

### SPECIAL NOTE FOR NON-EPOXY ADHESIVES

This Special Note will apply where indicated on the plans or in the proposal. Section references herein are to the Department's Standard Specifications for Road and Bridge Construction, current edition.

**1.0 DESCRIPTION.** As an alternate to Type IV epoxy, as specified in Subsection 826.01.02, the Department may allow other structural adhesives for doweling deformed reinforcing bars into hardened concrete providing the requirements herein are met.

**2.0 MATERIALS.** Furnish an adhesive material from the Department's List of Approved Materials. Submit one cartridge of each component per project to the Engineer for infrared analysis.

**3.0 CONSTRUCTION.** Do not use the material until the Engineer verifies, by visual inspection, that the material is from the List of Approved Materials.

**3.1 Field Installation.** Follow the following installation criteria:

- 1) Drill a dowel hole that is no more than 1/8 inch larger in diameter than the bar.
- 2) Ensure the dowel hole is dry and free of all drill and coring dust.
- 3) Place the adhesive in the dowel hole according to the manufacturer's instructions.
- 4) Insert the bar to the bottom of the hole and twist 1/4 turn. An excess amount of adhesive must be clearly visible as an extruded ring of material surrounding the reinforcing bar at the surface of the concrete.

**3.2 Job Site Testing.** Contact the Division of Materials in advance of the installation date to set up a testing schedule. After installation of the first 50 reinforcing bars, the Department will randomly select 5 and proof load according to the following table with zero slippage.

REBAR SIZE (#)	10	13	16	19	22
PROOF LOAD (lbs)	7,000	12,000	19,000	27,000	36,000

If any of the bars fail in bond, either revise the installation procedure, if applicable, or provide another adhesive that is capable of passing this test. The Engineer may require additional job site testing.

**4.0 MEASUREMENT AND PAYMENT.** The Department will not measure the adhesive or its application for payment and will consider it incidental to the reinforcing bars.

December 16, 2013