

ITEM 15555.3502 M - EPOXY BONDING COMPOUND

DESCRIPTION

The work shall consist of furnishing and placing epoxy bonding compound as a bonding medium between cured portland cement concrete and uncured portland cement concrete.

MATERIALS

Materials used in this work shall meet the requirements of Subsection 721-03 Epoxy Polysulfide Grout.

CONSTRUCTION DETAILS

- A. Preparation of Surface: All surfaces designated to receive epoxy bonding compound shall be thoroughly sandblasted with No. 40 boiler slag grit or No. 2 sandblast sand or abraded by other mechanical means approved by the Engineer.

After sandblasting and just prior to the application of epoxy, the surface shall be air-blown or vacuum-cleaned.

Vacuum cleaning shall be required on substantially horizontal surfaces while air blowing may be used on vertical surfaces.

- B. Mixing: The two components of the epoxy bonding compound are furnished in separate containers. It is essential that the entire contents of both containers be thoroughly blended together. A paddle attached to a slow-speed electric drill or other methods approved by the Engineer shall be used for mixing. For small batches of 4 liters or less, thorough hand stirring may be satisfactory.

- C. Application: The prepared surface shall be dry and then coated with the properly mixed bonding compound. The epoxy covering should be as uniform as possible and shall be worked into the prepared receiving surface by means of stiff brushes, or other means acceptable to the Engineer. The Contractor shall use every means available to prevent the epoxy compound from collecting in pools. However, under no circumstances shall the epoxy compound be thinned with solvents or sprayed onto the designated receiving surface.

Epoxy bonding compound should be applied in such a manner that surfaces are coated with no more than 0.4 mm of film thickness. However, since it is impracticable to measure a thickness of this magnitude under most conditions, the application coating thickness will be considered acceptable if it appears wet to visual observation. The prepared surface shall be considered adequately coated if 75 percent of the actual surface area designated to be coated, has been coated and passes the visual test previously described.

ITEM 15555.3502 M - EPOXY BONDING COMPOUND

Should 75 percent of the actual surface area not be coated as previously described, additional epoxy bonding compound shall be applied to the surface until the required coating coverage is achieved.

It should be noted that the workable life of epoxy bonding compound is a function of time, temperature and quantity of material being mixed. Therefore, the manufacturer's detailed instructions for mixing and application shall be carefully adhered to, with the exception that instructions regarding application by thinning of the epoxy bonding compound or spraying of the epoxy bonding compound shall be disregarded.

- D. Scheduling: The Contractor shall schedule his operations so that concrete shall be placed while the epoxy bonding compound is still uncured and tacky. If the Engineer determines that the bonding compound has begun to cure, then the Contractor shall apply a new coating of epoxy bonding compound to the required areas at no cost to the State. No concrete shall be placed upon any surface which the Engineer determines is covered with cured epoxy bonding compound.

METHOD OF MEASUREMENT

This work shall be measured as the total number of liters of epoxy bonding compound incorporated into the work, except for volume required to recoat surfaces under the requirements of subsection D. Scheduling, of the Construction Details.

BASIS OF PAYMENT

The unit price bid per liter shall include the cost of furnishing all labor, materials and equipment necessary to complete the work.