

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

QUALIFIED PRODUCT POLICY
FOR
MECHANICAL COUPLERS FOR STRUCTURAL STEEL

1.0 General:

As prescribed in the SCDOT “Reinforcing Steel” Supplemental Specification, all mechanical couplers used for reinforcing steel on SCDOT construction projects must be listed on Qualified Product List (QPL) 73 for the category of coupler required. This policy outlines the requirements for inclusion on this QPL.

2.0 Initial:

- 2.1 A producer may request that a specific model of coupler be added to QPL 73 by submitting the following:
1. The unique model number and name of the specific coupler.
 2. Documentation of heat treatment and/or any special manufacturing process.
 3. Brochures, shop drawings and other technical information indicating dimensions and materials.
 4. Quality control procedures for materials and manufacturing process.
 5. A certification that this product meets all requirements listed in Section 703.2.4.2.1 of the SCDOT “Reinforcing Steel” Supplemental Specification.
 6. Test reports from an independent AASHTO accredited laboratory demonstrating that the couplers meet all SCDOT requirements listed in Section 703.2.4.2.1 of the SCDOT “Reinforcing Steel” Supplemental Specification and include the following:
 - a. AASHTO accredited laboratory’s letterhead on each report.
 - b. Two (2) individual test results for each requirement of Section 703.2.4.2.1 of the SCDOT “Reinforcing Steel” Supplemental Specification for each size of coupler to be included on QPL 73.

The tests must be conducted with the coupler assembly utilizing AASHTO M 31, Type W – Grade 60 deformed bars.

7. Two (2) sample assemblies of each splice size according to the following guidelines:
 - a. Minimum length of samples, including coupler at midpoint, is 30 inches.
 - b. The length of rebar on each side of the coupler is 12 inches.
 - c. The alignment across the mechanical coupler splice must be straight to within ½ inch per 3 feet.
 - d. Coupler assembly utilizing AASHTO M 31, Type W – Grade 60 deformed bars.
 - e. Mill certificates for the mechanical coupler and rebar included in each submitted assembly.
 - f. Mill certificates must show where production processes occurred.

to:

Caleb Gunter, PE
Structural Steel Engineer
SCDOT Office of Materials and Research
1406 Shop Road
Columbia, SC 29201
(803) 737-6694
Fax: (803) 737-6649
Email: guntercb@scdot.org

(Note: When qualification for a range of sizes is requested, with approval of the Structural Steel Engineer, the smallest, largest and an intermediate size may be submitted)

For technical assistance, please contact:

Lucero E. Mesa, PE
Seismic Design Engineer
SCDOT
955 Park Street
Columbia, SC 29202
(803) 737-1765
Email: mesale@scdot.org

- 2.2 Couplers listed on the current Caltrans Authorized List of Couplers for Reinforcing Steel will be exempted from requirements 4 through 7 above when applying for the same usage category (Service Splice or Ultimate Splice) as found on the Caltrans list.

3.0 Requirements for Each Shipment:

- 3.1 Every shipment of couplers sent to a SCDOT project should be accompanied by the following:
1. Documentation showing the unique model number and name of the specific coupler.
 2. Specific assembly instructions for every specific coupler model and size included in the shipment.

4.0 Suspension of Qualified Status:

- 4.1 In the event that the producer appears to be in compliance with all requirements of this policy, but the end product does not meet the Department's specifications, then the State Materials Engineer may take steps towards suspending the producer's SCDOT qualification status. If the problem has not been properly corrected within 30 business days, the State Materials Engineer will revoke the qualification status of the producer until the producer demonstrates that all issues have been properly resolved.