

# LABORATORY REPORT

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DATE: February 14, 2018

1801-02 CLNN

PROJECT:

FOR: Dean Schmidt, Endicott Clay Products Company

cc: Mike Dickey, PROSOCO, Inc. Clay Witt, PROSOCO, Inc.

**SUBJECT:** Endicott Clay Products

Fairbury, NE

New Construction Cleaning Evaluation

**SAMPLES SUBMITTED:** Thirty-nine types of clay brick

SUBMITTED BY: Dean Schmidt

Sales Manager

**Endicott Clay Products Company** 

P.O. Box 17

Fairbury, NE 68352

#### **PURPOSE OF TEST:**

• To determine if appropriate PROSOCO, Inc. new construction cleaners cause any adverse effects to the submitted clay brick.



#### **SAMPLES SUBMITTED:**

Sample Name	<u>Size</u>
(6) samples of "Orleans Sand"	
(6) samples of "Medium Ironspot 77"	
(6) samples of "Grey Heritage"	
(6) samples of "Dark Ironspot"	
(6) samples of "Coppertone"	
(6) samples of "Copper Sands Heritage"	
(6) samples of "Medium Ironspot 46"	
(6) samples of "Manganese Ironspot"	
(6) samples of "Golden Buff"	
(6) samples of "Desert Ironspot Dark"	
(6) samples of "Autumn Sands"	7 ½" x 2 ¼" x ½"
(6) samples of "Desert Ironspot Light"	1 /2 X Z /4 X /2
(6) samples of "Executive Ironspot"	
(6) samples of "Light Sandstone"	
(6) samples of "Sienna Ironspot"	
(6) samples of "Rose Blend"	
(6) samples of "Ruby Red"	
(6) samples of "Buckskin Sands"	
(6) samples of "Tuscan Grey Heritage"	
(6) samples of "Heritage 46"	
(6) samples of "Red Blend"	
(6) samples of "Red Ironspot"	



### **SAMPLES SUBMITTED: (cont.)**

Sample Name	<u>Size</u>
(6) samples of "Sahara Sands"	
(6) samples of "Grey Blend"	
(6) samples of "Dark Sandstone"	
(6) samples of "Grey Sands"	
(6) samples of "Buff Blend"	
(6) samples of "Burgundy Blend"	
(6) samples of "Copper Canyon"	
(6) samples of "Manganese Brown"	
(6) samples of "Red Heritage"	7 ½" x 2 ¼" x ½"
(6) samples of "Antique 152"	
(6) samples of "Adobe Sands Heritage"	
(6) samples of "Light Grey"	
(6) samples of "Ivory Blend"	
(6) samples of "Burgundy Sands"	
(6) samples of "Bordeaux Blend"	
(6) samples of "Desert Sands"	
(6) samples of "Merlot Sands"	



#### **PRODUCTS EVALUATED:**

New Construction Cleaning	Dilution:
Sure Klean® Vana Trol®	1:4; 1:6
Enviro Klean® Safety Klean	1:2; 1:3
Sure Klean® 600 Detergent	1:6; 1:8
Sure Klean® 101 Lime Solvent	1:6; 1:8
PROSOCO SafEtch®	1:2

#### **TEST METHODS: New Construction Cleaning**

#### **Cleaning Procedure:**

1. Pre-wet the surface and apply diluted cleaning solution according to PROSOCO, Inc. Product Guide instructions.

2. Allow for an appropriate dwell time:

Vana Trol®	5 minutes
Safety Klean	5 minutes
600 Detergent	
101 Lime Solvent	
SafEtch	

- 3. Reapply cleaning solution; do not let cleaner dry into masonry.
- 4. Pressure rinse thoroughly with plenty of fresh water.\*

\*Pressure 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.

The samples were visually inspected several days after cleaning to determine whether any of the cleaners had any adverse effects on the samples.



"Orleans Sand"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Medium Ironsp	oot 77"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Grey Heritage"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	No change in appearance
Safety Klean	1:3	No change in appearance
600 Detergent	1:6	
600 Detergent	1:8	
101 Lime Solvent	1:6	Slight removal of yellow texture from surface; cleaned area appears darker in color
101 Lime Solvent	1:8	Slight removal of yellow texture from surface
SafEtch®	1:2	No change in appearance
	"Dark Iron	spot"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Coppertone"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Copper S	ands"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Medium Ironspot 46"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Manganese Iro	nspot"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Golden Buff"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
"Desert Ironspot Dark"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Autumn Sands"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	No change in appearance
Safety Klean	1:2	
Safety Klean	1:3	Spotty appearance
600 Detergent	1:6	
600 Detergent	1:8	
101 Lime Solvent	1:6	No change in appearance
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Desert Ironspot	Light"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Executive Ironspot"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Light Sandst	one"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Sienna Ironspot"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Rose Ble	end"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Ruby Red"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
"Buckskin Sands"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Tuscan Grey Heritage"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Heritage 4	6"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Red Blend"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Red Ironspot"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Sahara Sands"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Grey Blend"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Dark Sandstone"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Grey Sands"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Dark Sandstone"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Grey Sands"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Buff Blend"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
"Burgundy Blend"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Copper Canyon"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Manganese B	rown"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Red Heritage"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Antique 152"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Adobe Sands Heritage"		
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	
	"Light Gre	y"
Product	Dilution	Appearance
Vana Trol®	1:4	
Vana Trol®	1:6	
Safety Klean	1:2	
Safety Klean	1:3	
600 Detergent	1:6	No change in appearance
600 Detergent	1:8	
101 Lime Solvent	1:6	
101 Lime Solvent	1:8	
SafEtch®	1:2	



"Ivory Blend"			
Product	Dilution	Appearance	
Vana Trol®	1:4		
Vana Trol®	1:6		
Safety Klean	1:2		
Safety Klean	1:3		
600 Detergent	1:6	No change in appearance	
600 Detergent	1:8		
101 Lime Solvent	1:6		
101 Lime Solvent	1:8		
SafEtch®	1:2		
"Burgundy Sands"			
Product	Dilution	Appearance	
Vana Trol®	1:4		
Vana Trol®	1:6		
Safety Klean	1:2		
Safety Klean	1:3		
600 Detergent	1:6	No change in appearance	
600 Detergent	1:8		
101 Lime Solvent	1:6		
101 Lime Solvent	1:8		
SafEtch®	1:2		



"Bordeaux Blend"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			
"Desert Sands"				
Product	Dilution	Appearance		
Vana Trol®	1:4			
Vana Trol®	1:6			
Safety Klean	1:2			
Safety Klean	1:3			
600 Detergent	1:6	No change in appearance		
600 Detergent	1:8			
101 Lime Solvent	1:6			
101 Lime Solvent	1:8			
SafEtch®	1:2			



"Merlot Sands"			
Product	Dilution	Appearance	
Vana Trol®	1:4		
Vana Trol®	1:6		
Safety Klean	1:2		
Safety Klean	1:3		
600 Detergent	1:6	No change in appearance	
600 Detergent	1:8		
101 Lime Solvent	1:6		
101 Lime Solvent	1:8		
SafEtch®	1:2		

#### **CONCLUSIONS – New Construction Cleaning**

In the cleaning tests conducted, there were only two types of brick that exhibited a change in appearance:

- 101 Lime Solvent in both dilutions tested removed some of the yellow surface texture on "Grey Heritage". 101 Lime Solvent diluted with six parts water caused a darker appearance to "Grey Heritage".
- Safety Klean diluted with three parts water caused a spotty appearance to "Autumn Sands".

See photographs on following pages.



#### **PHOTOGRAPHS: New Construction Cleaning**



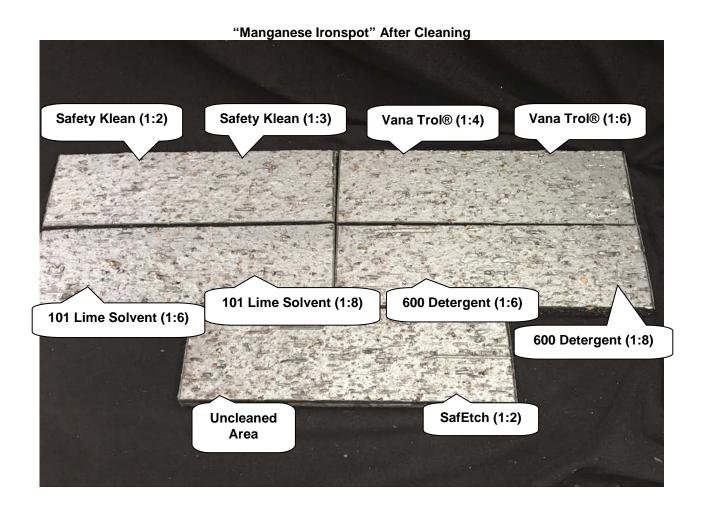


#### PHOTOGRAPHS: New Construction Cleaning (cont.)





#### PHOTOGRAPHS: New Construction Cleaning (cont.)





#### **RECOMMENDATIONS: New Construction Cleaning**

Recommendations for cleaning for each type of clay brick submitted by Endicott Clay Products, Fairbury, NE are provided in the chart below.

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 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 while minimizing any potential surface alterations to the decorative finish, clean within 3 days of construction.

<u>Sample Name</u>	New Construction Cleaning Recommendation
"Orleans Sand"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 101 Lime Solvent (1:8) OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)
"Medium Ironspot 77"	
"Grey Heritage"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)
"Dark Ironspot"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 101 Lime Solvent (1:8)
"Coppertone"	OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)



### **RECOMMENDATIONS: New Construction Cleaning (cont.)**

Sample Name	New Construction Cleaning Recommendation
"Copper Sands Heritage"	
"Medium Ironspot 46"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 101 Lime Solvent (1:8) OR Sure Klean® 600 Detergent (1:8) OR
"Manganese Ironspot"	
"Golden Buff"	**PROSOCO SafEtch® (1:2)
"Desert Ironspot Dark"	
"Autumn Sands"	*Sure Klean® Vana Trol® (1:6) OR Sure Klean® 101 Lime Solvent (1:8) OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)



### **RECOMMENDATIONS: New Construction Cleaning (cont.)**

Sample Name	New Construction Cleaning Recommendation
"Desert Ironspot Light"	
"Executive Ironspot"	
"Light Sandstone"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 101 Lime Solvent (1:8) OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)
"Sienna Ironspot"	
"Rose Blend"	
"Ruby Red"	
"Buckskin Sands"	
"Tuscan Grey Heritage"	
"Heritage 46"	
"Red Blend"	
"Red Ironspot"	
"Sahara Sands"	
"Grey Blend"	
"Dark Sandstone"	
"Grey Sands"	
"Buff Blend"	
"Burgundy Blend"	
"Copper Canyon"	
"Manganese Brown"	
"Red Heritage"	
"Antique 152"	
"Adobe Sands Heritage"	



#### **RECOMMENDATIONS: New Construction Cleaning (cont.)**

Sample Name	New Construction Cleaning Recommendation
"Light Grey"	
"Ivory Blend"	*Sure Klean® Vana Trol® (1:6) OR Enviro Klean® Safety Klean (1:3) OR Sure Klean® 101 Lime Solvent (1:8) OR Sure Klean® 600 Detergent (1:8) OR **PROSOCO SafEtch® (1:2)
"Burgundy Sands"	
"Bordeaux Blend"	
"Desert Sands"	
"Merlot Sands"	,

<sup>\*</sup>Best practices for cleaning buff-colored brick and brick with manganese or other metallic additives is to use Sure Klean® Vana Trol® for these types of brick.

<sup>\*\*</sup>PROSOCO SafEtch® is ideal for removing excess mortar modified with latex or other acrylic additives.



The below application procedures must be followed:

#### **Procedure for Sure Klean<sup>®</sup> Vana Trol:**

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for Vana Trol<sup>®</sup>. Dilute Vana Trol<sup>®</sup> concentrate with 6-10 parts water. Refer to test area results for recommended dilution for intended use.

#### **Exterior Application**

- 1. Thoroughly saturate a large portion of the masonry surface with fresh water.
- 2. Using a densely-packed, soft-fibered masonry-washing brush or low pressure spray (50 psi max), apply diluted solution freely. Do not apply diluted cleaning solution with pressure spray above 50 psi. Such application will drive the chemicals deep into the surface making it difficult to rinse completely.
- 3. Leave cleaning solution on the wall for about 5 minutes, depending on absorption rate of masonry and drying conditions. Do not let cleaner dry into the masonry. This may leave a residue and cause staining.
- 4. Reapply cleaning solution and scrape off heavy buildup of excess mortar using a wooden scraper or piece of brick. Take care to avoid damaging the masonry surface. Do not use metal scrapers, which may contribute to metallic staining.
- 5. Rinse thoroughly with fresh water, removing all cleaning compound, free sand, loose material and debris. Thorough rinsing is extremely important to ensure that all residues are removed from the porous masonry. High-pressure rinsing equipment providing at least 400 psi with 4 to 6 gallons of water per minute will prove most effective. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.

#### Interior Application

Follow the cleaning procedure outlined for exterior surfaces. Rinse thoroughly with fresh water using sponge or soft-fibered brush. If conditions do not allow sufficient water for complete rinsing, use a neutralizing rinse following this procedure:

- 1. Rinse first with fresh, clear water.
- 2. Apply neutralizing solution of 2 ounces baking soda to 1 gallon of clean water.
- Saturate thoroughly and allow neutralizing solution to dwell on the surface 3 to 5 minutes.
- 4. Apply a final rinse of fresh, clear water.

Note: Multiple applications may etch acid-sensitive surfaces.



#### Procedure for Enviro Klean® Safety Klean:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for Safety Klean. Dilute Safety Klean concentrate with up to 3 parts water. Refer to test area results for recommended dilution for intended use.

#### **Exterior Application**

- 1. Working from bottom to top, use clean water to thoroughly prewet surface to be cleaned.
- 2. Apply Safety Klean liberally using low-pressure spray (50 psi max), roller or densely filled (tampico) masonry washing brush. Do not apply with high-pressure spray. Do not atomize.
- 3. Let the cleaning solution dwell 3-5 minutes. Reapply. Light scrubbing of the surface improves cleaning results especially where high pressure rinsing equipment is not available. Do not let cleaning solution "dry into" to the masonry. If solution starts to dry, reapply.
- 4. Rinse with clean water from the bottom to the top, covering each section of the surface with a concentrated stream of water. To avoid streaking on vertical walls, take care to keep the wall below wet and rinsed free of cleaner and residues. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.

#### **Procedure for Sure Klean® 600 Detergent:**

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for Sure Klean® 600. Dilute Sure Klean® 600 concentrate with 6-12 parts water. Refer to Product Data Sheet for additional information.

#### **Exterior Application**

Test thoroughly before general cleaning.

- 1. Thoroughly prewet a large area with fresh water.
- 2. Using a densely-packed, soft-fibered masonry washing brush, or low-pressure spray (50 psi maximum), apply the diluted solution freely.
- 3. Let diluted cleaning solution stay on the wall for 3 to 5 minutes. Do not let cleaner dry into the masonry. This may leave residue or stains.
- 4. Reapply diluted cleaning solution and scrape off heavy buildup of excess mortar using a wooden scraper or piece of brick. Take care not to harm the masonry surface.
- 5. Rinse off all cleaning compounds, free sand, loose material and debris with clean water. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.
- 6. Reapply as needed following steps 1-5.

#### **Interior Application**

Follow exterior application procedures. Use a sponge or soft fibered brush to rinse thoroughly. If conditions don't allow enough water for complete rinsing, use a neutralizing rinse following this procedure:

- 1. First, rinse with clean water.
- 2. Apply neutralizing rinse of 2 ounces baking soda to 1 gallon water.
- 3. Saturate thoroughly and let neutralizing solution stay on the surface 3 to 5 minutes.
- 4. Rinse with clear water.



#### Procedure for Sure Klean® 101 Lime Solvent:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Sheet for 101 Lime Solvent. Not for use on polished natural stone.

Dilute 101 Lime Solvent concentrate 4-8 parts water depending on application. Refer to Product Data Sheet and test area results for recommended dilution for intended use.

#### **Exterior Application**

Test thoroughly before cleaning.

- 1. Prewet a large area with fresh water.
- 2. Using a densely-packed, soft-fibered masonry washing brush, or low-pressure spray (50 psi maximum), apply the diluted solution freely.
- 3. Let diluted cleaning solution stay on the wall for 1 3 minutes. Don't let cleaner dry into the masonry. This may leave residue and stains. Fresh water rinse the surfaces below areas being cleaned to prevent streaking.
- 4. Immediately reapply diluted cleaning solution and scrape off heavy buildup of excess mortar using a wooden scraper or piece of brick. Take care not to harm the masonry surface.
- 5. Rinse thoroughly with fresh water, removing all cleaning compound, free sand, loose material and debris. The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400-1000 psi with a water flow rate of 6-8 gallons per minute delivered through a 15-45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet.
- 6. Reapply as required following steps 1 through 5.

Note: Multiple applications may affect mortar color.

#### Interior Application

Follow preceding preparation and cleaning procedures for exteriors. Rinse thoroughly with fresh water using a sponge or soft-fibered brush. If there isn't enough water for complete rinsing, use this procedure:

- 1. Rinse with clear water.
- 2. Apply neutralizing solution of 2 ounces baking soda to 1 gallon water.
- 3. Saturate. Leave solution on surface 3-5 minutes.
- 4. Apply final rinse of clear water.



#### Procedure for PROSOCO SafEtch®:

Before applying, read "Preparation" and "Safety Information" sections in the Manufacturer's Product Data Sheet for application instructions.

SafEtch® may be diluted with up to three parts clean water, depending on the nature and severity of soiling. Always pour water into empty bucket first, then carefully add concentrate. Refer to test panel results for recommended dilution for intended use.

#### **Exterior Application**

- 1. Use clean water to thoroughly prewet surface to be cleaned. On vertical surfaces, work from the bottom to the top.
- 2. Apply liberally using low-pressure spray (50 psi max), roller or densely filled (tampico) masonry washing brush. Do not apply with high-pressure spray. Do not atomize.
- 3. Let the cleaning solution dwell 3 to 5 minutes. Reapply. Do not let cleaning solution "dry into" the surface. If solution starts to dry, reapply.
- 4. Rinse the treated area thoroughly with clean water using high-pressure spray. On vertical surfaces, work from the bottom to the top, keeping lower surfaces rinsed clean and free of cleaner residue.

SPECIFIER NOTE: Light scrubbing of the surface improves cleaning results especially where high pressure rinsing equipment is not available.

SPECIFIER NOTE: The best combination of rinsing pressure and water volume is provided by masonry washing equipment generating 400 to 1000 psi with a water flow rate of 6 to 8 gallons per minute delivered through a 15 to 45 degree fan spray tip. Equipment should be adjustable to reduce water flow rate and rinsing pressure as required for controlled cleaning of more sensitive surfaces. See also "Equipment" section of the Product Data Sheet. Rinse with clean water, covering each section of the surface with a concentrated stream of water.

#### Interior Application

Proper ventilation is necessary. Follow exterior application procedures. If pressure-rinsing is not possible, use a sponge or soft-fibered brush to rinse thoroughly with clean water.

#### Cleanup

Clean tools and equipment with fresh water.

Thorough on-site testing must be conducted before attempting overall application of any product.

Courtney A. Murdock, CDT Project Testing Director

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ALL SAMPLES SUPPLIED FOR THE ABOVE EVALUATION WILL BE DISPOSED OF <u>NINETY (90) DAYS</u> 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 <u>NINETY</u> (90) 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.