938 POST-TENSION GROUT. (REV 6-13-08) (FA 8-12-08) (1-09)

ARTICLES 938-5 through 938-7 (Pages 834-835) are deleted and the following substituted:

938-5 Accelerated Corrosion Test Method (ACTM).

Perform the ACTM as outlined in Appendix B of the "Specification for Grouting of Post-Tensioning Structures" published by the Post-Tensioning Institute. Report the time to corrosion for both the grout being tested and the control sample using a 0.45 water-cement ratio neat grout.

A grout that shows a longer average time to corrosion in the ACTM than the control sample and the time to corrosion exceed 1,000 hours is considered satisfactory.

938-6 Variation in Testing for Specific Applications.

938-6.1 Horizontal Applications: Horizontal grout applications are defined as grouting of all superstructure tendons and transverse substructure tendons in caps, struts, etc. All physical requirements defined in 938-4 and 938-5 are applicable for grouts used in horizontal applications.

938-6.2 Vertical Applications: Vertical grout applications are defined as grouting of substructure column tendons. All physical requirements defined in 938-4 and 938-5 are applicable for grouts used in vertical applications. In addition, perform the Schupack Pressure Bleed Test Procedure for Cement Grouts for Post-Tensioned Structures as outlined in Appendix C of the "Specification for Grouting of Post-Tensioned Structures" published by the Post-Tensioning Institute. Report the percent bleed for the grout tested. Test grout at the specified pressure of 100 psi. An acceptable test will result in no bleed water (0.0 percent).

938-6.3 Repair Applications: Repair applications are used to augment grouting operations which did not completely fill the duct or anchorage. For new construction, repairs may be made with the same grout approved for use in the tendon as long as the volume of the void is less 0.5 gal. In all other cases, use a non-sanded grout meeting the requirements of 938-4 and 938-5 with a modified maximum permeability of 2,800 coulombs (ASTM C 1202 at 30 volts). Non-sanded grouts shall have 95% passing on the #100 sieve and 90% passing the #170 sieve as determined by ASTM C33. Each sieve may be washed and dried before weighing in accordance with the procedure in ASTM C117 modified for sieve size.