

SECTION 824 EMBEDDED REINFORCEMENT AND HARDWARE

824.01 Description. This material consists of bar reinforcement, wire mesh reinforcement, tie bars, dowel bars, hook bolts, W-bolts, and load transfer assemblies.

824.02 Material Requirements.

- a. *Bar Reinforcement.* Bar reinforcement shall conform to the requirements of AASHTO M 31/M 31M, Grade 40 or Grade 60, (Grade 300 or Grade 400), as specified on the Plans.
- b. *Epoxy Coated Bar Reinforcement.* Epoxy coated bar reinforcement shall conform to the requirements of AASHTO M 284/M 284M.
- c. *Wire Mesh Reinforcement.* Wire mesh reinforcement shall conform to the requirements of AASHTO M 55.
- d. *Tie Bars.* Tie bars shall conform to the requirements of AASHTO M 31M.
- e. *Hook Bolts.* Hook bolts used in lieu of deformed tie bars shall conform to the Plans and the Standard Construction Details.
- f. *W-Bolts.* W-bolts shall conform to the Plans and the Standard Construction Details.
- g. *Coated Dowel Bars.* Coated dowel bars shall be round, steel bars of the diameter and length shown on the Plans, with a corrosion-resistant coating over a plain steel bar core, conforming to AASHTO M 255/M 255M, Grade 65 (Grade 450). The coating shall conform to AASHTO M 254 and be either Type A0, 25 " 5 mils (635 " 130 μ m), multi-layer, low-bond plastic coating, or Type B, 7 " 2 mils (180 " 50 μ m), fusion-bonded epoxy coating, requiring graphite application.
- h. *Load Transfer Assemblies.* The load transfer device shall be fabricated from corrosion-resistant, coated dowel bars conforming to AASHTO M 254, Type A or Type B coating described in (g) above.
- i. *Splice Couplers.* Splice couplers shall conform to the requirements specified on the Plans and shall be submitted to the Engineer for approval.
- j. *Fiber Reinforcement.* Alkali resistant fiber reinforcement shall conform to the requirements of ASTM C 1116, Type III with a minimum fiber length of 20 (12 mm) and a maximum length of 12" (38 mm).