

To: SUPERSEDED BY EB 06-057 EFFECTIVE 5/3/07		New York State Department of Transportation ENGINEERING INSTRUCTION	EI 05-009
Title: REVISED EI FOR ADDITION OF CONCRETE PREWETTING REQUIREMENTS AND ELIMINATION OF REQUIREMENT FOR BONDING GROUT			
Distribution: ☒ Manufacturers (18) ☐ Local Govt. (31) ☒ Agencies (32) ☐ Surveyors (33) ☒ Consultants (34) ☐ Contractors (39) ☐ _____ ()		Approved:  R. L. Sack, Deputy Chief Engineer Technical Services 22 MAR 05 Date	

ADMINISTRATIVE INFORMATION:

- This Engineering Instruction (EI) is effective beginning with the letting of September 8, 2005.
- This EI supersedes EI 02-009.
- The revisions transmitted by this EI will be incorporated into a future revision of the Standard Specifications.

PURPOSE: This EI supersedes EI 02-009 and transmits revisions to Volume II of the Standard Specifications of January 2, 2002, Sections 582, 584, and 606 to eliminate the use of 705-22 Portland Cement Mortar Bonding Grout for bonding new concrete to existing concrete in these specifications.

TECHNICAL INFORMATION: The changes to the Standard Specifications will result in improvement to the quality of bond between new and existing concrete at a reduced cost.

IMPLEMENTATION: Beginning with projects submitted for the letting of September 8, 2005, the Design Quality Assurance Bureau (DQAB) will insert the attached shelf notes into all contract proposals that contain the base item numbers 582, 584, and 606 as appropriate. These changes may be implemented on existing contracts at the discretion of the Engineer in Charge. To implement this policy prior to the effective date, the designer or Engineer can obtain the information and materials required directly from the issuance contact person named below.

TRANSMITTED MATERIALS: This EI transmits a shelf note which revises Volume II of the Standard Specifications, Sections 582, 584, and 606.

BACKGROUND: Technical changes for prewetting and bonding grout requirements were first issued by EI 02-009. Refinements and additional information was also issued by EI 04-021. This EI is being issued to eliminate duplication between these previous EIs. This EI also includes several changes to the Standard Specifications of January 2, 2002, regarding elimination of the requirement for bonding grout which were not included in the previous issuances.

CONTACT: David Graves of the Field Engineering 1 office of the Materials Bureau at dzgraves@dot.state.ny.us or (518)457-4592.

SECTION 582 – REMOVAL AND REPLACEMENT OF STRUCTURAL CONCRETE

Make the following changes to the Standard Specifications of January 2, 2002, Section 582 – Removal and Replacement of Structural Concrete:

Page 5-154 – Make the following changes to the Standard Specifications of January 2, 2002, Section 582 – Removal and Replacement of Structural Concrete:

Lines 28 - 31; under §582-3 Construction Details, §582-3.04 Placement, A. Concrete Placement, *delete* the following:

“Immediately prior to concrete placement, but after wetting, the receiving the surfaces shall be coated with a thin coating of 1:1 mortar, or neat cement paste thoroughly brushed into the surface. It will not be necessary to brush the mortar into surfaces made inaccessible by the presence of forms, or closely spaced reinforcement.”

SECTION 584 – SPECIALIZED OVERLAYS FOR STRUCTURAL SLABS

Make the following changes to the Standard Specifications of January 2, 2002, Section 584 – Specialized Overlays for Structural Slabs:

Page 5-164

Line 27; under **§584-3 Construction Details, §584-3.02 Blast Cleaning, C.,** *delete* the following:

“C. Repeat blast cleaning if more than 48 hours pass before bonding grout placement begins.”

and *replace* it with the following:

“C. Repeat blast cleaning if more than 48 hours pass before concrete placement begins.”

Lines 30-32; under **§584-3 Construction Details, §584-3.03 Preplacement Wetting.,** *delete* the following:

“Remove all standing water with oil-free compressed air, and protect the deck from drying, so the concrete remains in a saturated surface dry condition when placing bonding grout.”

and *replace* it with the following:

“Remove all standing water with oil-free compressed air, and protect the deck from drying, so the concrete remains in a saturated surface dry condition.”

Page 5-165

Lines 14-16; **§584-3 Construction Details, §584-3.05 Handling and Placing Concrete., D.,** *delete* the following:

“This gap is to be sufficient in length to allow the finishing machine to clear the previously placed concrete and any unacceptable area, as when bonding grout has dried out.”

and *replace* it with the following:

“This gap is to be sufficient in length to allow the finishing machine to clear the previously placed concrete.”

SECTION 606 – GUIDE RAILING

Make the following changes to the Standard Specifications of January 2, 2002, Section 606 – Guide Railing:

Page 6-30

Lines 16 - 18; under **§606-3 Construction Details, §606-3.05 Concrete Barrier., C. Machine Formed Concrete Barrier, 5. Placing Operations**, *delete* the following:

“Immediately prior to placing fresh concrete against a terminated face, the damp surface shall be completely coated with Portland Cement Bonding Grout §705-22 by thorough brushing.”