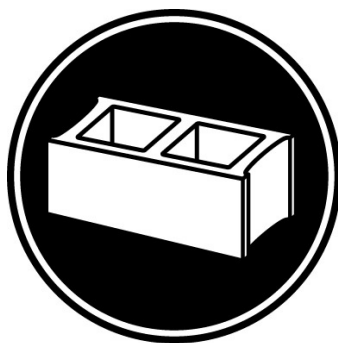




Pallet Tag Program Laboratory Report

Hebron Brick Hebron, ND



Project No. 1901-02 PTP

Prepared For:



Prepared By:

J. Lucas Comadoll

J. Lucas Comadoll
Project Testing Technician
AMT Laboratories

January 2019



LABORATORY REPORT

AMT Laboratories • 3741 Greenway Circle • Lawrence, Kansas 66046 • (888) 376-3600

FOR: Corey Schultz, Hebron Brick
cc: Jake Boyer, PROSOCO, Inc.
Al Morris, PROSOCO, Inc.

SUBJECT: Hebron Brick
Hebron, ND
Pallet Tag Evaluation

DATE: January 16, 2019
PROJECT: 1901-02 PTP

SAMPLES SUBMITTED:

Sample	Name	Collection	Color	Size
(4) Bricks	"Champagne"	"Solid Colors"	Buff	8" x 2" x 0.5"
(4) Bricks	"Buckwheat"	"Solid Colors"	Light Orange	
(4) Bricks	"Scoria"	"Solid Colors"	Orange	
(4) Bricks	"Silverado"	"Solid Colors"	Gray	
(4) Bricks	"Toasted Gray"	"Ironspots"	Dark Buff with Small Dark Gray Spots	
(4) Bricks	"Onyx"	"Ironspots"	Black	
(4) Bricks	"Opus"	"Solid Colors"	Black with Moderate Sheen	
(4) Bricks	"Garnet"	"Solid Colors"	Red	
(4) Bricks	"Rosemont"	"Solid Colors"	Light Red	
(4) Bricks	"Walnut Creek"	"Ironspots"	Brown with Small Black Spots	
(4) Bricks	"Castlewood"	"Rustics"	Dark Brown with Sandy Surface Texture	
(5) Bricks	"Brandywine"	"Rustics"	Red and Purple with Sandy Surface Texture	
(5) Bricks	"Madison"	"Rustics"	Buff with White Sandy Surface Texture	

NOTE: "Overture" brick from Hebron Brick was previously submitted to AMT Laboratories with a request to determine the most appropriate new construction cleaner. See report 1812-01 PTP Hebron Brick for reference.

SUBMITTED BY: Corey Shultz
Hebron Brick
1000 Washington Ave East
Hebron, ND 58638



PURPOSE OF TEST:

- To determine the most appropriate PROSOCO, Inc. new construction cleaner(s) for the submitted samples.

PRODUCTS EVALUATED:

New Construction Cleaning	Dilution:
Sure Klean® 600 Detergent	1:6; 1:8
Sure Klean® Vana Trol®	1:6; 1:8
Enviro Klean® Safety Klean	1:2; 1:3

TEST METHODS: New Construction Cleaning

Sure Klean® 600 Detergent, Sure Klean® Vana Trol®, and Enviro Klean® Safety Klean were evaluated to determine the optimal concentration of cleaner which leaves the external surface looking most like the uncleaned surface of the submitted sample.

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

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

Color Change is the visual examination comparing the color of the uncleaned surface to the 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.

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

- 0 – **No change** compared to uncleaned surface
- 1 – **Slight change** compared to uncleaned surface
- 2 – **Moderate change** compared to uncleaned surface
- 3 – **Significant change** compared to uncleaned surface

Cleaning Procedure:

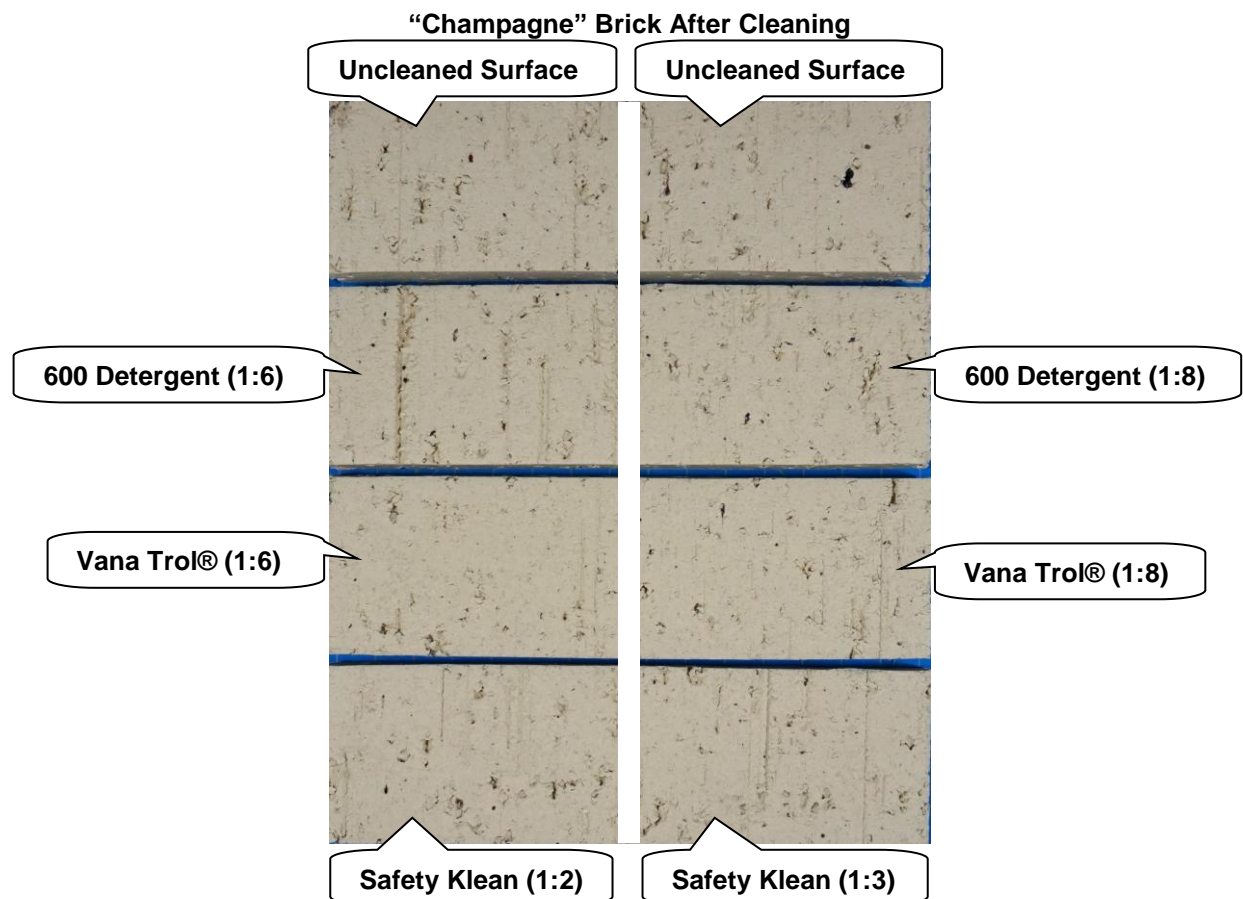
1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Data Sheet.
2. Allow for an appropriate dwell time:
 - 600 Detergent5 minutes
 - Vana Trol®5 minutes
 - Safety Klean5 minutes
3. Reapply cleaning solution; do not let cleaner dry into brick.
4. Rinse thoroughly with plenty of fresh water.*
5. Allow the sample to dry for at least 18 hours and visually examine.
6. Compare the uncleaned surfaces to the cleaned surfaces for the best match.

***Rinsing Equipment** – Masonry washing equipment generating approximately 700-800 psi with a water flow rate of 8 gallons per minute delivered through a 45 degree fan spray tip was used for rinsing.

TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning

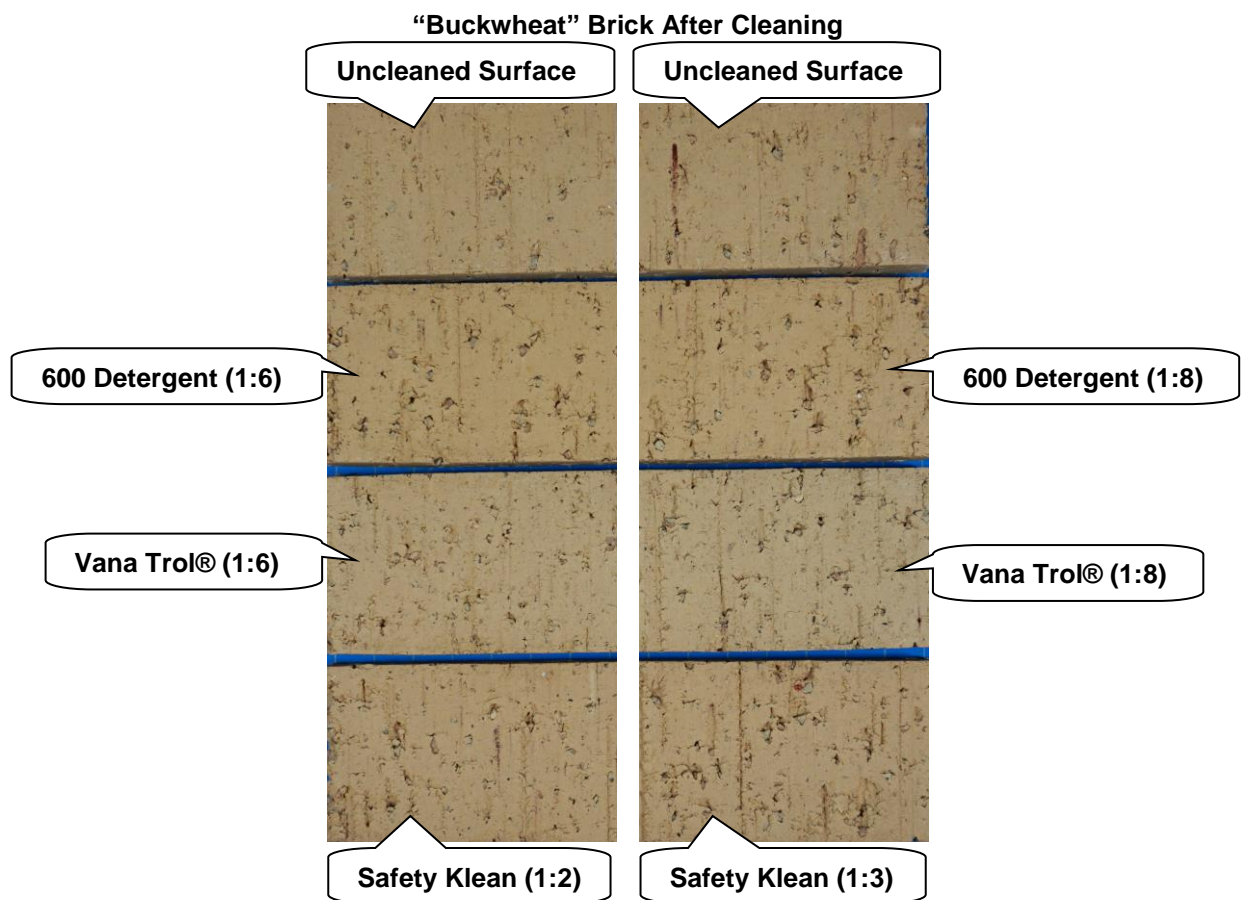
Scale used for reporting results of both categories:
0 – No change compared to uncleaned surface
1 – Slight change compared to uncleaned surface
2 – Moderate change compared to uncleaned surface
3 – Significant change compared to uncleaned surface

Name: "Champagne"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



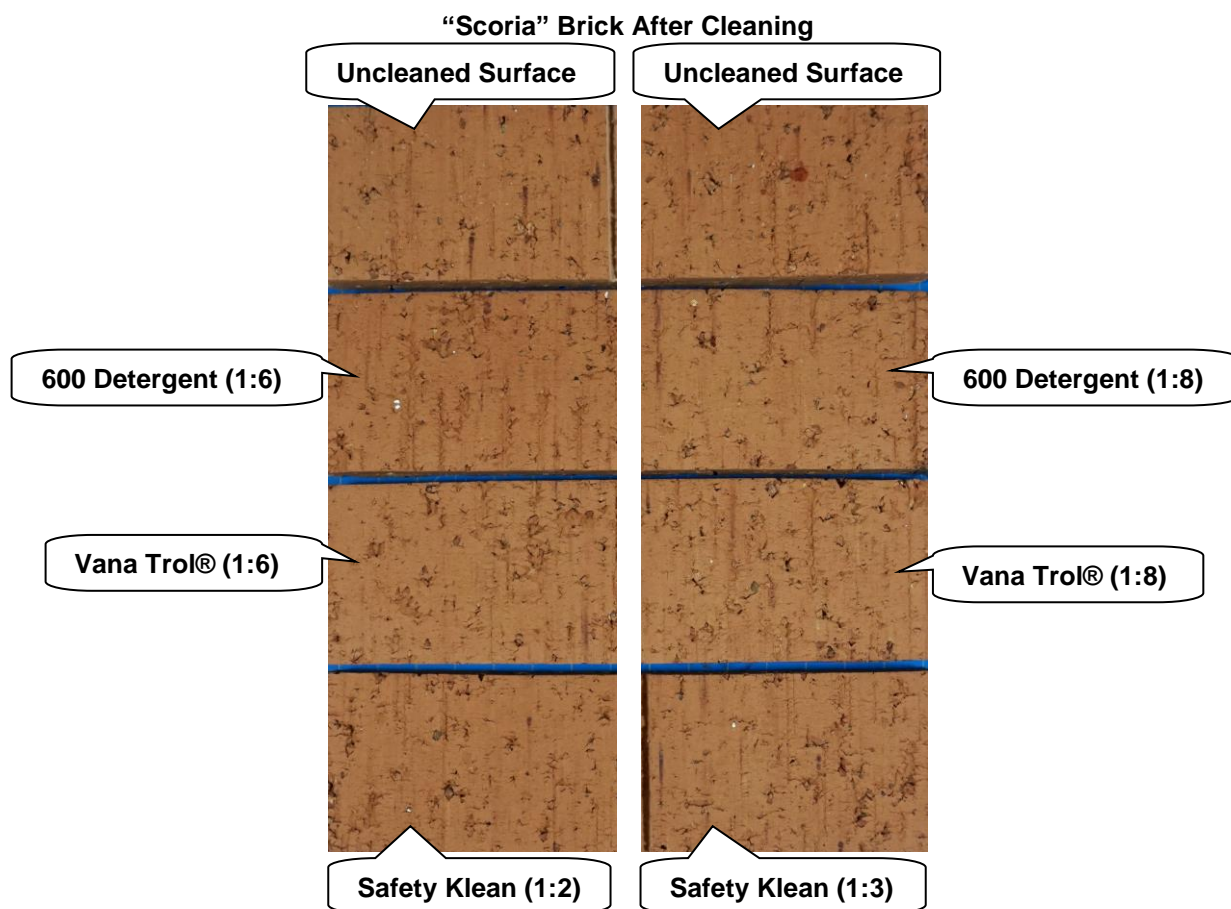
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Buckwheat"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



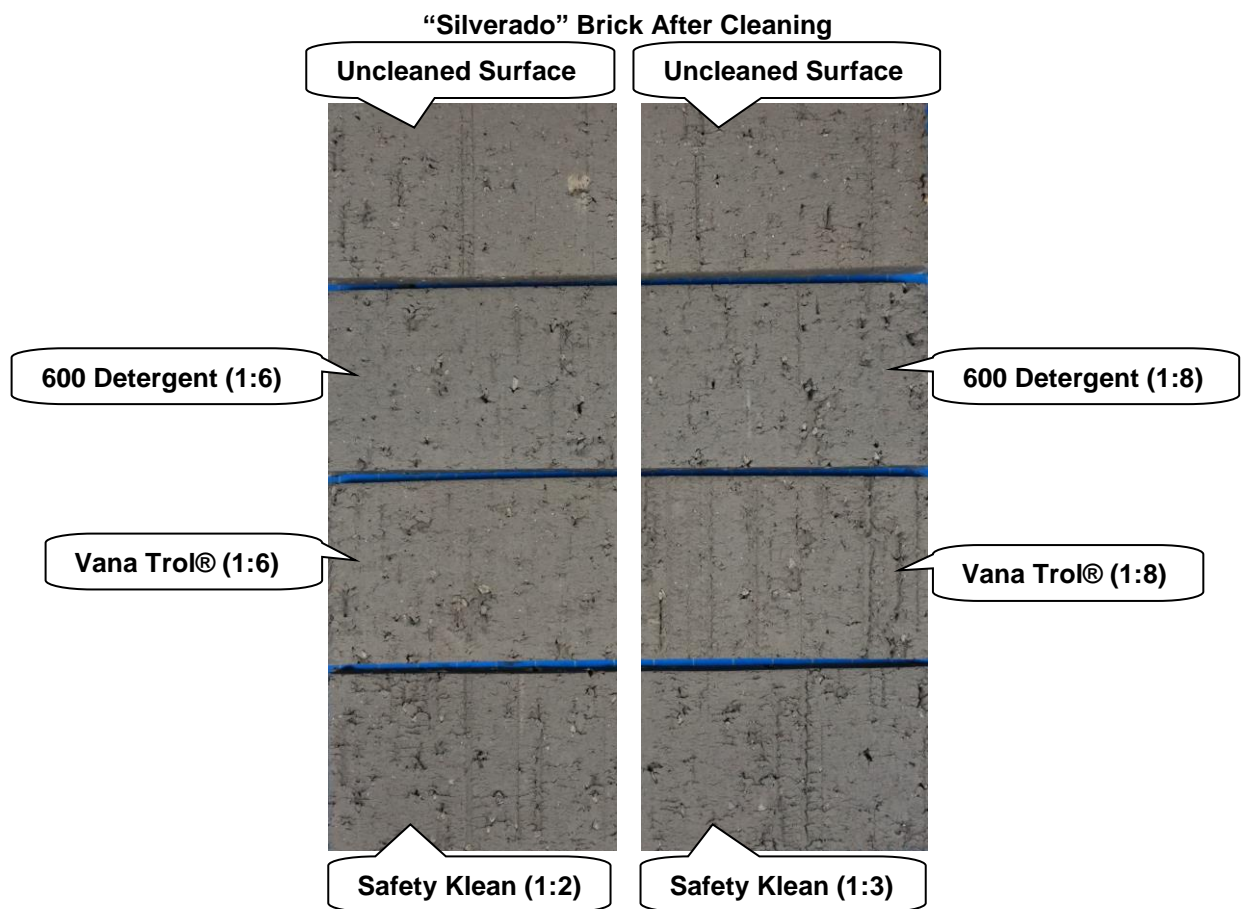
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Scoria"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safetly Klean	1:3	0	0	0	0



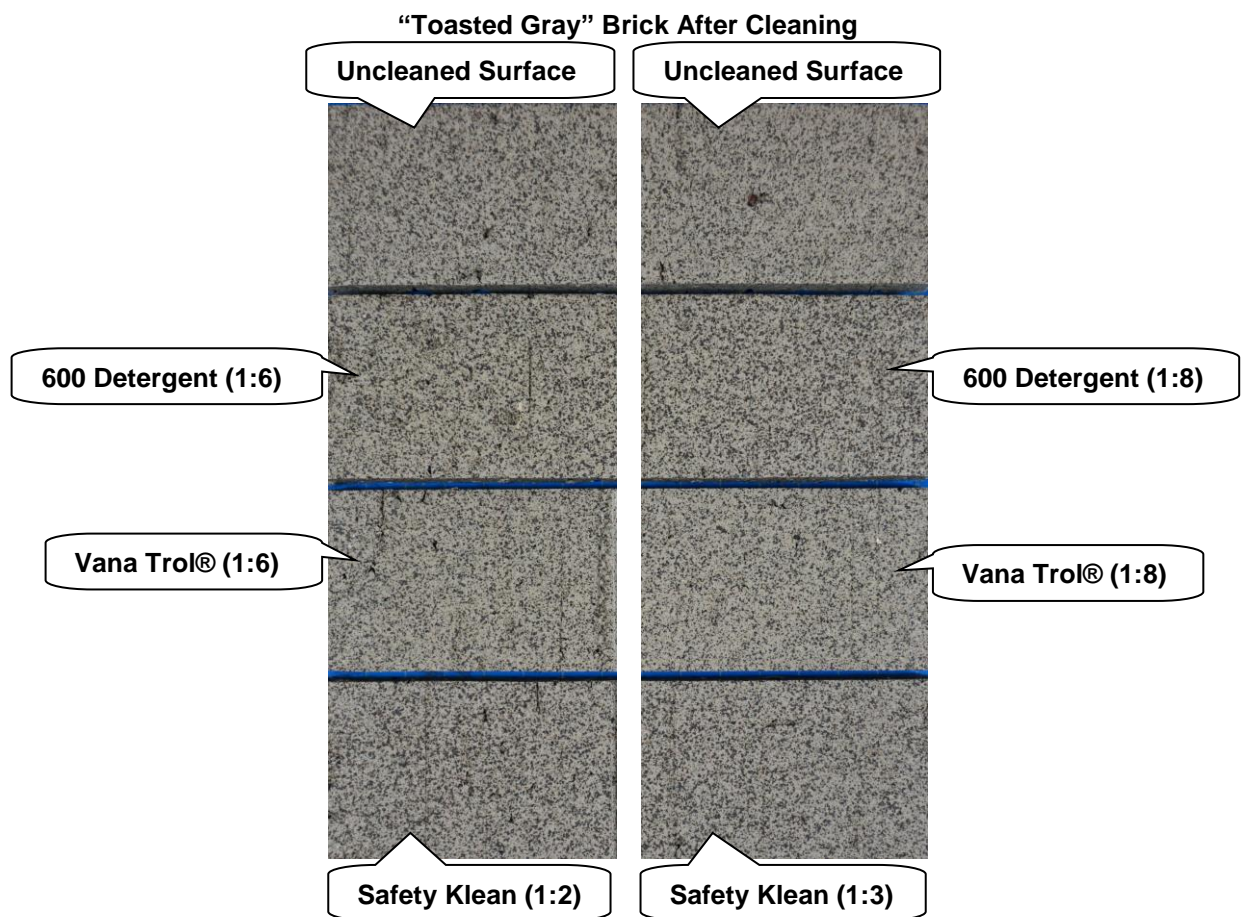
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Silverado"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



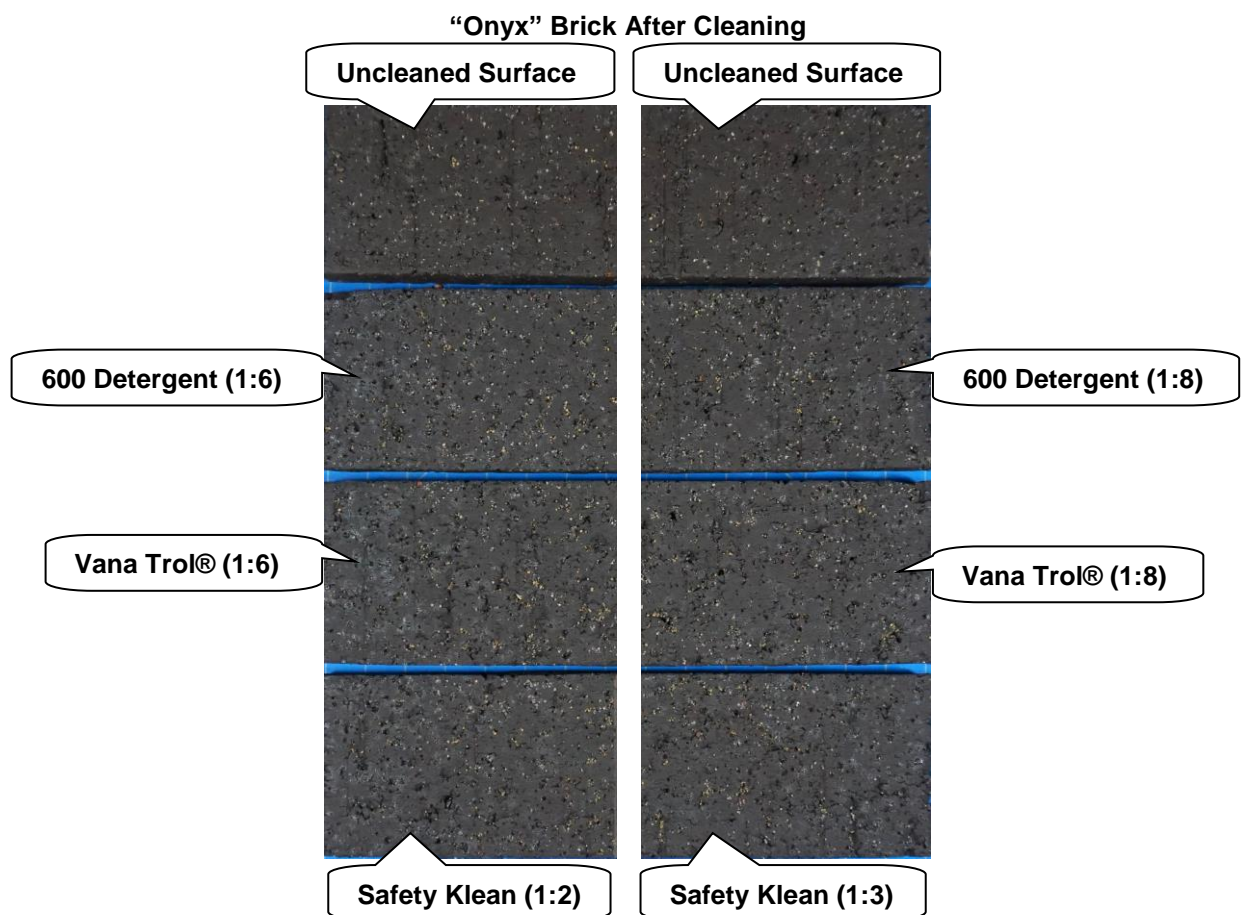
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Toasted Gray"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safetly Klean	1:3	0	0	0	0



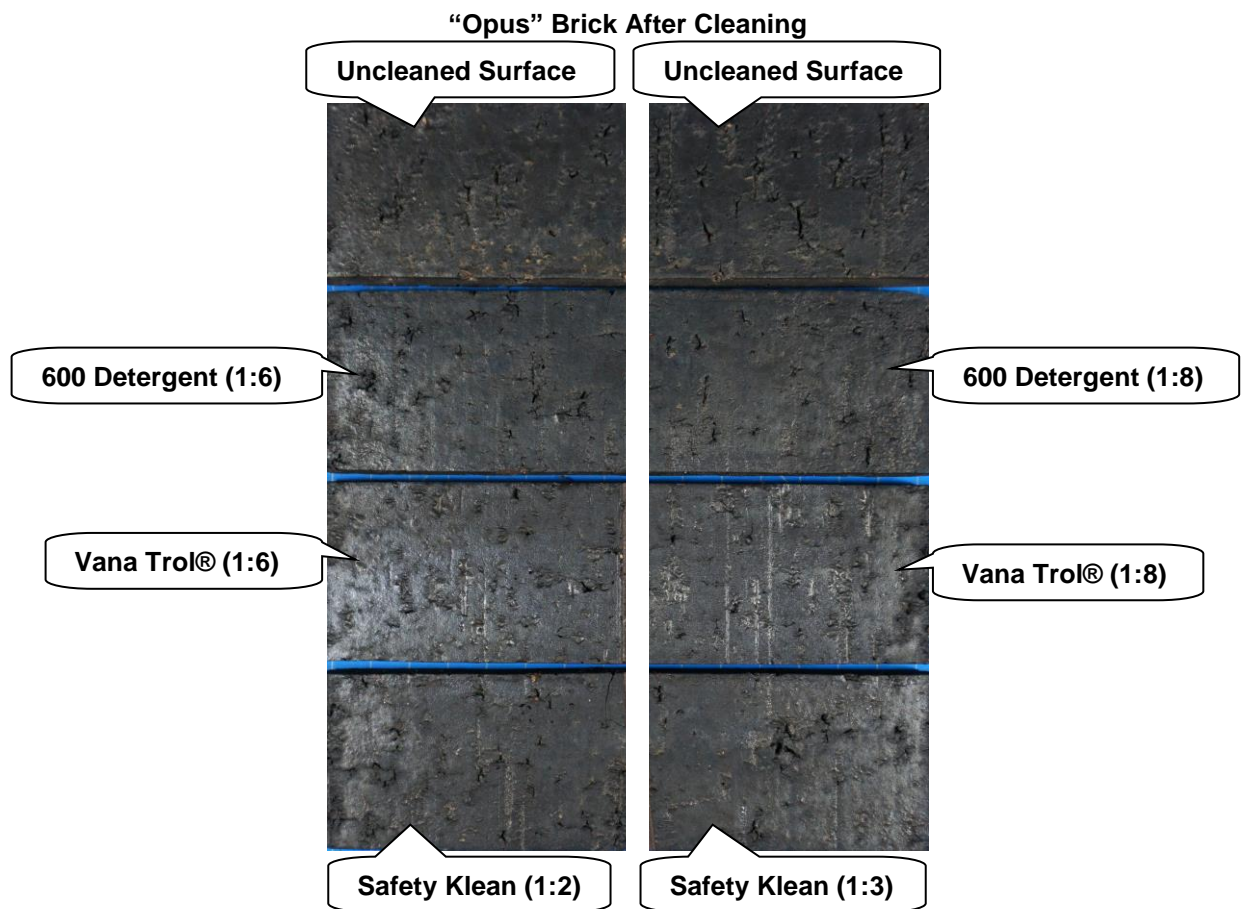
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Onyx"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



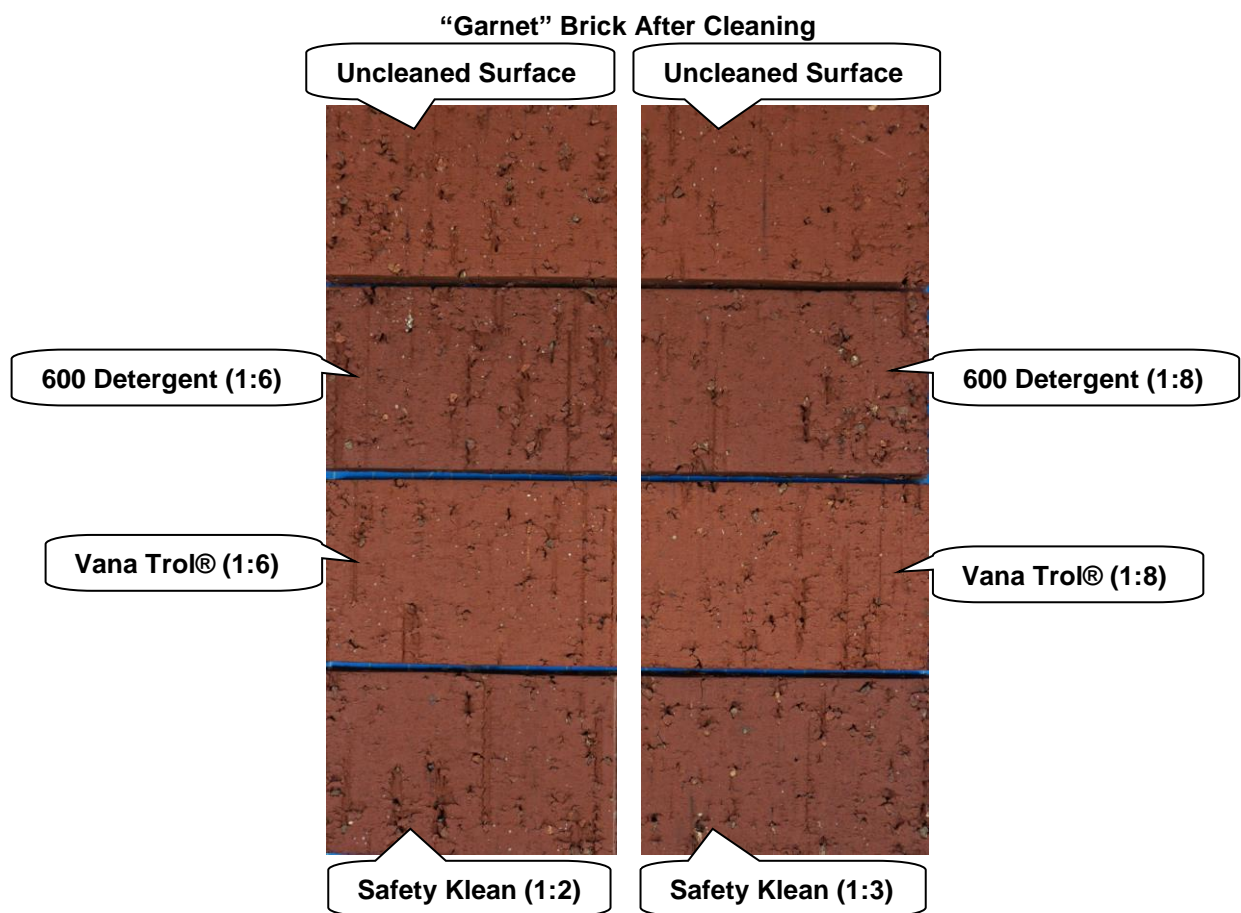
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Opus"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

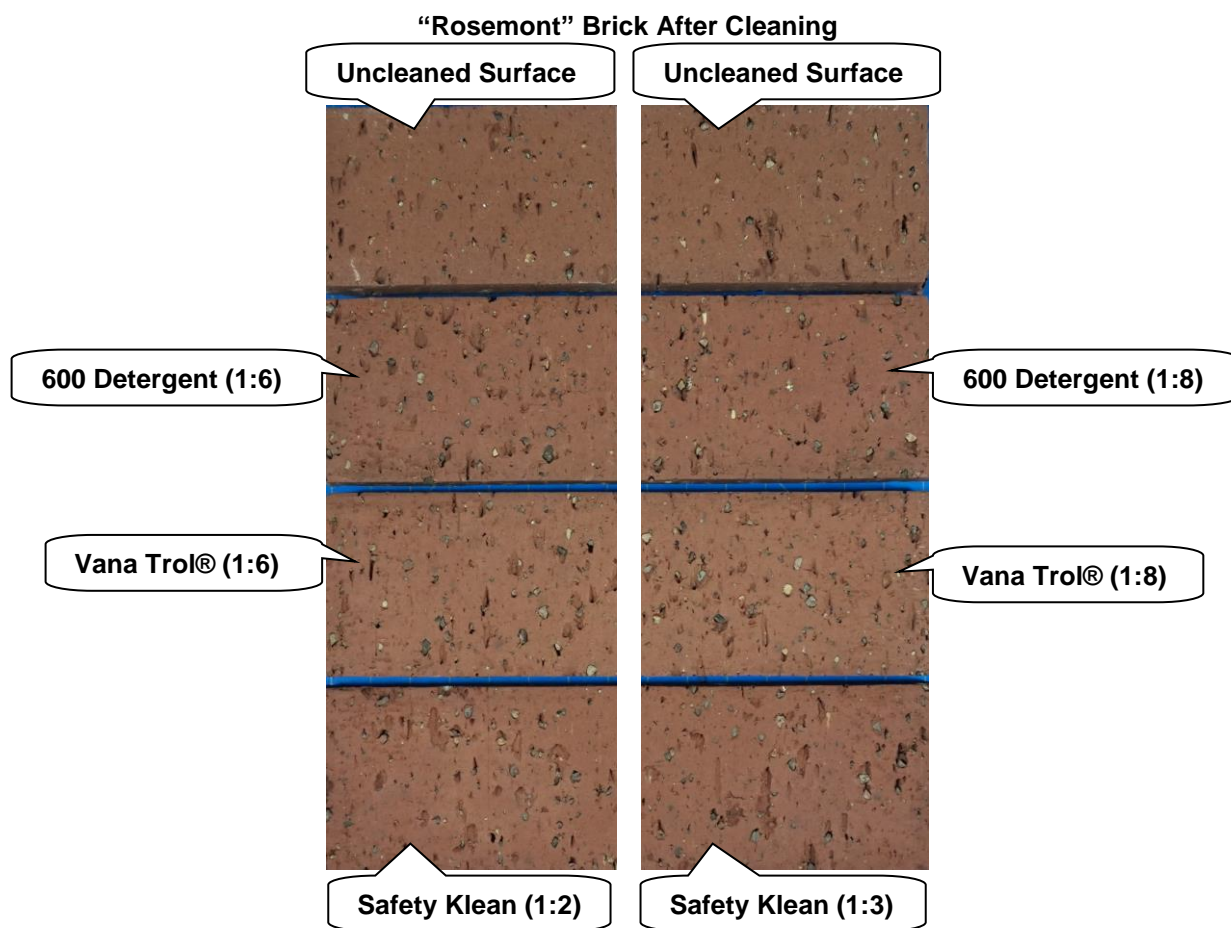
Name: "Garnet"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



NOTE: Prior to cleaning the samples, a slight color variation was visible among the four "Garnet" bricks submitted.

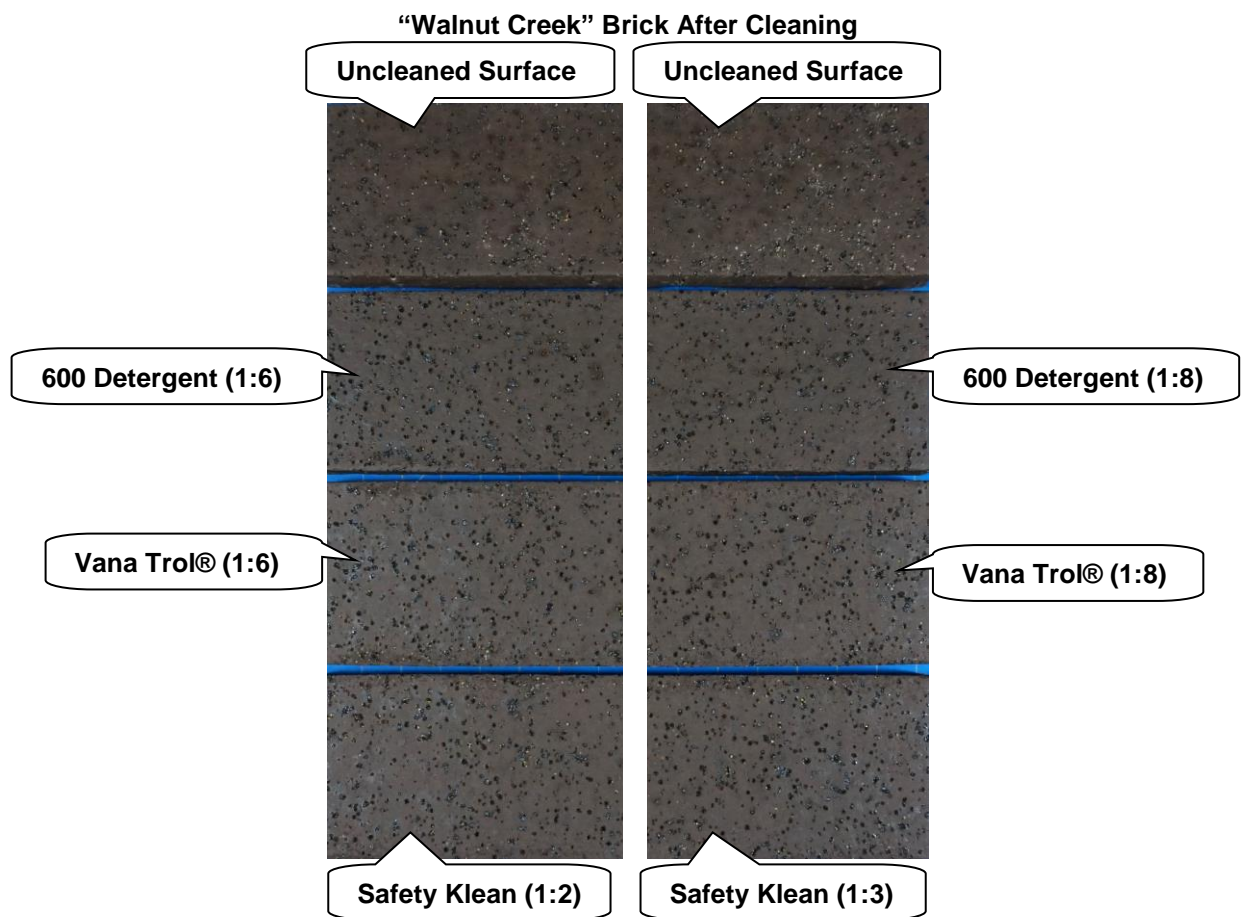
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Rosemont"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safetly Klean	1:3	0	0	0	0



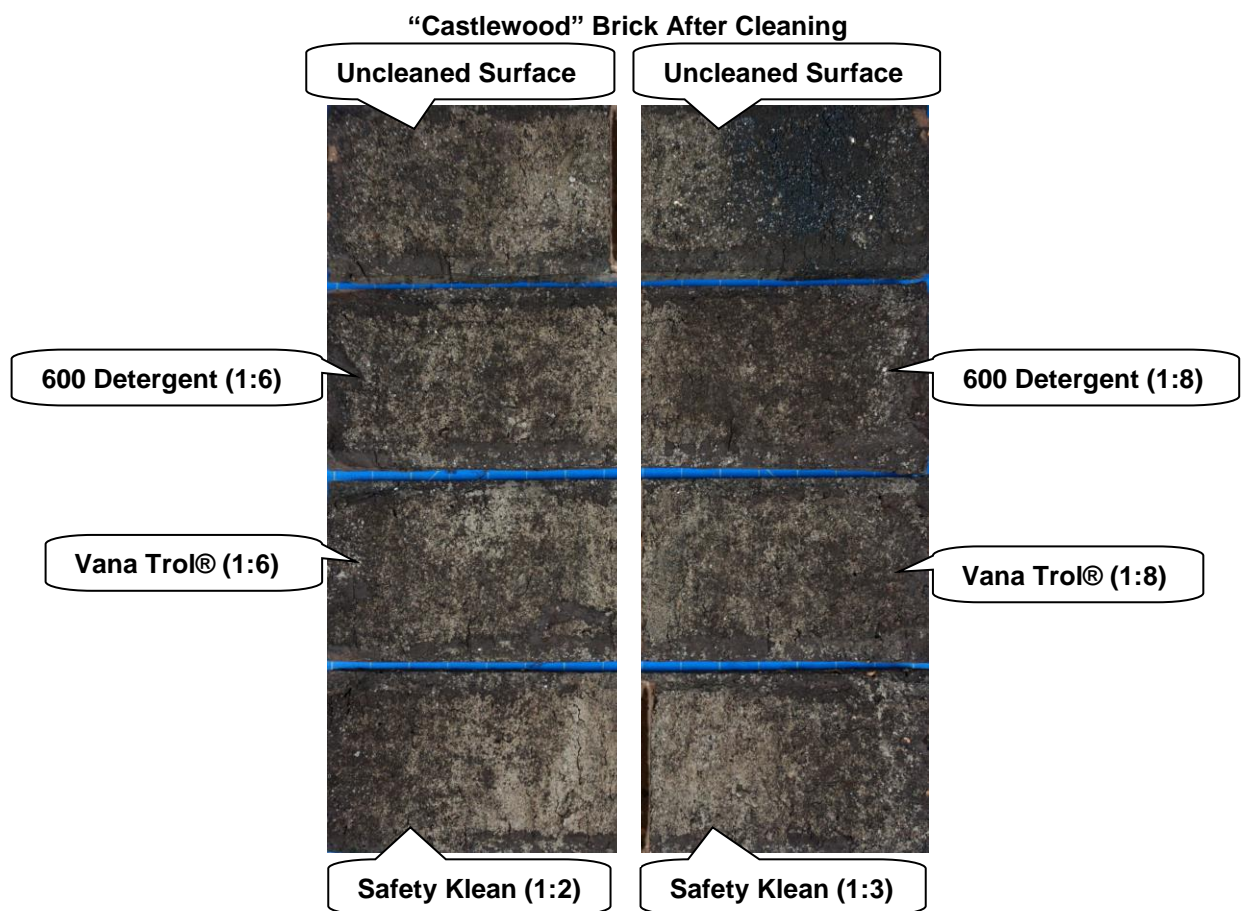
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Walnut Creek"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0



TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

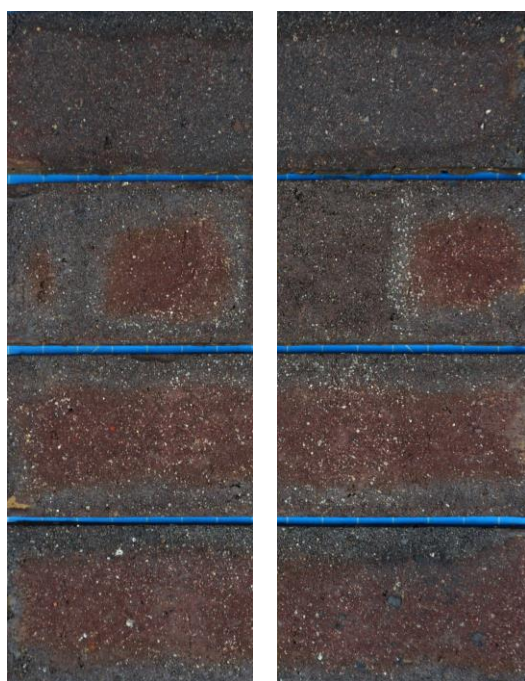
Name: "Castlewood"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safetly Klean	1:3	0	0	0	0



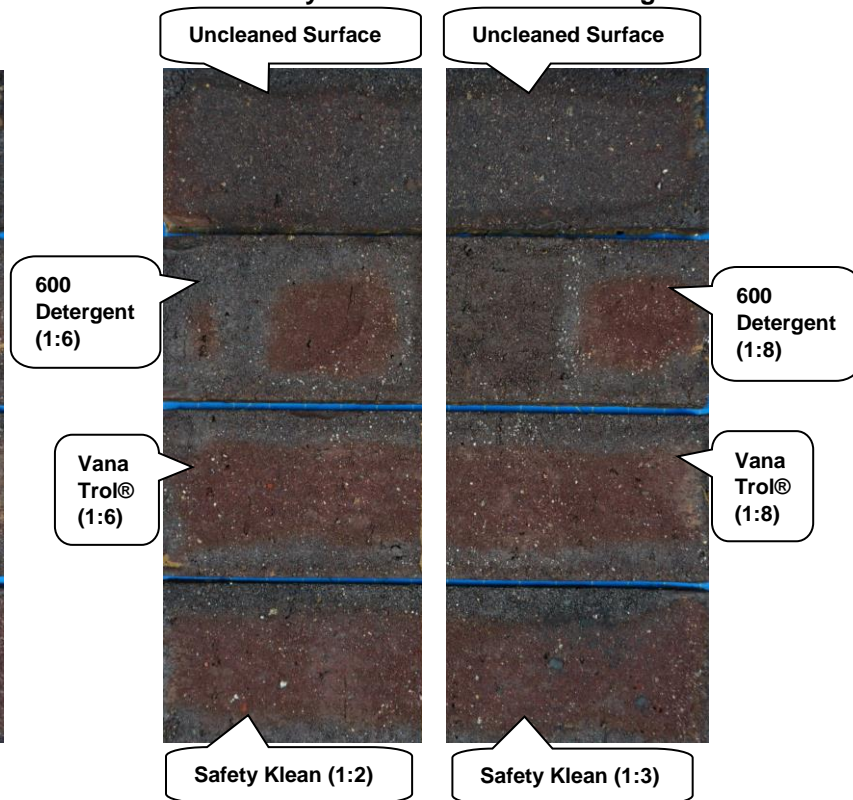
TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Brandywine"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	0	0	0	0
600 Detergent	1:8	0	0	0	0
Vana Trol®	1:6	0	0	0	0
Vana Trol®	1:8	0	0	0	0
Safety Klean	1:2	0	0	0	0
Safety Klean	1:3	0	0	0	0

"Brandywine" Brick Before Cleaning



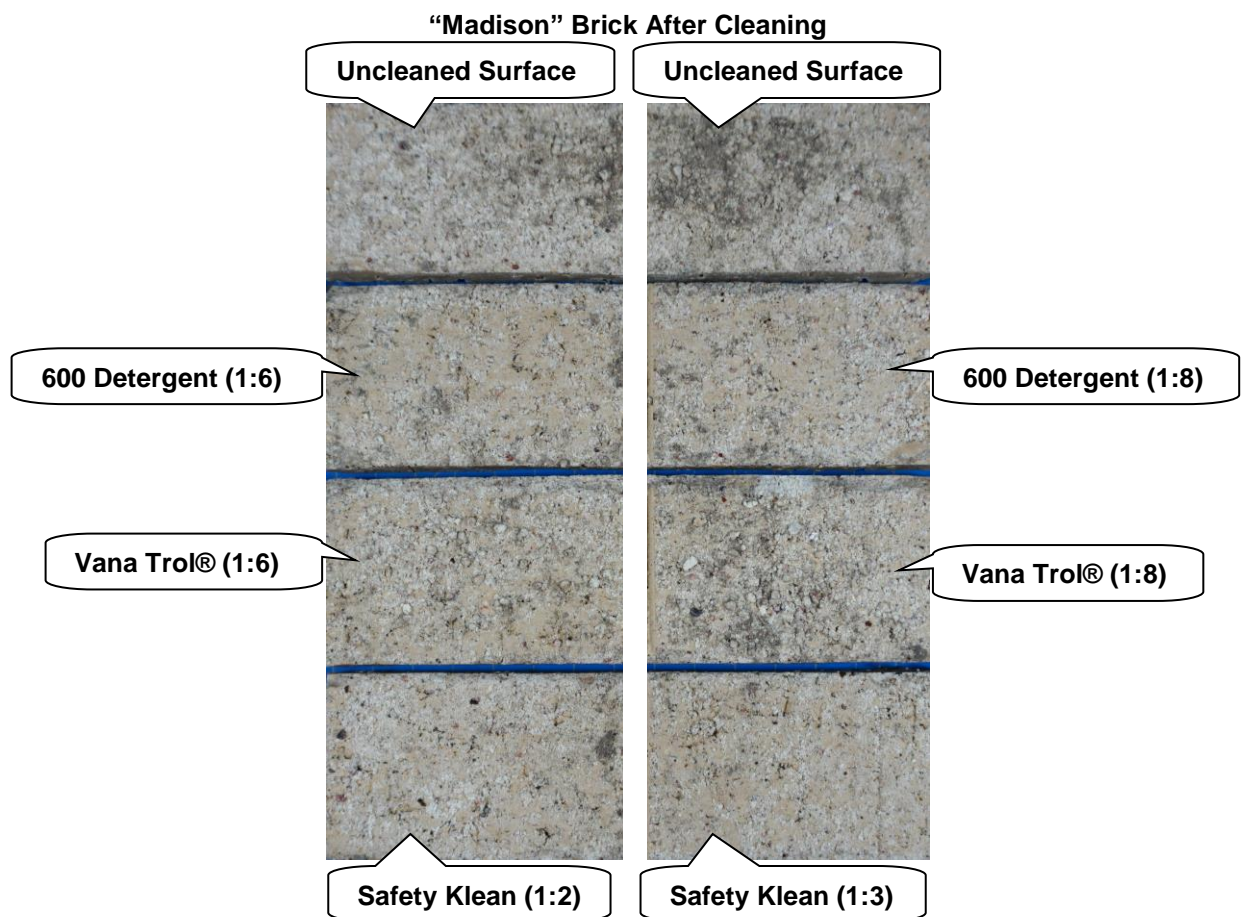
"Brandywine" Brick After Cleaning



NOTE: Due to surface color variation present on the "Brandywine" brick samples, a photograph of the samples before the new construction cleaning test is included for reference.

TEST RESULTS AND PHOTOGRAPHS: New Construction Cleaning (cont.)

Name: "Madison"					
Product	Dilution	Surface Finish Removal	Substrate Deterioration	Color Change	Staining
600 Detergent	1:6	2	2	0	0
600 Detergent	1:8	2	2	0	0
Vana Trol®	1:6	1	1	0	0
Vana Trol®	1:8	1	1	0	0
Safety Klean	1:2	2	2	0	0
Safety Klean	1:3	2	2	0	0



CONCLUSIONS – New Construction Cleaning

In most of the cleaning tests conducted, neither Sure Klean® 600 Detergent nor Sure Klean® Vana Trol® nor Enviro Klean® Safety Klean caused any change to the appearance of the submitted brick samples.

However, both dilutions of Sure Klean® 600 Detergent and Enviro Klean® Safety Klean removed a moderate amount of the white, sandy surface finish from the “Madison” samples.

Both dilutions of Sure Klean® Vana Trol® removed a slight amount of the white, sandy surface finish from the “Madison” samples.

None of the cleaners caused any color change or staining to any of the submitted samples.

RECOMMENDATIONS: New Construction Cleaning

Recommendations for cleaning for each brick submitted by Hebron Brick, Hebron, ND are provided in the chart below. Recommendations are based on the cleaner and dilution that provided the best match to the uncleaned surface.

Sample	New Construction Cleaning
"Champagne"	<p>Sure Klean® 600 Detergent (1:6) or (1:8) OR Sure Klean® Vana Trol® (1:6) or (1:8) OR Use Enviro Klean® Safety Klean (1:2) or (1:3)</p>
"Buckwheat"	
"Scoria"	
"Silverado"	
"Toasted Gray"	
"Onyx"	
"Opus"	
"Garnet"	
"Rosemont"	
"Walnut Creek"	
"Castlewood"	
"Brandywine"	
"Madison"	Sure Klean® Vana Trol® (1:6) or (1:8)

The most appropriate cleaner and dilution should be determined on the specific job-site, and will be dependent primarily on the nature and severity of soiling present at that location.

When choosing the most appropriate product for the desired result, use Sure Klean® 600 Detergent as a general purpose, concentrated acidic cleaner for brick, tile and concrete surfaces. Use Sure Klean® Vana Trol® for new masonry surfaces that are subject to vanadium, manganese, and other metallic stains. Use Enviro Klean® Safety Klean as an effective, safe alternative to acidic cleaning compounds.

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

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



J. Lucas Comadoll
Project Testing Technician

ALL SAMPLES SUPPLIED FOR THE ABOVE EVALUATION WILL BE DISPOSED OF THIRTY (30) DAYS AFTER THE ISSUE DATE OF THIS REPORT. IF SAMPLES ARE TO BE RETAINED FOR ADDITIONAL TESTING OR RETURNED TO THE SENDER, PROVIDE WRITTEN INSTRUCTIONS TO THE LABORATORY WITHIN THIRTY (30) DAYS OF THE ISSUE DATE OF THIS REPORT.

Recommendations made within this report are based on laboratory test applications and observations. Final determination of the suitability of a product and/or procedure should be made only after thorough job testing on actual surfaces.