

## CHAPTER 4 – PORTLAND CEMENT CONCRETE (PCC) PAVEMENT

Subsection B. Reinforcement in Section 4.01 Materials of Chapter 4, Portland Cement Concrete (PCC) Pavement, is void and superseded as follows:

### B. REINFORCEMENT

All reinforcement bars shall conform to the requirements of “Standard Specifications for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement” ASTM A 615, Grade 40 (300) or grade 60 (420). Bars shall be free from rust, scale, or other substances which prevent the bonding of the concrete to the reinforcement, excluding greasing of dowel bars as required in the plans and or in the contract. Smooth dowel bars shall be epoxy coated and conform to the requirements of “Structural Steel”, ASTM A 36. **All dowel and tie bar reinforcement in PCC pavement shall be epoxy coated** and conform to the requirements of ASTM A 775/A 775M – 07b.

The epoxy coating shall be free from holes, voids, contamination, cracks, or other damaged areas. A suitable patching material compatible with the coating and inert in concrete shall be made available to the Contractor by the manufacturer of the epoxy resin for repair of damaged coating areas at the applicator's plant or in the field. The patching or repair shall be performed in accordance with the recommendations of the material manufacturer.

Patching materials supplied or recommended by the manufacturer of the powdered resin shall be used to repair the coating and shall be applied to provide a minimum film thickness of 5 mils (125  $\mu\text{m}$ ) over the bare area. Areas to be patched shall be clean and free of surface contaminants. They shall be properly treated in accordance with the resin manufacturer's recommendations before detrimental oxidation occurs.

Care should be taken during the patching procedure to assure that the coating thickness on the area adjacent to the patched area does not exceed 15 mils (375  $\mu\text{m}$ ). Extensive areas of damaged coating, exceeding that which is unavoidable in careful handling and shipping, may be cause for rejection of the damaged bars.

In no case, however, shall the total bar surface area covered by patching material exceed 5 percent. (The 5 percent total bar surface area is the combined area for repairs done in the fabricator's shop and those done in the field.)

Proper repairs shall be the Contractor's responsibility even when the work is done by an applicator, fabricator, or other subcontractors.