



SECTION 1056

CONCRETE TINTING AND STAINING MATERIAL

SECTION 1056.10 CONCRETE TINTING MATERIAL

1056.10.1 Description. This work item shall consist of providing a concrete tinting material to aesthetically color concrete as shown on the plans.

1056.10.2 Material Requirements. This material shall consist of a homogeneous mixture mineral oxide pigment of an approved tint with such other additives as deemed necessary by the manufacturer. The tinting material shall conform to the specification outlined on ASTM C979. The material shall be free from oil, grease, dirt and nonferrous particles. The tinting material shall not contain any material that might promote oxidation of the iron particles if exposed to air and moisture, or that might have any detrimental effect on concrete. The contractor shall supply the engineer with a manufacturer's certification indicating that the material supplied is in accordance with this specification.

1056.10.3 Construction Requirements. The contractor shall incorporate the tinting material into the concrete through mixing with the aggregate, cementitious material and water in accordance with the manufacturer's recommendation. The dry shake method; whereby the tinting material powder, combined with dry cement and sand, is sprinkled onto the concrete and worked into the surface through finishing; shall not be allowed.

SECTION 1056.20 CONCRETE STAINING MATERIAL

1056.20.1 Description. This work item shall consist of providing a field concrete stain to aesthetically color concrete exteriors as shown on the plans.

1056.20.2 Material Requirements. The material shall be two-coat, pigmented acrylic resin system which penetrates into the concrete surface to provide water repellency, semi-opaque aesthetic color and salt resistance and shall form a breathable film allowing trapped moisture vapor to safely migrate through the coating without blistering or peeling. The contractor shall supply the engineer with a manufacturer's certification indicating that the material supplied is in accordance with this specification.

1056.20.3 Construction Requirements. The concrete surface shall be fully cured a minimum of 28 days prior to application of the aesthetic concrete stain. The absence of moisture in the concrete surface shall be verified with standard test ASTM D4263. Pressure washing with a minimum of 3,000 psi shall be used to remove all foreign matter, form oils, waxes, curing compounds, laitance, efflorescence and dirt. Sand blasting will not be permitted for cleaning. The cleaned surface shall be free of blemishes, discolorations, surface voids and conspicuous form marks to the satisfaction of the engineer. The concrete stain shall be adequately mixed within its container until homogenous in color. Application of the stain shall be in accordance with the manufacturer's recommendations including allowable ambient conditions. Application of the stain will not be allowed during rain. All manufacturers' safety precautions shall be submitted to the engineer prior to work and followed during staining.