

#### **SECTION 09 97 23**

## CONCRETE AND MASONRY COLOR TREATMENT

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This section is based on the products of Nawkaw Corporation, which is located at:

380 Commerce Blvd

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### **PART 1 GENERAL**

# 1.1 SECTION INCLUDES

A. Water Based Stain

## 1.2 RELATED SECTIONS

- A. Section 03 30 00 Cast-in-Place Concrete.
- B. Section 03 11 16.13 Concrete Form Liners.
- C. Section 03 35 23 Exposed Aggregate Concrete Finishing.
- D. Section 03 41 16 Precast Concrete Slabs.
- E. Section 03 45 13 Faced Architectural Precast Concrete.
- F. Section 03 47 13 Tilt-Up Concrete.
- G. Section 03 49 00 Glass-Fiber-Reinforced Concrete.
- H. Section 03 50 00 Cast Decks and Underlayment.
- I. Section 04 20 00 Unit Masonry.
- J. Section 04 40 00 Stone Assemblies.
- K. Section 09 22 00 Stucco.
- L. Section 09 24 13 Adobe Finish.

#### 1.3 REFERENCES

- A. ASTM C 744 Standard Specification for Prefaced Concrete and Calcium Silicate Masonry Units.
- B. SCAQMDR 1168 South Coast Air Quality Management District's (SCAQMD)
  Volatile Organic Compounds (VOC) Rule 1168.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Product characteristics.
  - 2. Preparation instructions and recommendations.
  - 3. Storage and handling requirements and recommendations.
  - 4. Installation methods.
- C. Preliminary Samples: To be provided as required for the specific project.
- D. Verification Samples: To be provided on the specific materials to be treated when they are available in plant or on site.
- E. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

## 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: An international manufacturer with a minimum of 20 years of experience in the production of the stains and coatings of type specified.
- B. Installer Qualifications: Installer licensed by Nawkaw to apply the stain products specified and with a minimum of three years documented experience in applying stains and coatings similar in type and scale to this Project.
- C. Environmental Regulations: The masonry stain material to be applied is in compliance with federal, provincial and local environmental Volatile Organic Compounds (VOC) regulations.
- D. Mock-Up: Apply a minimum one square foot sample of each type of color application required.

- 1. Finish areas designated by Architect.
- Prepare each sample in an area where it will be exposed to the same conditions as will be present on the building during curing.
- 3. Samples should be viewed from a minimum distance of 20 feet.
- 4. Do not proceed with remaining work until color and finish is approved by Architect.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and handle products in accordance with requirements of manufacturer.
- C. Store materials inside if possible, away from open flame. Store in a secure area to avoid tampering and contamination. Water-based materials must be kept from freezing.

## 1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### 1.8 WARRANTY

- A. At project closeout, provide to Owner or Owner's Representative an executed copy of the manufacturer's standard limited warranty against manufacturing and workmanship defects, outlining its terms, conditions, and exclusions from coverage.
  - 1. Duration: 25 years.

#### **PART 2 PRODUCTS**

## 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Nawkaw Corporation, which is located at: 380 Commerce Blvd; Athens, GA 30606; Toll Free Tel: 866-462-9529; Tel: 706-355-3217; Fax: 706-355-9199; Email: info@nawkaw.com; Web: http://www.nawkaw.com/
- B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

## 2.2 WATER-BASED STAIN

- A. NawTone (Formerly NECT-90):
  - General: NawTone: high-quality, water-based, highly permeable acrylic stain. Mold, mildew, UV and weather resistant.
  - 2. Properties:
    - Viscosity: (72° F) 70°-90° KU
    - pH: 8.5-9.5
    - Finish: flat
    - Nonflammable (ASN/ZS 1530.3-1999)
    - VOC: < 5 g/L (SCAQMDR 1168)
    - Abrasion Resistance: excellent
    - Freeze/Thaw Test (ASTM C216-86): exceeded
    - Salt Attack Resistance (AS/NZS 4456.10): no blisters
    - Water Vapor Transmission (ASTM E96-05) 0.337 g/hr m<sup>2</sup>
    - Water Vapor Permeance (ASTM E96-05) 6.6x10-8 g/Pa s m<sup>2</sup>
    - UV Resistant–Accelerated Weathering
      (ASTM G154:2000, ASTM G53-88, D2244-89) 2000 hrs: excellent
  - 3. Finish:
  - a. Color: To match existing substrate (masonry or concrete).
  - b. Color: Formulate to color as selected by the Owner or Architect.

## **PART 3 EXECUTION**

## 3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Verify that new masonry and concrete have cured at least 21 days prior to applying NawTone.
- C. Verify that surfaces being color treated with NawTone have a neutral pH, are clean, dry and free of efflorescence.
- D. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### 3.2 PREPARATION

- A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Clean surfaces thoroughly prior to installation. Allow surfaces to dry completely before applying coating.
- C. Verify that walls, masonry, concrete, stucco, block split faced/fluted and mortar that may have been treated with any form of chemical/acid wash are neutralized.
- D. Treat alkali or efflorescence with proper neutralizing compounds as recommended by masonry supplier before stain application.
- E. Before application, verify that the masonry walls have a neutral pH.
- F. Before application, verify that surface to be treated is clean, dry and contains no frozen water.
- G. Mix products as recommended immediately prior to application.

## 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Apply stain using airless spray pump to help control airborne particles or overspray. If site conditions prohibit spray application, apply by hand; utilizing brushes and rollers.
- C. Do not proceed with work when ambient temperatures are less than 25 degrees F (-4 degrees C) or greater than 110 degrees F (43 degrees C).
- D. Allow manufacturer's specified drying time for each coat before applying next coat (if required).
- E. Verify color consistency. Recoat areas where blotches, blemishes or imperfections are present.

# 3.4 FIELD QUALITY CONTROL

A. Verify color consistency. Recoat any areas that are unacceptable.

## 3.5 PROTECTION

- A. Protect installed products until completion of project.
- B. Protect prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels as required.

- C. Protect shrubs, metal, wood trim, glass, asphalt and other building hardware during application from overspray.
- D. Do not permit mist (if spraying) or liquid to drift onto surrounding properties or parking lots.
- E. Touch-up, repair or replace damaged products before substantial completion.

**END OF SECTION**