

SECTION 04 01 20  
SURFACE CLEANER

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: Application of a gentle surface cleaner to remove dust, grease, oil, soot, and atmospheric pollution on natural stone, concrete, brick, terra cotta, stucco, and masonry mineral surfaces. Not suitable for the removal of crusty carbon layers.
- B. Related Sections: Related sections include the following:  
*PLACE RELATED SECTIONS BELOW. EXAMPLES INCLUDE:*
  - 1. Section 03 01 30.51 –Cleaning of Cast-In-Place Concrete
  - 2. Section 03 01 40.51 –Cleaning of Precast Concrete
  - 3. Section 04 01 20.52 – Unit Masonry Cleaning
  - 4. Section 04 01 40.52 – Stone Cleaning

1.2 DEFINITIONS

- A. Gentle Cleaner: A detergent in concentrate form.

1.3 SYSTEM DESCRIPTION

- A. An environmentally-safe, neutral pH, biodegradable cleaning concentrate.
  - 1. Gentle Cleaner for mild and gentle cleansing by brush or for injection through hot water pressure spray equipment:

1.4 SUBMITTALS

- A. Product Data: Submit product data showing material proposed. Submit sufficient information to determine compliance with the Drawings and Specifications. Provide published documentation describing materials, characteristics, and limitations.
- B. Samples: Submit samples for verification purposes, fabrication techniques and workmanship.
- C. Manufacturer's Instructions: Submit manufacturer's instructions including technical data sheets, material safety data sheets, mixing instructions, application requirements, special procedures, and conditions requiring special attention.
- D. LEED Submittals: Submittals that are required to comply with requirements for LEED certification include the following:
  - 1. Low-Emitting Materials: Submit certification by the manufacturer confirming that products (i.e., adhesives, sealants, paints, coatings, etc.) meet or exceed the volatile organic compound (VOC) limits set by specific agencies or other requirements. Clearly state VOC limits in the submittal.

1.5 QUALITY ASSURANCE

- A. Qualifications:
  - 1. Manufacturer Qualifications: Provide evidence that Manufacturer is a firm engaged in the manufacture of paint removers of types required, and whose products have been in satisfactory use in similar service for a minimum of ten years.

2. Applicator Qualifications: *(BELOW, KEEP ONE AND DELETE THE OTHER)*
- a. Provide evidence Applicator is a firm having a minimum of three years of successful application experience with projects similar in type and scope to that required for this Project, and having passed a product certification training course provided by the manufacturer prior to the execution of this unit of work.
  - b. Provide evidence Applicator is a firm having successful application of products within this specification with at least one project in the last 18 months similar in type and scope to that required for this Project, and having passed a product certification training course provided by the manufacturer prior to the execution of this unit of work.

B. Mock-ups:

1. Prior to application of the work, fabricate and erect mock ups for each type of finish and application to verify selections made under sample submittals and to demonstrate aesthetic effects as well as qualities of materials and execution.
2. Build mock ups to comply with the following requirements using materials indicated for final unit of work.
3. Locate mock ups as directed by the Architect.
4. Demonstrate the proposed range of aesthetic effects and workmanship to be expected in the completed work.
5. Obtain the Architect's acceptance of mock ups before start of final unit of work.
6. Retain and maintain mock ups during construction in undisturbed condition as a standard for judging completed unit of work.
7. Maintain a record of approved mock up's product mixing and application steps to incorporate into final unit of work to ensure consistency and aesthetics.

C. Tracking Job Progress with Daily Logs

1. Maintain a daily record of the weather conditions, of material ordered and delivered, material used, inspections, areas of work that began, areas of work that were completed, and questions raised and answers received.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the Project site in supplier's or manufacturer's original wrappings and containers, labeled with manufacturer's name, material and product brand name, and lot number, if any.
- B. Store materials in their original undamaged packages and containers inside a well ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

## 1.7 PROJECT CONDITIONS

- A. Environmental Requirements:
  1. None.

## 1.8 WARRANTY

- A. Warranty Period: Product warranty is one year from date of purchase.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis of Design:

1. Items specified are to establish a standard of quality for design, function, materials, compatibility, performance, warranty, and appearance.
  2. Equivalent products by listed manufacturers are acceptable.
  3. The Architect is the sole judge of the basis of what is equivalent.
- B. KEIM Mineral Coatings of America, Inc., 10615 Texland Blvd. #600, Charlotte, North Carolina 28273. Telephone 704-588-4811. Email keim-info@keim.com.

## 2.2 MATERIALS

### A. Gentle Cleaner:

1. Concentrate is diluted with clean water.
2. Density of 1.0 grams per cubic centimeter.
3. Neutral 7.1 pH.
4. Less than 0.1 grams per liter VOC (Volatile Organic Content).
5. Basis of Design: "KEIM Stone Cleaner-N", KEIM Mineral Coatings of America, Inc.

## 2.3 EQUIPMENT

### A. Tools:

1. Gentle Cleaner: Apply by soft nylon or natural bristle brush, or injected through steam cleaner or pressure washer.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verification of Conditions: Confirm by examination the areas and conditions under which the work is to be applied for compliance with manufacturer's instructions. Do not proceed with the work until unsatisfactory conditions have been corrected.
1. Beginning of the work shall indicate acceptance of the areas and conditions as satisfactory by the Applicator.

### 3.2 APPLICATION

- A. Conform to reviewed product data, manufacturer's written instructions, and provisions of the Contract Documents.
- B. Remove soiling and pollutants with Gentle Cleaner: Brush Cleaning Method
1. Mechanically remove thick soil deposits.
  2. Dilute 1:10 with clean water (1 part gentle cleaner to 10 parts clean water.)
  3. Clean contaminated surfaces with diluted gentle cleaner. Allow to rest minimum 1 hour.
  4. Reapply diluted gentle cleaner to contaminated surfaces. Rinse cleaned surfaces before they dry from bottom of façade to top and then back down with clean water to prevent loosened soil from re-depositing onto the cleaned surface.
- C. Remove soiling and pollutants with Gentle Cleaner: Steam Cleaner or Pressure Washer Method
1. Dilute 1:10 with clean water (1 part gentle cleaner to 10 parts clean water.)
  2. Add diluted gentle cleaner to additive reservoir of cleaning equipment. Adjust product delivery for best effect.

3. Clean contaminated surfaces from bottom to top. Rinse cleaned surfaces before they dry from bottom of façade to top and then back down with clean water to prevent loosened soil from re-depositing onto the cleaned surface.

### 3.3 CLEANING

- A. Clean tools, spills, and accidental drips with plenty of water.
- B. Leave applications clean and premises free from residue and debris from work of this Section.

END OF SECTION