

## ENGINEERING DIRECTIVE

Frank Tramontozzi (signature on original)

CHIEF ENGINEER

## **Mechanical Reinforcing Bar Splicer**

Effective immediately, all Mechanical Reinforcing Bar Splicers used on any MassDOT Highway Division project shall meet the following requirements:

DESCRIPTION	REQUIREMENT
Ultimate Tensile Strength of Mechanical Coupler System (California Test No. 670)	90% of ultimate tensile strength of reinforcement bars (80,000 psi minimum for AASHTO M 31 Grade 60.) During testing, the ultimate failure of the spliced reinforcing bar system shall occur either in the reinforcing bar being joined or in the splicing device at a minimum of 150% of the yield strength of the reinforcing bar.
Allowable Slip (California Test No. 670)	0.01 inch maximum for #14 and smaller bars, 0.03 inch maximum for #18 bars
Yield Strength of Mechanical Coupler System	125% of yield strength of reinforcement bars, minimum

Mechanical Reinforcing Bar Splicers shall be epoxy coated or shall be galvanized consistent with the reinforcement to be spliced and shall be tested with epoxy coated or galvanized reinforcing steel as applicable. The final assembly shall be in conformance with the specifications for epoxy coating or galvanizing.

Mechanical Reinforcing Bar Splicers which have been successfully tested and met all of the above requirements shall be placed on the Qualified Construction Materials List. Only products on the Qualified Construction Materials List maintained by the MassDOT Highway Division Research and Materials Section are acceptable for use.

The contract time will not be extended to allow for the testing and approval process required for inclusion on the Qualified Construction Materials List.