain on the surface of the brick for 21 days under ideal curing conditions.

It is recommended that the selected cleaners always be used in the lowest possible concentration. They should be rinsed with the lowest pressure of water as practical, at least 400 psi, to minimize removal of the decorative finish. Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction.





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RECOMMENDATIONS – New Construction Cleaning

Recommendations for cleaning for each type of clay brick submitted by FXL Industries Ltd., Medicine Hat, Alberta, Canada are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Brick Type	New Construction Cleaning (Type N, 21 Days)
"101 Red" "201 Red" "Coventry" "Ferric Red" "Maroon" "Montego Brown" "Plum Red" "Prairie Dusk" "Williamsburg"	Sure Klean [®] Vana Trol [®] 1:6 OR 1:8 OR Sure Klean [®] 600 Detergent 1:6 OR 1:8
All Other Submitted Clay Bricks	Sure Klean [®] Vana Trol [®] 1:6 OR 1:8

Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction. Rinsing with high-pressure spray (400-800 psi) is recommended.

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.

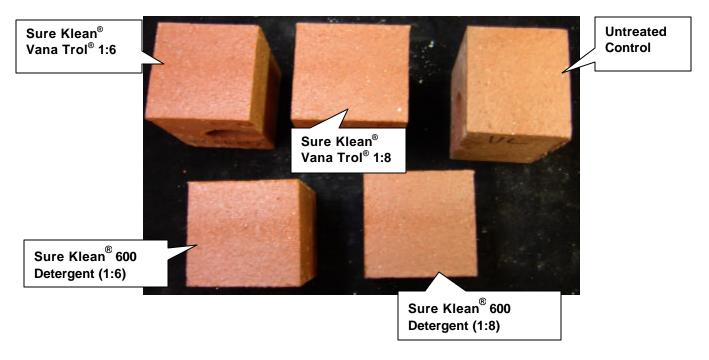




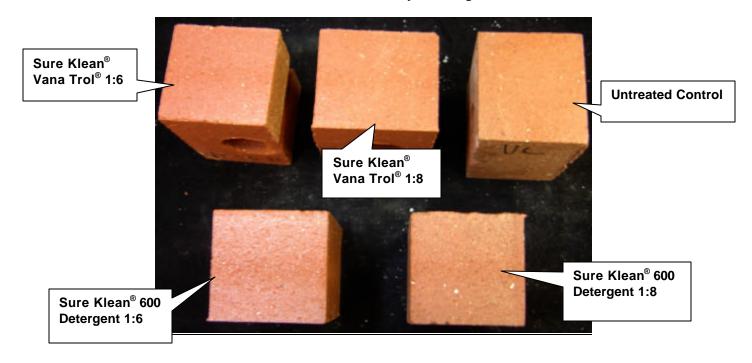
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PHOTOGRAPHS - Cleaning

"Maroon" after 14 day cleaning



"Maroon" after 21 day cleaning







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SECTION B - LIMITING SURFACE ALTERATIONS

DESCRIPTION OF PRODUCTS EVALUATED - Limiting Surface Alterations

Sure Klean Vana Trol - A concentrated acidic cleaner for new masonry surfaces that are subject to vanadium, manganese and other metallic stains. Designed for use on gray, brown, white and most light-colored brick, natural stone and 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 410 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. 600 Detergent dissolves mortar smears and construction dirt quickly, leaving the masonry clean and uniform with no acid burning or streaking. Liquid concentrate for dilution with 4-12 parts water. Apply by brush or low-pressure spray.

NOTE: Sure Klean[®] 600 Detergent may not be suitable for cleaning buff-colored brick and brick with manganese or other metallic additives. Therefore, for these types of brick, Sure Klean[®] Vana Trol[®] was the only product evaluated.

TEST METHOD – Limiting 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®	. 3-5 minutes
600 Detergent	. 3-5 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 – Limiting Surface Alterations

Substrate: Clay brick	Pigment Color: "101 Red"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean [®] 600 Detergent	1:6	0	0	0	0
Sure Klean® 600 Detergent	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "201 Red"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean 600 Detergent	1:6	0	0	0	0
Sure Klean® 600 Detergent	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Amber"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Bear's Paw"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Color: "Belgravia"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean Vana Trol	1:6	0	0	0	0
Sure Klean Wana Trol	1:8	0	0	0	0

Scale used for reporting results of both categories 3 – change – heavy

0 - No change

1 - change - slight

4 - change - excessive





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TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Color: "Black"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Substrate: Clay brick	Pigment Col	<u>I</u> or: "Brown Variegated	Į"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Substrate: Clay brick	Pigment Color: "Buff"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Substrate: Clay brick	Pigment Col	or: "Capilano"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Substrate: Clay brick	Pigment Color: "Champagne Buff"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining	
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	

Scale used for reporting results of both categories

0 – No change — 3 – change – heavy

1 – change – slight 4 – change - excessive

2 – change – moderate





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TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Co	lor: "Chateau Grey"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Co	lor: "Chocolate Brown	"		
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Co	lor: "Cinnamon"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Co	lor: "Coral"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Co	lor: "Coventry"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean 600 Detergent	1:6	0	0	0	0
Sure Klean [®] 600 Detergent	1:8	0	0	0	0

Scale used for reporting results of both categories

0 - No change

3 - change - heavy

1 - change - slight

4 - change - excessive





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TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Col	Pigment Color: "Cream"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining		
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0		
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0		
Substrate: Clay brick	Pigment Col	or: "Dark Tweed"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining		
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0		
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0		
Substrate: Clay brick	Pigment Col	Pigment Color: "Dove Grey"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining		
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0		
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0		
Substrate: Clay brick	Pigment Col	or: "Dutch Molde"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining		
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0		
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0		
Substrate: Clay brick	Pigment Col	Pigment Color: "Fall Tan"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining		
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0		
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0		

Scale used for reporting results of both categories

0 - No change

1 - change - slight

3 – change – heavy 4 – change - excessive





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TEST RESULTS – Limiting Surface Alterations (continued)

Product	Substrate: Clay brick	Pigment Col	Pigment Color: "Ferric Red"				
Sure Klean		Dilution				Staining	
Sure Klean® 600 Detergent		1:6	0	0	0	0	
Sure Klean		1:8	0	0	0	0	
Sure Klean	Sure Klean [®] 600 Detergent	1:6	0	0	0	0	
Product	Sure Klean 600 Detergent	1:8	0	0	0	0	
Sure Klean® Vana Trol®	Substrate: Clay brick	Pigment Col	or: "Georgian Grey"				
Sure Klean		Dilution				Staining	
Substrate: Clay brick Pigment Color: "Granville" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0 0 Substrate: Clay brick Pigment Color: "Grayburn Mod" Color Change Staining Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0 Substrate: Clay brick Pigment Color: "Kitsilano" Substrate Color Change Staining Substrate: Clay brick Pigment Color: "Kitsilano" Substrate Color Change Staining Substrate: Clay brick Pigment Color: "Kitsilano" Substrate Color Change Staining Surface Finish Removal Deterioration Change Staining Surface Finish Removal Deterioration Change Staining	Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Product Dilution Surface Finish Removal Deterioration Change Staining	Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Product Dilution Surface Finish Removal Deterioration Change Staining		<u> </u>					
Sure Klean® Vana Trol® 1:6 0 0 0 0 0	Substrate: Clay brick	Pigment Col	or: "Granville"				
Sure Klean® Vana Trol® 1:8 0 0 0 0 Substrate: Clay brick Pigment Color: "Grayburn Mod" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0 Sure Klean® Vana Trol® 1:8 0 0 0 0 Substrate: Clay brick Pigment Color: "Kitsilano" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0		Dilution				Staining	
Substrate: Clay brick Pigment Color: "Grayburn Mod" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean Vana Trol Trol Sure Klean Vana Trol 1:6 0 0 0 0 Sure Klean Vana Trol	Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Product Dilution Surface Finish Removal Deterioration Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0 0 Sure Klean® Vana Trol® 1:8 0 0 0 0 0 Substrate: Clay brick Pigment Color: "Kitsilano" Product Dilution Surface Finish Removal Deterioration Change Staining Sure Klean® Vana Trol® 0 0 0 0 0	Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Sure Klean® Vana Trol® 1:6 0 0 0 0 0	Substrate: Clay brick	Pigment Col	or: "Grayburn Mod"				
Sure Klean® Vana Trol® 1:8 0 0 0 0 Substrate: Clay brick Pigment Color: "Kitsilano" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0		Dilution				Staining	
Substrate: Clay brick Pigment Color: "Kitsilano" Product Dilution Surface Finish Removal Substrate Deterioration Color Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0	Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0	
Product Dilution Surface Finish Removal Deterioration Change Staining Sure Klean® Vana Trol® 1:6 0 0 0 0	Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	
Sure Klean® Vana Trol® 1:6 0 0 0 0	Substrate: Clay brick	Pigment Color: "Kitsilano"					
	Product	Dilution				Staining	
Sure Klean [®] Vana Trol [®] 1:8 0 0 0		1:6	0	0	0	0	
	Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0	

Scale used for reporting results of both categories

0 - No change 1 - change - slight 3 - change - heavy 4 - change - excessive





PROSOCO, Inc.

TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Col	or: "Kootenay Brown"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Lava Sand"			<u> </u>
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Light Tweed"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Malahat"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	or: "Maroon"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean 600 Detergent	1:6	0	0	0	0
Sure Klean 600 Detergent	1:8	0	0	0	0

Scale used for reporting results of both categories

0 - No change 3 - change - heavy 1 - change - slight 4 - change - excessive

2 - change - moderate





PROSOCO, Inc.

TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Color: "Montego Brown"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean 600 Detergent	1:6	0	0	0	0
Sure Klean [®] 600 Detergent	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Old Scona"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Old Yale"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Plum Red"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean [®] 600 Detergent	1:6	0	0	0	0
Sure Klean [®] 600 Detergent	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Prairie Dusk"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean [®] 600 Detergent	1:6	0	0	0	0
Sure Klean [®] 600 Detergent	1:8	0	0	0	0

Scale used for reporting results of both categories

0 – No change

1-change-slight

3 – change – heavy 4 – change - excessive





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TEST RESULTS – Limiting Surface Alterations (continued)

Substrate: Clay brick	Pigment Color: "Queenston"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Robson"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Sandstone"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Cole	or: "Silverado"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Color: "Sonora"				
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0

Scale used for reporting results of both categories

0 - No change 3 - change - heavy 1 - change - slight

2 - change - moderate

4 - change - excessive





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Test Results- Limiting Surface Alterations

Substrate: Clay brick	Pigment Col	or: "Whistler"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Substrate: Clay brick	Pigment Col	Pigment Color: "Williamsburg"			
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
Sure Klean [®] Vana Trol [®]	1:6	0	0	0	0
Sure Klean [®] Vana Trol [®]	1:8	0	0	0	0
Sure Klean® 600 Detergent	1:6	0	0	0	0
Sure Klean [®] 600 Detergent	1:8	0	0	0	0

Scale used for reporting results of both categories

0 – No change

1 - change - slight

2 - change - moderate

3 - change - heavy

4 - change - excessive





PROSOCO, Inc.

CONCLUSIONS – Limiting Surface Alterations

Test results indicate that none of the products tested caused any surface alterations on any of the submitted clay bricks. It is recommended that the selected cleaners always be used in the lowest possible concentration. Excessive pressure and water volume may combine to damage or remove decorative finishes. To facilitate easier removal of excess mortar and construction dirt while minimizing any potential surface alterations to the decorative finish, clean within 7 days of construction.

RECOMMENDED PRODUCTS AND DILUTIONS – Limiting Surface Alterations

Product recommendations for limiting surface alterations for each type of clay brick submitted by I-XL Industries Ltd., Medicine Hat, AB, Canada are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar while limiting surface alterations.

Brick Type	New Construction Cleaning (Type N, 21 Days)
"101 Red" "201 Red" "Coventry" "Ferric Red" "Maroon" "Montego Brown" "Plum Red" "Prairie Dusk" "Williamsburg"	Sure Klean [®] Vana Trol [®] 1:6 OR 1:8 OR Sure Klean [®] 600 Detergent 1:6 OR 1:8
All Other Submitted Clay Bricks	Sure Klean [®] Vana Trol [®] 1:6 OR 1:8

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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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 ready-to-use, water-based silane/siloxane water repellent for concrete, GFRC, and most masonry and stucco surfaces. Siloxane PD penetrates more deeply than conventional water repellents. It helps masonry resist cracking, spalling, staining, and other damage related to water intrusion. Low odor and alkaline stable, Siloxane PD is ideal for field and in-plant application.

Sure Klean® Weather Seal Siloxane WB Concentrate – A concentrated water repellent designed for dilution with fresh water at the jobsite. A solvent-free blend of silanes and oligomeric alkoxysiloxanes, it mixes easily with water to produce a penetrating water repellent ideal for application to dense or porous masonry surfaces.

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 a wet-on-wet brush application as instructed in the 2003 PROSOCO, Inc. Product Guide.





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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 ml X 20% = 1 ml.

A rating of A Average water repellent performance would require loss of no more than 5 ml X 50% = 2.5ml.

A rating of <u>BA</u> Below Average water repellent performance would be reported for treatments which result in a loss of more than 50% X 5ml = 2.5ml+

NOTE: Due to the textured surface of the "Brown Variegated", "Kitsilano", "Malahat", "Plum Red" and "Silverado" brick, the Capillary Uptake method for evaluating water absorption was performed:

Water Absorption Test – Capillary Uptake

Water absorption is determined by comparing the dry weight of the sample with its weight after capillary uptake through the weathered surface at 1-minute, 16-minute, 36-minute, and 64-minute intervals.





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

AA = Above Average

 $\underline{\mathbf{A}} = \mathbf{A} \mathbf{verage}$

BA = Below Average

"Amber"	Results in mL loss	Ranking
Untreated Control	1.1	
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Bear's Paw"	Results in mL loss	Ranking
Untreated Control	3.3	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Belgravia"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Black"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Brown Variegated"	Results in mL loss	Ranking
Untreated Control		
Weather Seal Siloxane PD	See Capillary Uptake	See Capillary Uptake Results
Weather Seal Siloxane WB (1:9)	Results	coo capinary optano recento
Weather Seal Siloxane WB (1:14)		
"Buff"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Capilano"	Results in mL loss	Ranking
Untreated Control	2.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	AA





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

 \underline{AA} = Above Average \underline{A} =

 $\underline{\mathbf{A}} = \mathbf{A} \mathbf{verage}$

"Champagne Buff"	Results in mL loss	Ranking
Untreated Control	1.6	
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Chateau Grey"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Chocolate Brown"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Cinnamon"	Results in mL loss	Ranking
Untreated Control	3.2	
Weather Seal Siloxane PD	0.1	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Coral"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.1	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Coventry"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Cream"	Results in mL loss	Ranking
Untreated Control	3.5	
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>





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

AA = Above Average

A = Average

"Dark Tweed"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.5	AA
Weather Seal Siloxane WB (1:9)	0.1	AA
Weather Seal Siloxane WB (1:14)	0.1	<u>AA</u>
"Dove Grey"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.1	<u>AA</u>
"Dutch Molde"	Results in mL loss	Ranking
Untreated Control	1.5	-
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Fall Tan"	Results in mL loss	Ranking
Untreated Control	4.0	
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Ferric Red"	Results in mL loss	Ranking
Untreated Control	1.0	
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Georgian Grey"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.2	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Granville"	Results in mL loss	Ranking
Untreated Control	0.6	
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>





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

AA = Above Average

A = Average

"Grayburn Mod"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.3	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.1	<u>AA</u>
"Kitsilano"	Results in mL loss	Ranking
Untreated Control		
Weather Seal Siloxane PD	See Capillary Uptake	See Capillary Uptake Results
Weather Seal Siloxane WB (1:9)	Results	See Capillary Optake Results
Weather Seal Siloxane WB (1:14)		
"Kootenay Brown"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.3	AA
Weather Seal Siloxane WB (1:9)	0.2	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Lava Sand"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.3	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Light Tweed"	Results in mL loss	Ranking
Untreated Control	5.0	1
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Malahat"	Results in mL loss	Ranking
Untreated Control		
Weather Seal Siloxane PD	See Capillary Uptake Test	See Capillary Uptake Test Results
Weather Seal Siloxane WB (1:9)	Results	See Capillary Optake Test Results
Weather Seal Siloxane WB (1:14)		
"Maroon"	Results in mL loss	Ranking
Untreated Control	3.3	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.1	AA
Weather Seal Siloxane WB (1:14)	0.1	AA





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

AA = Above Average

A = Average

"Montego Brown"	Results in mL loss	Ranking
Untreated Control	0.5	
Weather Seal Siloxane PD	0.3	<u>BA</u>
Weather Seal Siloxane WB (1:9)	0.1	AA
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Old Scona"	Results in mL loss	Ranking
Untreated Control	5.0	-
Weather Seal Siloxane PD	0.2	AA
Weather Seal Siloxane WB (1:9)	0.1	AA
Weather Seal Siloxane WB (1:14)	0.1	AA
"Old Yale"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	AA
Weather Seal Siloxane WB (1:14)	0.0	AA
"Plum Red"	Results in mL loss	Ranking
Untreated Control		
Weather Seal Siloxane PD	See Capillary Uptake	See Capillary Uptake Results
Weather Seal Siloxane WB (1:9)	Results	See Capillary Optake Nesults
Weather Seal Siloxane WB (1:14)		
"Prairie Dusk"	Results in mL loss	Ranking
	Results in mL loss	Ranking
"Prairie Dusk"		Ranking <u>AA</u>
"Prairie Dusk" Untreated Control	3.5	-
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD	3.5 0.0	 <u>AA</u>
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9)	3.5 0.0 0.0	 <u>AA</u> <u>AA</u>
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14)	3.5 0.0 0.0 0.0	 <u>AA</u> <u>AA</u> AA
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston"	3.5 0.0 0.0 0.0 0.0 Results in mL loss	 <u>AA</u> <u>AA</u> <u>AA</u> Ranking
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control	3.5 0.0 0.0 0.0 Results in mL loss 3.3	AA AA AA Ranking
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control Weather Seal Siloxane PD	3.5 0.0 0.0 0.0 Results in mL loss 3.3 0.0	AA AA AA Ranking AA
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9)	3.5 0.0 0.0 0.0 Results in mL loss 3.3 0.0 0.1	<u>AA</u> <u>AA</u> <u>AA</u> Ranking <u>AA</u> <u>AA</u>
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14)	3.5 0.0 0.0 0.0 Results in mL loss 3.3 0.0 0.1 0.1	AA AA AA Ranking AA AA AA AA AA
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Robson"	3.5 0.0 0.0 0.0 Results in mL loss 3.3 0.0 0.1 0.1 Results in mL loss	AA AA AA Ranking AA AA AA AA AA AA AA AA Ranking
"Prairie Dusk" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Queenston" Untreated Control Weather Seal Siloxane PD Weather Seal Siloxane WB (1:9) Weather Seal Siloxane WB (1:14) "Robson" Untreated Control	3.5 0.0 0.0 0.0 Results in mL loss 3.3 0.0 0.1 0.1 Results in mL loss 5.0	AA AA AA Ranking AA AA AA AA AA AA AA AA Ranking





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

AA = Above Average

A = Average

"Sandstone"	Results in mL loss	Ranking
Untreated Control	1.5	
Weather Seal Siloxane PD	0.5	<u>A</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"Silverado"	Results in mL loss	Ranking
Untreated Control		
Weather Seal Siloxane PD	See Capillary Uptake	See Capillary Uptake Results
Weather Seal Siloxane WB (1:9)	Results	Gee Capillary Optake Results
Weather Seal Siloxane WB (1:14)		
"Sonora"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.1	AA
Weather Seal Siloxane WB (1:14)	0.1	<u>AA</u>
"Whistler"	Results in mL loss	Ranking
Untreated Control	5.0	
Weather Seal Siloxane PD	0.1	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.2	<u>AA</u>
"Williamsburg"	Results in mL loss	Ranking
Untreated Control	3.8	-
Weather Seal Siloxane PD	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"101 Red"	Results in mL loss	Ranking
Untreated Control	0.1	-
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>
"201 Red"	Results in mL loss	Ranking
Untreated Control	3.6	
Weather Seal Siloxane PD	0.0	AA
Weather Seal Siloxane WB (1:9)	0.0	<u>AA</u>
Weather Seal Siloxane WB (1:14)	0.0	<u>AA</u>





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Water Absorption - Capillary Uptake

Treatment	1 Min. % Absorbed	16 Min. % Absorbed	36 Min. % Absorbed	64 Min. % Absorbed	% Reduced Water Absorption
"Brown Variegated"					
Untreated Control	0.51%	1.32%	1.85%	2.57%	
Weather Seal Siloxane PD	0.06%	0.16%	0.18%	0.14%	95.4%
Weather Seal Siloxane WB (1:9)	0.03%	0.09%	0.10%	0.12%	95.8%
Weather Seal Siloxane WB (1:14)	-0.02%	-0.01%	0.05%	0.03%	99.1%
"Kitsilano"					
Untreated Control	0.12%	0.47%	1.09%	1.88%	
Weather Seal Siloxane PD	0.10%	0.10%	0.11%	0.10%	96.5%
Weather Seal Siloxane WB (1:9)	0.04%	0.04%	0.04%	0.05%	98.2%
Weather Seal Siloxane WB (1:14)	0.01%	0.01%	0.06%	0.02%	99.2%
"Malahat"					
Untreated Control	0.44%	1.17%	1.67%	2.26%	
Weather Seal Siloxane PD	0.13%	0.05%	0.06%	0.06%	98.0%
Weather Seal Siloxane WB (1:9)	0.02%	0.06%	0.07%	0.07%	97.7%
Weather Seal Siloxane WB (1:14)	0.02%	0.04%	0.03%	0.14%	98.7%
"Plum Red"					
Untreated Control	0.81%	2.15%	3.17%	4.21%	
Weather Seal Siloxane PD	0.10%	0.02%	0.03%	0.02%	99.4%
Weather Seal Siloxane WB (1:9)	0.01%	0.04%	0.06%	0.06%	97.9%
Weather Seal Siloxane WB (1:14)	0.01%	0.03%	0.10%	0.09%	97.2%
"Silverado"					
Untreated Control	0.67%	2.50%	3.35%	0.80%	
Weather Seal Siloxane PD	0.19%	0.12%	0.13%	0.06%	96.6%
Weather Seal Siloxane WB (1:9)	0.01%	0.03%	0.05%	0.05%	98.3%
Weather Seal Siloxane WB (1:14)	0.01%	0.05%	0.00%	0.15%	97.8%

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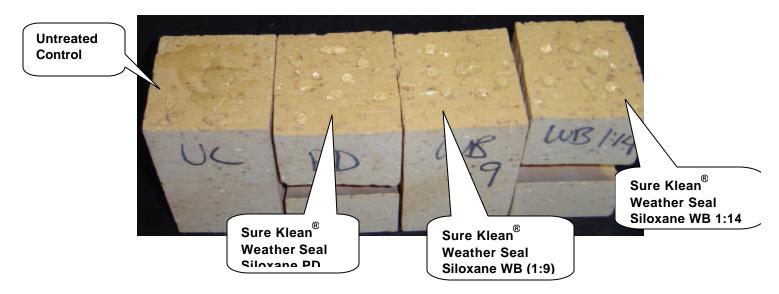




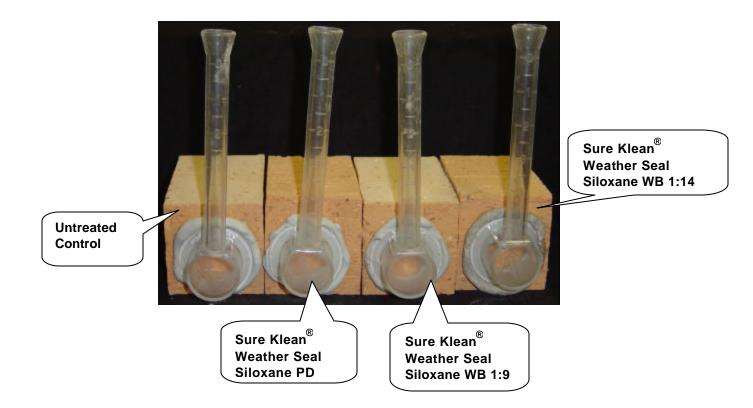
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PHOTOGRAPH - Surface Beading

"Fall Tan" Surface Beading Characteristics



"Fall Tan" RILEM Testing







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CONCLUSIONS - Protective Water Repellents:

RILEM test results indicate that either Sure Klean[®] Weather Seal Siloxane PD or Sure Klean[®] Weather Seal Siloxane WB Concentrate in 1:9 and 1:14 dilutions exhibited above average water repellency on all submitted clay bricks. "Malahat", "Silverado", "Plum Red", "Kitsilano" and "Brown Variegated" clay bricks were not able to undergo RILEM testing because of their textured surface, and so were tested by Capillary Uptake.

Capillary Uptake test results indicate that Sure Klean[®] Weather Seal Siloxane PD and Sure Klean[®] Weather Seal Siloxane WB Concentrate in 1:9 and 1:14 dilutions exhibited above average water repellency on the "Malahat", "Silverado", "Plum Red", "Kitsilano" and "Brown Variegated" clay bricks. For future projects, PROSOCO, Inc. would only be able to offer a 5 Year Material Only Warranty on these clay bricks.

RECOMMENDATIONS - Protective Water Repellents:

Recommendations for water repellent treatments for each type of clay brick submitted by IXL Industries Ltd., Medicine Hat, Alberta, Canada are provided in the chart below. Recommendations are based on the treatments that proved most effective by results and can provide water repellency on all types submitted if possible.

Brick Type	Water Repellent
"Montego Brown"	Sure Klean [®] Weather Seal Siloxane WB Concentrate (1:9), (1:14)
All Other Submitted Clay Bricks	Sure Klean [®] Weather Seal Siloxane PD OR Sure Klean [®] Weather Seal Siloxane WB Concentrate (1:9), (1:14)

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.





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SECTION D - GRAFFITI CONTROL

DESCRIPTION OF PRODUCTS EVALUATED

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

Graffiti Control Treatments

Sure Klean® Weather Seal Blok-Guard® & Graffiti Control – A clear, solvent-based silicone elastomer formulated to weatherproof custom masonry units, cast stone, and concrete block without altering the natural appearance. Blok-Guard® & Graffiti Control 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.

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 removed a variety of graffiti stains from most smooth masonry, wood and metal surfaces.

Sure Klean® Fast Acting Stripper – A thixotropic stripping compound designed for removing coatings and epoxies from masonry, wood and metal surfaces. Also removes oil, grease, and waxes from concrete decks, tile and terrazzo floors.

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 brick samples were treated with Sure Klean® Weather Seal Blok-Guard® & Graffiti Control in accordance with PROSOCO, Inc.'s Product Guide application recommendations and then allowed to cure for at least 24 hours. At the end of the 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 at least 24 hours following application of Sure Klean[®] Weather Seal Blok-Guard[®] & Graffiti Control. 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.





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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:

- 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

	"101 Red"							
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal			
Graffiti Wipe	100%	90%	95%	100%	96%			
Fast Acting Stripper	100%	95%	95%	100%	98%			
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal			
Graffiti Wipe	95%	100%	100%	100%	99%			
Fast Acting Stripper	80%	100%	100%	100%	95%			
	"2	01 Red"						
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal			
Graffiti Wipe	95%	90%	95%	100%	95%			
Fast Acting Stripper	95%	95%	95%	100%	96%			
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal			
Graffiti Wipe	100%	100%	100%	100%	100%			
Fast Acting Stripper	95%	95%	100%	100%	98%			





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	"	Amber"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	85%	85%	85%	88%
Fast Acting Stripper	90%	85%	85%	85%	86%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	95%	100%	95%	96%
Fast Acting Stripper	80%	90%	100%	95%	91%
	"Be	ar's Paw"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	100%	98%
Fast Acting Stripper	85%	95%	95%	100%	94%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	100%	100%	100%	99%
Fast Acting Stripper	90%	95%	100%	100%	96%
	"Br	elgravia"			
	Red	Black	Green	Red	% Avg.
Untreated Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	95%	100%	100%	100%	99%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	90%	95%	100%	100%	96%
	66	Black"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	95%	95%	95%	95%	95%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	98%	100%	100%	98%
Fast Acting Stripper	90%	98%	100%	100%	97%





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	"Brown	Variegated"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	95%	100%	100%	100%	99%
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
		'Buff"			
Untreated Control	Red	Black	Green	Red	% Avg.
	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	90%	60%	60%	60%	68%
Fast Acting Stripper	80%	60%	60%	60%	65%
					2/ 4
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
Cupffiti Min a	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	50% 50%	50%	60% 70%	50% 70%	53% 63%
Fast Acting Stripper	50%	60%	70%	70%	63%
	"C	apilano"			
			0	Dod	0/ 4
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Craffiti Min a					
Graffiti Wipe	100% 95%	90%	90%	90%	93% 95%
Fast Acting Stripper	95%	95%	95%	95%	95%
	Red	Black	Green	Red	% Avg.
Blok-Guard [®] & Graffiti Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	90%	100%	100%	100%	98%
t destructing emppe		10070		10070	
	"Cham	pagne Buff"			<u>•</u>
Hadaada I Quutus	Red	Black	Green	Red	% Avg.
Untreated Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	90%	70%	70%	70%	75%
Fast Acting Stripper	80%	70%	70%	70%	73%
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
Biok-Guard & Grannii Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	95%	95%	95%	95%	95%
Fast Acting Stripper	90%	90%	90%	90%	90%





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	"Chate	eau Grey"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	75%	70%	70%	70%	71%
Fast Acting Stripper	75%	70%	70%	70%	71%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	60%	80%	90%	80%	78%
Fast Acting Stripper	60%	80%	90%	80%	78%
	"Choco	late Brown"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	95%	95%	95%	95%	95%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	100%	100%	100%	99%
Fast Acting Stripper	90%	95%	100%	100%	96%
	"Cin	namon"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	85%	90%	90%	91%
Fast Acting Stripper	100%	95%	95%	95%	96%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"(Coral"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	60%	60%	60%	66%
Fast Acting Stripper	70%	60%	60%	60%	63%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe Fast Acting Stripper	80%	75%	75%	75%	76%
L cot / otio a L'trip por	70%	75%	75%	75%	74%





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	"Co	oventry"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	90%	90%	90%	91%
Fast Acting Stripper	90%	95%	90%	90%	91%
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	95%	95%	100%	95%	96%
Fast Acting Stripper	85%	95%	100%	95%	94%
	"(Cream"			<u> </u>
	Red	Black	Green	Red	% Avg.
Untreated Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	55%	50%	50%	50%	51%
Fast Acting Stripper	55%	50%	50%	50%	51%
<u> </u>					
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
Blok-Guard & Graffiti Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	60%	70%	70%	70%	68%
Fast Acting Stripper	50%	60%	60%	60%	58%
	"Dar	k Tweed"			
Untreated Control	Red	Black	Green	Red	% Avg.
Ontreated Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	95%	75%	75%	75%	80%
Fast Acting Stripper	90%	75%	75%	75%	79%
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	90%	95%	95%	95%	94%
Fast Acting Stripper	80%	90%	90%	90%	88%
	"Do	ve Grey"			
	Red	Black	Green	Red	% Avg.
Untreated Control	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	95%	95%	90%	95%	94%
Fast Acting Stripper	95%	100%	90%	100%	96%
Blok-Guard [®] & Graffiti Control	Red	Black	Green	Red	% Avg.
DIOK-GUARD & GRATTITI CONTROL	Paint	Marker	Marker	Marker	Removal
Graffiti Wipe	95%	95%	95%	95%	95%
Fast Acting Stripper	85%	95%	95%	95%	93%





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	"Dut	ch Molde"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	70%	70%	70%	76%
Fast Acting Stripper	90%	70%	70%	70%	75%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"F	all Tan"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	80%	85%	95%	89%
Fast Acting Stripper	95%	100%	85%	95%	94%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	95%	100%	100%	96%
Fast Acting Stripper	75%	90%	100%	100%	91%
	"Fe	rric Red"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	100%	100%	99%
Fast Acting Stripper	100%	100%	100%	100%	100%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	95%	100%	100%	99%
	"Geor	gian Grey"			<u> </u>
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	80%	80%	80%	81%
Fast Acting Stripper	85%	80%	80%	80%	81%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	65%	100%	100%	100%	91%





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	"G	ranville"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	70%	70%	70%	76%
Fast Acting Stripper	90%	70%	70%	70%	75%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	90%	95%	95%	95%	94%
	"Gray	/burn Mod"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	80%	80%	80%	84%
Fast Acting Stripper	90%	80%	80%	80%	83%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	90%	90%	90%	89%
Fast Acting Stripper	85%	90%	90%	90%	89%
	"K	itsilano"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	80%	80%	80%	84%
Fast Acting Stripper	85%	80%	80%	80%	81%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	95%	95%	95%	94%
Fast Acting Stripper	85%	95%	95%	95%	93%
	"Koote	enay Brown"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	95%	95%	95%	95%
Fast Acting Stripper	95%	95%	95%	95%	95%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	95%	95%	95%	95%
Fast Acting Stripper	95%	90%	90%	90%	91%





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	"La	va Sand"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	95%	95%	95%	95%	95%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	95%	100%	100%	100%	99%
	"Ligl	nt Tweed"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	80%	80%	80%	81%
Fast Acting Stripper	90%	80%	80%	80%	83%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	80%	85%	85%	85%	84%
Fast Acting Stripper	85%	80%	80%	80%	81%
	"M	lalahat"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	90%	90%	90%	90%
Fast Acting Stripper	95%	95%	95%	95%	95%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	100%	100%	100%	99%
Fast Acting Stripper	95%	100%	100%	100%	99%
	"N	laroon"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	100%	95%	95%	95%	96%
, i			-		
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	95%	95%	95%	95%
	95%	95%	95%	95%	95%





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	"Mont	ego Brown"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	100%	95%	95%	95%	96%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	100%	95%	95%	100%	98%
	"OI	d Scona"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	90%	90%	90%	93%
Fast Acting Stripper	95%	90%	90%	90%	91%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	100%	100%	99%
Fast Acting Stripper	90%	95%	100%	100%	96%
	"0	ld Yale"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	80%	80%	80%	83%
Fast Acting Stripper	40%	80%	80%	80%	70%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	90%	90%	90%	91%
Fast Acting Stripper	50%	90%	90%	90%	80%
	"PI	um Red"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	90%	90%	95%	93%
Fast Acting Stripper	95%	95%	90%	95%	94%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%





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	"Pra	irie Dusk"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	80%	80%	95%	88%
Fast Acting Stripper	95%	95%	80%	95%	91%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	95%	95%	95%	94%
Fast Acting Stripper	85%	90%	90%	90%	89%
	"Qu	eenston"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	95%	85%	85%	85%	88%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"R	Robson"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	95%	100%	100%	100%	99%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	100%	100%	100%	100%
Fast Acting Stripper	100%	100%	100%	100%	100%
	"Sa	ndstone"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	85%	90%	90%	90%
Fast Acting Stripper	95%	95%	90%	95%	94%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	95%	95%	96%
Fast Acting Stripper	90%	95%	95%	95%	94%





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	"Si	lverado"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	80%	90%	85%	85%	85%
Fast Acting Stripper	80%	90%	85%	85%	85%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	95%	85%	90%	89%
Fast Acting Stripper	85%	95%	85%	90%	89%
	"(Sonora"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	80%	80%	80%	83%
Fast Acting Stripper	80%	80%	80%	80%	80%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	90%	95%	95%	93%
Fast Acting Stripper	70%	95%	95%	95%	89%
	"V	/histler"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	85%	85%	85%	85%	85%
Fast Acting Stripper	85%	95%	90%	95%	90%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	90%	90%	95%	100%	94%
Fast Acting Stripper	70%	90%	95%	100%	89%
	"Will	iamsburg"			
Untreated Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	95%	95%	95%	100%	96%
Fast Acting Stripper	95%	95%	95%	100%	96%
Blok-Guard [®] & Graffiti Control	Red Paint	Black Marker	Green Marker	Red Marker	% Avg. Removal
Graffiti Wipe	100%	95%	100%	100%	99%
Fast Acting Stripper	95%	95%	100%	100%	98%

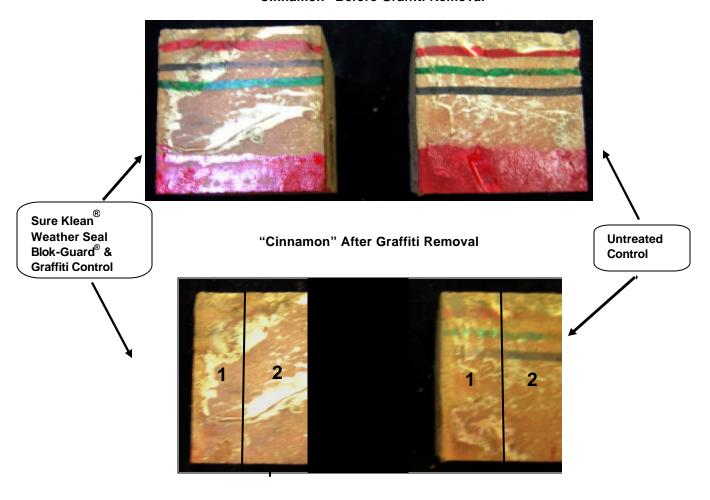




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PHOTOGRAPHS - Graffiti Control

"Cinnamon" Before Graffiti Removal



- Sure Klean[®] Fast Acting Stripper
 Defacer Eraser[®] Graffiti Wipe





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RECOMMENDATIONS - GRAFFITI CONTROL

Recommendations for graffiti control treatment for each type of clay brick submitted by I-XL Industries, Medicine Hat, Alberta, Canada 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.

Brick Type	Graffiti Repellents	Graffiti Removers	
"Amber" "Bear's Paw" "Black" "Brown Variegated" "Capilano" "Champagne Buff" "Chateau Grey" "Chocolate Brown" "Coral" "Coventry" "Dark Tweed" "Dutch Molde" "Ferric Red" "Georgian Grey" "Granville" "Grayburn Mod" "Kitsilano" "Lava Sand" "Malahat" "Maroon" "Montego Brown" "Old Scona" "Plum Red" "Queenston" "Robson" "Sandstone" "Silverado" and "Williamsburg"	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	Defacer Eraser [®] Graffiti Wipe OR Sure Klean [®] Fast Acting Stripper	





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Brick Type	Graffiti Repellents	Graffiti Removers	
"101 Red" "201 Red" "Belgravia" "Cream" "Dove Grey" "Fall Tan" "Kootenay Brown" "Light Tweed" "Old Yale" "Prairie Dusk" "Sonora" and "Whistler"	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	Defacer Eraser [®] Graffiti Wipe	
"Buff"	Sure Klean [®] Weather Seal Blok-Guard [®] & Graffiti Control	Sure Klean [®] Fast Acting Stripper	

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 graffiti control product and procedure for a particular project. See product literature for application and product information.

Nathan R. Colaner Technical Analyst

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NRC/



Laboratory Report

Pallet Tag Program Evaluation

I-XL Industries Ltd. Medicine Hat, Alberta Canada

Project No. 0308-19 PTP

Prepared For:

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PROSOCO, Inc. October 2003