Laboratory Compatibility Evaluation
Report
York Building Products
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Lab Report: Product Compatibility Evaluation

Products Tested:

This report will provide test results concerning the use of NMD80 and SOS-50 for new construction cleaning of the four York Building Products provided for testing.

Substrates to be Evaluated:

- York Smooth Face Chamois #13
- York Split Face #85
- York Gemstone Mink
- York Gemstone Plus Slate

Materials Used During the Testing Process:

- NMD 80
- SOS-50
- Garden hose
- 250 ml beaker
- 500 ml graduated cylinder
- Spray bottle
- Microscope
Product Description:

NMD 80®:
NMD 80 is a buffered detergent based solution designed for the cleaning of new masonry surfaces. NMD 80 will remove mortar smears, efflorescence, general jobsite debris, and help prevent the formation of vanadium and manganese stains. NMD 80 can also be used for stain and/or deposit removal on both vertical and horizontal surfaces. When EaCo Chem’s cleaning process is used product will not burn mortar joints or masonry. Standard dilution is 4 parts water to 1 part solution. NMD 80 is normally applied and diluted using a EC-Jet.

SOS 50:
SOS 50 is a buffered detergent based solution designed for the cleaning of new masonry surfaces especially when a “sensitive” surface is one of the substrates. This product is based on a non-hydrochloric acid formula. SOS 50 will remove mortar smears and general jobsite debris. SOS 50 can be used on sensitive surfaces for stain and/or deposit removal. When EaCo Chem’s cleaning process is used product will not burn mortar joints or masonry. Standard dilution is 4 parts water to 1 part solution. SOS 50 is normally applied and diluted using a EC-Jet.

Procedure:
Before photos were taken of the pieces prior to chemical application. Four pieces were tested with NMD80 and SOS-50 diluted at 4 parts water and 1 part product. Each test was to gage the effect if any between product, application, and substrate.

Test #1
- Pre-wet area with clean water.
- Apply the NMD 80 4 parts water to 1 part product using spray bottle.
- Wait 5 minutes.
- Re-apply to test area #1 NMD80 4 parts water to 1 part chemical and allow for another 5 minute dwell time.
- Rinse using garden hose with pressure about 50 PSI.
- Allow Item to dry completely.

Test #2
- Pre-wet area with clean water.
- Apply SOS-50 4 parts water to 1 part product using spray bottle.
- Wait 5 minutes.
- Re-apply to test area #1 SOS-50 4 parts water to 1 part chemical and allow for another 5 minute dwell time.
- Rinse using garden hose pressure about 50 PSI.
- Allow item to dry completely.
York Smooth Face Chamois #13:

Before:

![Before Image]

This is a picture of the York Smooth Face Chamois #13.

After:

![After Image]

This pictures shows the York Smooth Face Chamois #13 tested with diluted NMD80 on the left and diluted SOS-50 on the right. Both products were applied twice with 5 minute dwell times back to back without rinsing. Both NMD80 and SOS-50 areas show haze removal and an enriched color when compared to the untreated area.
York Split Face #85:

Before:

This is a picture of the York Split Face #85.

After:

This pictures shows the York Split Face #85 treated with NMD80 $ parts water 1 part product on the left and SOS-50 4 parts water 1 part product on the right. Both products were applied twice for 5 minute applications back to back without rinsing. Both areas where the diluted products were applied show a slightly deeper color than the untreated area. Both NMD80 and SOS-50 areas show haze removal and an enriched color when compared to the untreated area.
York Gemstone Mink:

Before:

This is a picture of the York Gemstone Mink.

After:

This pictures shows the York Gemstone Mink treated with NMD80 4 parts water and 1 part product on the left and SOS-50 4 parts water 1 part product on the right. Both products were applied twice for 5 minute applications back to back without rinsing. Both NMD80 and SOS-50 areas show haze removal and an enriched color when compared to the untreated area.
York Gemstone Plus Slate:

Before:

This is a picture of the York Gemstone Plus Slate.

After:

This pictures shows the York Gemstone Plus Slate tested with NMD80 4 parts water 1 part product on the left and SOS-50 4 parts water 1 part product on the right. Both products were applied twice for 5 minute applications back to back without rinsing. Both NMD80 and SOS-50 areas show haze removal and slightly enriched color when compared to the untreated area.
Conclusions:

Product Compatibility Results:

The following results were documented during the testing process. Each of the four products provided by York Building products which include York Smooth Face Chamois, York Split Face #85, York Gemstone Mink, and York Gemstone Plus Slate were tested in the same manner to examine the results of our Proprietary Masonry Detergents, NMD 80 and SOS 50, on the surface using our uniform dilution standard.

The testing results show that both NMD 80 and SOS 50 when used at proper dilution ratios are safe and effective for use in new construction mortar smear removal as well as for use in stain removal under standardized definitions and applications.

The Process which incorporates the use of an EC-Jet will insure proper dilution and application pressure. This Process allows for predictable results on York Building Products materials while providing reduced labor and ergonomically friendly process which in turn provides an overall better profit ratio to the masonry cleaning professional.