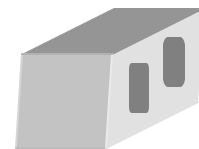




PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 1

TABLE OF CONTENTS

SAMPLES SUBMITTED.....	2
PURPOSE OF TEST	3
PRODUCTS EVALUATED.....	4
SECTION A – CLEANING INTEGRALLY COLORED CMU's	
DESCRIPTION OF PRODUCTS EVALUATED.....	5
TEST METHOD.....	5
TEST RESULTS	6
PHOTOGRAPHS OF CMU CLEANING.....	7
CONCLUSIONS	8
RECOMMENDATIONS	8
SECTION B – COLOR UNIFORMITY	
DESCRIPTION OF PRODUCTS EVALUATED.....	9
TEST METHOD.....	9
TEST RESULTS	10
PHOTOGRAPHS OF CMU COLOR UNIFORMITY TESTING	11
CONCLUSIONS	12
RECOMMENDATIONS	12
SECTION C – COLOR ENHANCEMENT	
DESCRIPTION OF PRODUCTS EVALUATED.....	13
TEST METHODS.....	13
PHOTOGRAPHS OF CMU COLOR ENHANCEMENT	13
TEST RESULTS	14
RECOMMENDATIONS	15

ATTACHMENTS

Product Data literature for all products evaluated



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 2

FOR: Jerry Liner, Metromont Materials
cc: Mike Burdette
Paul Tessier
Stephen Dean

SUBJECT: Metromont Materials
Charlotte, NC

DATE: October 16, 2003

PROJECT: 0308-11 PTP

SAMPLES SUBMITTED: Six types of ground-face CMU's all with Dry Blok

<u>Block</u>	<u>Color</u>	<u>Size</u>
Ground-face CMU	"White"	
Ground-face CMU	"Beige"	
Ground-face CMU	"Light Gray"	
Ground-face CMU	"Dark Gray"	16" x 8" x 4"
Ground-face CMU	"Black"	
Ground-face CMU	"Light Tan"	

Submitted by: Jerry Liner
Metromont Materials
Charlotte, NC



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 3

PURPOSE OF TESTING:

Six integrally colored ground-face concrete blocks were submitted for testing using PROSOCO's new construction cleaning and water repellent products.

A. Cleaning Concrete Masonry Units - Sure Klean[®] Burnished Custom Masonry Cleaner and Enviro Klean[®] 2010 All Purpose Cleaner were evaluated for removal of laboratory applied mortar.

To simulate new construction soiling, all concrete masonry units (CMU's) are placed on a bench with finished surface facing upward. Hollow cylinders measuring 50 mm in diameter and 75 mm tall are positioned on top of each CMU and filled with a wet mixture of Ash Grove[®] Type S mortar. The wet, mortar-filled cylinder is allowed to remain in contact with the CMU for 10 minutes before removal.

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

B. Color Uniformity Testing* - Sure Klean[®] Burnished Custom Masonry Cleaner and Enviro Klean[®] 2010 All Purpose Cleaner were evaluated at various dilutions to determine the optimal concentration of cleaner that leaves the external surface looking most like the natural through-body color of the CMU. Color uniformity was evaluated by comparing aggregate exposure and surface pigment alternation/removal of each cleaned surface compared to the natural through-body color of the CMU.

Aggregate Exposure is the visual examination comparing aggregate exposure of the interior, through-body section of CMU to surfaces cleaned with selected product(s) at given dilutions.

Surface Pigment Alteration/Removal* is the visual examination comparing the pigmentation of the interior, through-body section of the CMU to surfaces cleaned with selected product(s) at given dilutions.

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

0 – Worst match to through-body	3 – Good match to through-body
1 – Poor match to through-body	4 – Best match to through-body
2 – Fair match to through-body	

*** NOTE: When cleaning integrally colored CMU.**

Integrally colored concrete masonry units (CMU's) frequently have high amounts of pigments concentrated on the surface of the cured concrete unit. Variation of surface pigment concentrations from one CMU to the next creates a blotchy appearance in the completed wall. Allowed to remain on the surface of the CMU, the weakly bound pigment will weather and streak, further detracting from the appearance of the completed CMU wall.

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

C. Color Enhancement - Sure Klean[®] Burnished Block Sealer was evaluated for its ability to provide color enhancement to the submitted samples.



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 4

PRODUCTS EVALUATED FOR CLEANING AND COLOR UNIFORMITY

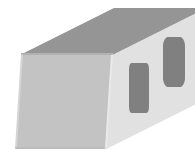
Block Type	Product	Dilution
All Submitted CMU's	Sure Klean [®] Burnished Custom Masonry Cleaner	1:2, 1:3
	Enviro Klean [®] 2010 All Purpose Cleaner	Concentrate

COLOR ENHANCEMENT PRODUCTS EVALUATED

Block Type	Product	Dilution
All Submitted CMU's	Sure Klean [®] Burnished Block Sealer	Concentrate



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 5

SECTION A – CLEANING INTEGRALLY COLORED CMU's

DESCRIPTION OF PRODUCTS EVALUATED

These cleaning trials were conducted to determine the optimal cleaning/cure time combination.

Sure Klean® Burnished Custom Masonry Cleaner - A general-purpose, non-etching acidic cleaner that removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Burnished Custom Masonry Cleaner adds depth to colors, brightens white matrices and exposed aggregate. Liquid concentrate for dilution with 2-3 parts water. Apply by brush or low-pressure spray.

Enviro Klean® 2010 All Purpose Cleaner – A “next generation” product for cleaning and degreasing light-to-heavily soiled stone, tile, masonry and much more. Powerful enough for industrial use, flexible enough for jobs around the home, space-saving EK 2010 replaces a host of individual cleaning agents. It's dilutable for home-use on windows, bathroom tub and tile, countertops and more. It's concentrated for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces. EK 2010 also removes Sure Klean® Weather Seal Siloxane PD overspray from windows. Easy-to-use EK All Surface Cleaner is water-rinsable and contains no harsh acids, caustics or solvents.

TEST METHOD – Cleaning

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

1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
3. Allow appropriate dwell time for each cleaner:
 Burnished Custom Masonry Cleaner 3-5 minutes
 2010 All Purpose Cleaner 1-10 minutes
4. Reapply the products and moderately agitate with a brush.
5. Pressure rinse thoroughly.*
6. Allow the surface to dry for at least 18 hours and visually examine.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 6

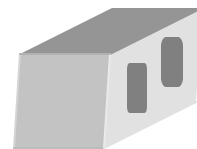
TEST RESULTS - Cleaning

% removal

"White" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	97%	95%
Burnished Custom Masonry Cleaner	1:3	97%	90%
2010 All Purpose Cleaner	Concentrate	97%	90%
"Beige" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%
2010 All Purpose Cleaner	Concentrate	100%	100%
"Light Gray" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%
2010 All Purpose Cleaner	Concentrate	100%	100%
"Dark Gray" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	95%	100%
Burnished Custom Masonry Cleaner	1:3	95%	100%
2010 All Purpose Cleaner	Concentrate	95%	100%
"Black" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	97%	95%
Burnished Custom Masonry Cleaner	1:3	97%	95%
2010 All Purpose Cleaner	Concentrate	100%	100%
"Light Tan" Ground-face CMU			
Product	Dilution	7 day	14 day
Burnished Custom Masonry Cleaner	1:2	100%	100%
Burnished Custom Masonry Cleaner	1:3	100%	100%
2010 All Purpose Cleaner	Concentrate	100%	100%



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 7

PHOTOGRAPHS - Cleaning

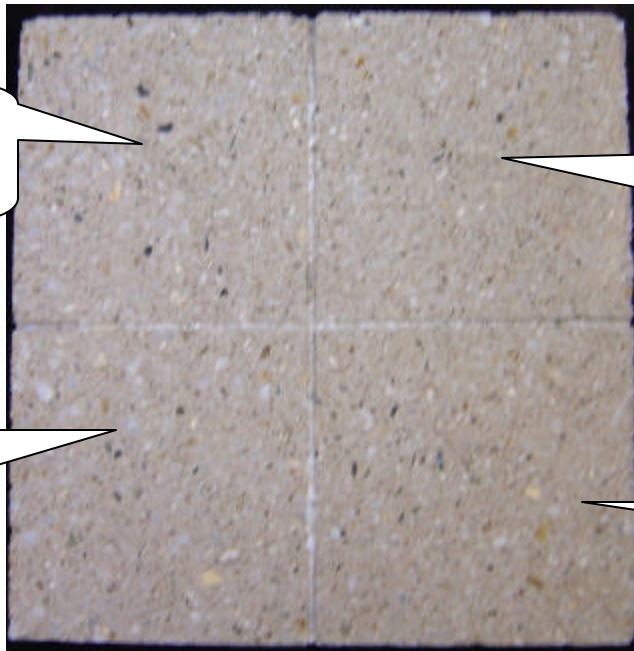
"Light Tan" 7 Day Cleaning

**Sure Klean[®] Burnished
Custom Masonry
Cleaner (1:2)**

**Sure Klean[®]
Burnished Custom
Masonry Cleaner
(1:3)**

**Enviro Klean[®] 2010
All Purpose
Cleaner**

Untreated Control



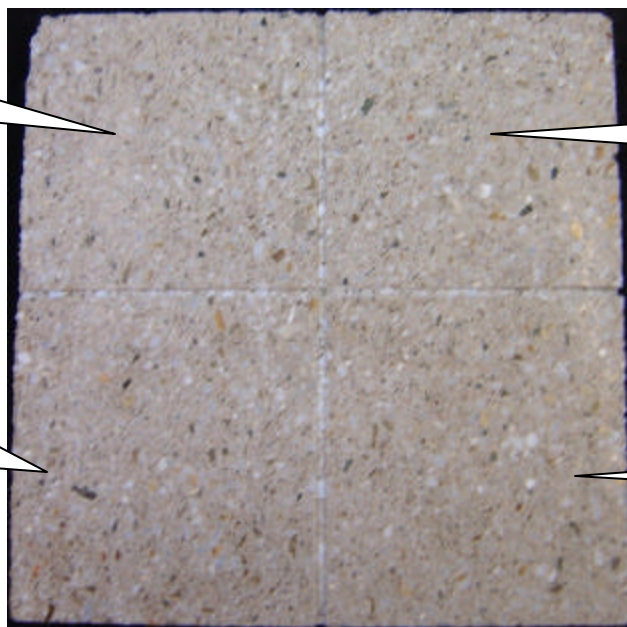
"Light Tan" 14 Day Cleaning

**Burnished Custom
Masonry Cleaner (1:2)**

**Burnished Custom
Masonry Cleaner (1:3)**

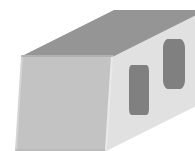
**Enviro Klean[®]
2010 All Purpose
Cleaner**

Untreated Control





PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 8

CONCLUSIONS – Cleaning

Based on the test data, all of the submitted block samples were efficiently cleaned with a dilution of the selected PROSOCO Inc. cleaning product.

Both dilutions of Sure Klean® Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner, removing slight to heavy concentrations of pigmented matrix from the ground-face blocks, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit. Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure. Enviro Klean® 2010 All Purpose Cleaner did not alter the appearance of the substrate in any way.

RECOMMENDED PRODUCTS AND DILUTIONS – CLEANING

Recommendations for cleaning for each type of CMU submitted by Metromont Materials, Charlotte, NC are provided in the chart below. Recommendations are based on the optimum dilution for complete removal of mortar.

Block	New Construction Cleaning (Type S mortar, 14 day)
“White” CMU	Sure Klean® Burnished Custom Masonry Cleaner (1:2)
“Black” CMU	Enviro Klean® 2010 All Purpose Cleaner
All other submitted CMU's	Sure Klean® Burnished Custom Masonry Cleaner (1:2), (1:3) OR Enviro Klean® 2010 All Purpose Cleaner

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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered through a 15-40 degree fan spray often produces best cleaning 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 cleaning product and procedures for a particular project. See product literature for additional application and product information.



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 9

SECTION B – COLOR UNIFORMITY:

DESCRIPTION OF PRODUCTS EVALUATED – Color Uniformity:

Sure Klean® Burnished Custom Masonry Cleaner - A general-purpose, non-etching acidic cleaner that removes rust, mud, oil, atmospheric dirt, mortar smears and other stains without altering the surface texture. Burnished Custom Masonry Cleaner adds depth to colors, brightens white matrices and exposed aggregate. Liquid concentrate for dilution with 2-3 parts water. Apply by brush or low-pressure spray.

Enviro Klean® 2010 All Purpose Cleaner – A “next generation” product for cleaning and degreasing light-to-heavily soiled stone, tile, masonry and much more. Powerful enough for industrial use, flexible enough for jobs around the home, space-saving EK 2010 replaces a host of individual cleaning agents. It's dilutable for home-use on windows, bathroom tub and tile, countertops and more. It's concentrated for the toughest industrial cleaning jobs on concrete, metal and many other plant and warehouse surfaces. EK 2010 also removes Sure Klean® Weather Seal Siloxane PD overspray from windows. Easy-to-use EK All Surface Cleaner is water-rinsable and contains no harsh acids, caustics or solvents.

TEST METHOD – Color Uniformity Testing:

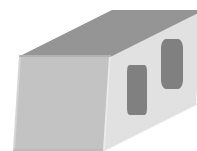
Dilution ratios refer to mixtures of parts concentrated cleaner: parts fresh water. Chemical cleaners were evaluated using the following procedure:

1. Prewet the surface with water.
2. Apply each cleaner at the appropriate dilutions.
3. Allow appropriate dwell time, as specified.
Burnished Custom Masonry Cleaner 3-5 minutes
2010 All Purpose Cleaner 1-10 minutes
4. Reapply the products and moderately agitate with a brush.
5. Pressure rinse thoroughly.*
6. Allow the sample to dry for at least 18 hours and visually examine.
7. Break the sample in half and compare the through-body surfaces to the cleaned surfaces for the best match.

* Pressure rinsing was conducted at approximately 1300 psi with a warm water flow rate of 1.9 gallons per minute.



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 10

TEST RESULTS – Color Uniformity

Substrate: Ground-face CMU		Pigment Color: "White"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
2010 All Purpose Cleaner	Concentrate	4	4
Substrate: Ground-face CMU		Pigment Color: "Beige"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
2010 All Purpose Cleaner	Concentrate	4	4
Substrate: Ground-face CMU		Pigment Color: "Light Gray"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
2010 All Purpose Cleaner	Concentrate	4	4
Substrate: Ground-face CMU		Pigment Color: "Dark Gray"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
2010 All Purpose Cleaner	Concentrate	4	4
Substrate: Ground-face CMU		Pigment Color: "Black"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	2
Burnished Custom Masonry Cleaner	1:3	4	3
2010 All Purpose Cleaner	Concentrate	4	4
Substrate: Ground-face CMU		Pigment Color: "Light Tan"	
Product	Dilution	Aggregate Exposure	Surface Pigment Alteration/Removal
Burnished Custom Masonry Cleaner	1:2	4	4
Burnished Custom Masonry Cleaner	1:3	4	4
2010 All Purpose Cleaner	Concentrate	4	4

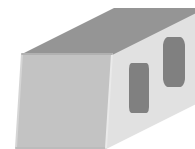
Scale used for reporting results of both categories

0 – **Worst** match to through-body
1 – **Poor** match to through-body
2 – **Fair** match to through-body

3 – **Good** match to through-body
4 – **Best** match to through-body



PALLET TAG PROGRAM LABORATORY REPORT

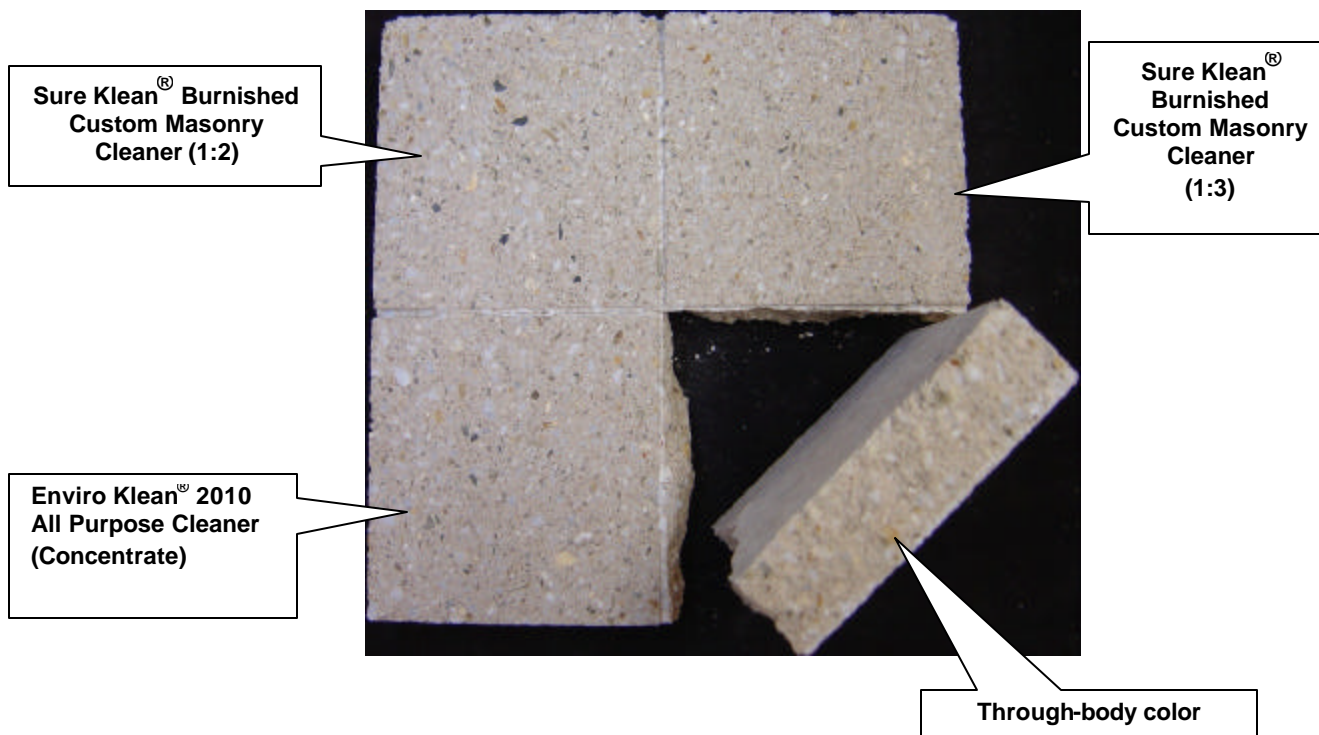


PROSOCO, Inc.

Page 11

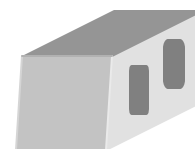
PHOTOGRAPHS – Color Uniformity

“Light Tan” CMU after 14 day cleaning





PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 12

CONCLUSIONS: COLOR UNIFORMITY:

Both dilutions of Sure Klean® Burnished Custom Masonry Cleaner tested affected the substrate in a similar manner, removing slight to heavy concentrations of pigmented matrix from the ground-face blocks, exposing small and large aggregate, and enhancing the natural appearance of the integrally colored concrete masonry unit. Use higher concentrations and surface agitation to maximize aggregate exposure. Use low concentration and surface agitation to minimize aggregate exposure.

Enviro Klean® 2010 All Purpose Cleaner did not alter the appearance of the substrate in any way.

RECOMMENDATIONS - COLOR UNIFORMITY

Recommendations for color uniformity for each type of CMU submitted by Metromont Materials, Charlotte, NC are provided in the chart below. Recommendations are based on the optimum dilution that provides the best color uniformity.

Block	Color Uniformity
"Black" CMU	Enviro Klean® 2010 All Purpose Cleaner
All other submitted CMU's	Sure Klean® Burnished Custom Masonry Cleaner (1:2) OR (1:3) OR Enviro Klean® 2010 All Purpose Cleaner

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. Pressure rinsing equipment providing at least 400 psi at 4-6 gpm delivered through a 15-40 degree fan spray often produces best cleaning 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 cleaning product and procedures for a particular project. See product literature for additional application and product information.



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 13

SECTION C – COLOR ENHANCEMENT:

DESCRIPTION OF PRODUCTS EVALUATED – Color Enhancement:

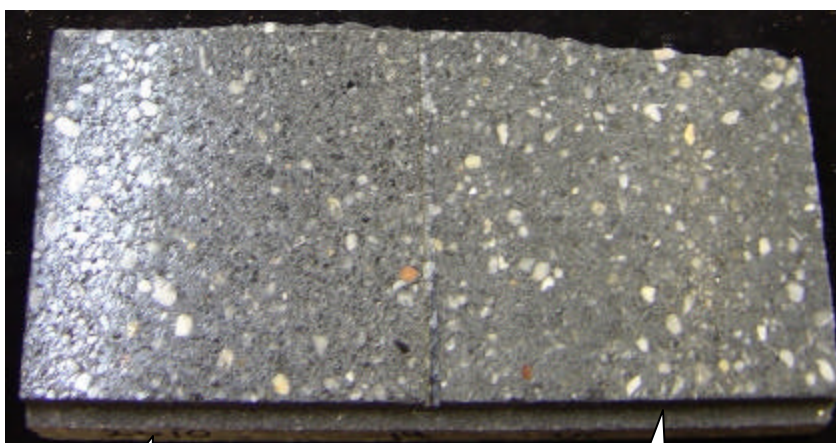
Sure Klean® Burnished Block Sealer- A water-based acrylic emulsion for protecting and enhancing the finish of burnished concrete block. Applied with brush, roller, or low-pressure sprayer, this milky-white liquid dries quickly to a tightly adhered glossy finish. Burnished Block Sealer provides resistance to scrapes and scuffs of transport and facilitates the removal of mortar smears and other construction soiling. Following construction cleaning, a treatment of Burnished Block Sealer enhances the appearance of burnished block and makes maintenance cleaning easier.

TEST METHOD – COLOR ENHANCEMENT

Sure Klean® Burnished Block Sealer was applied in accordance with the product recommendation in the product data sheet..

PHOTOGRAPH COLOR ENHANCEMENT

“Black” Ground-face CMU

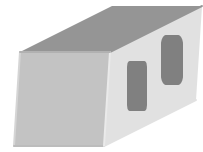


**Sure Klean® Burnished
Block Sealer**

Untreated Control



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 14

TEST RESULTS- COLOR ENHANCEMENT

CMU Name	Color Enhancement	Sheen
"White"	1	2
"Beige"	1	2
"Light Gray"	1	2
"Dark Gray"	1	2
"Black"	1	2
"Light Tan"	1	2

Color Enhancement Scale: 0- No enhancement; dull

1- Slight Enhancement

2- Moderate Enhancement

3- Significant Enhancement

Sheen Scale: 0- No sheen; dull

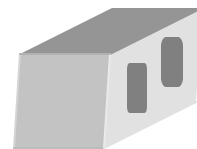
1- Slight Sheen

2- Moderate Sheen

3- Significant Sheen



PALLET TAG PROGRAM LABORATORY REPORT



PROSOCO, Inc.

Page 15

RECOMMENDATIONS – Color Enhancement

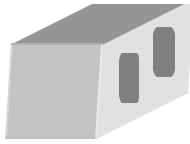
Recommendations for color enhancement for each type of CMU submitted by Metromont Materials, Charlotte, NC, are provided in the chart below. Recommendations are based on the treatment that proved most effective in providing color enhancement and adding sheen to the CMU.

Substrate	Color Enhancer
All submitted CMU's	Sure Klean [®] Burnished Block Sealer

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 product and procedures for a particular project. See product literature for additional application and product information.

Nathan R. Colaner
Technical Analyst

NRC/



Laboratory Report

Pallet Tag Program Evaluation

**Metromont Materials
Charlotte, NC**

Project No. 0308-11 PTP

Prepared For:

**Jerry Liner
Metromont Materials
1801 Cottonwood Street
Charlotte, NC**

Prepared By:



***PROSOCO, Inc.
October 2003***