

ITEM 555.0194 07 STAINING CONCRETE SURFACES

DESCRIPTION:

This work shall consist of furnishing and applying concrete penetrating stain of the color specified on the plans and at the locations shown on the plans or as directed by the Engineer.

MATERIALS:

Concrete Penetrating Stain

The concrete penetrating stain shall be a single component, waterbased, thermoplastic acrylic emulsion which carries its color and water repellent protection into the concrete. All concrete stain shall be of the same batch and lot and shall be delivered to the application site in original sealed containers clearly labeled with the manufacturer's name, brand name, type of material, batch and lot numbers and color. The stain color shall comply with the notes indicated on the plans or as directed by the Engineer.

The concrete penetrating stain shall comply with New York State Laws regulating the use of volatile organic compounds and solvents.

CONSTRUCTION DETAILS:

Staining Concrete

Surfaces to receive the concrete penetrating stain shall be fully cured, clean, dry and free from dust, curing agents, oil, grease, efflorescence and any other contaminants that could prevent proper adhesion, if necessary the surfaces to be stained shall be pressure washed until all surface contamination has been completely removed. In addition, glazed or glossy surfaces must be chemically or mechanically abraded to remove gloss to allow adhesion.

Prior to any staining operations, the contractor shall be required to complete a test staining program for color acceptance and surface area coverage. The test panel will be constructed at a location on site as approved by the Engineer. The finished color of the penetrating stain treated areas shall be as indicated on the plans or as directed by the Engineer. The Contractor shall apply the stain according to the manufacturer's recommendations. The stain test sample must be submitted to and approved by the Engineer prior to ordering the complete stain batch. When approved, the sample areas shall serve as a standard of acceptance for all further work.

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Accompanying the sample shall be the manufacturer's literature which shall include materials specifications, physical properties, including ASTM test methods utilized, manufacturer's recommended application rates for the various surface textures and porosity, current application instructions, and Material Safety Data Sheets. The Contractor must comply with all safety instructions during all applications.

Prior to use, the stain shall be thoroughly mixed using the appropriate mechanical means and shall be mixed during application operations as required to maintain uniformity.

At the time of stain application, both the concrete and air temperatures must be between 8 degrees C and 32 degrees C and the concrete shall be completely dry. Stain shall not be applied unless weather conditions will permit complete drying of material prior to rain, fog, dew or temperatures beyond the prescribed limits. Areas not to receive stain shall be masked.

The concrete penetrating stain shall be applied by a combination of hand wiping, spraying, sponging, brush painting, ragging or other methods approved by the Engineer, with as many layers and patterns necessary to achieve believable coloration within stones and natural random variation from stone to stone.

METHOD OF MEASUREMENT:

Staining Concrete Surfaces will be measured by the total number of square meters of projected plane area of concrete surfaces stained.

BASIS OF PAYMENT:

The unit price bid per square meter of Staining Concrete Surfaces shall include the cost of all labor, materials and equipment necessary to perform the work. No additional payment will be made for the required samples.