Guardrail Hardware

SC T 137

1. Scope

Test guardrail hardware to insure specifications are maintained.

2. Referenced Documents

- 2.1 AASHTO Standards
 - M 180 Corrugated Sheet Steel Beams for Highway Guardrail
 - M 232 Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- 2.2 ASTM Standards
 - A 153 Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - A 307 Specification for Carbon Steel Bolts and Studs, 60 000 PSI Tensile Strength
- 2.3 SCDOT Standards

Standard Drawings 805-1,2, 7, 9A, 11 and 12

2.4 Other Standards

ANSI/ASME Standards B1.1 and B 18.2.1

3. Apparatus

- 3.1 Steel ruler
- 3.2 Micrometer
- 3.3 Magnetic thickness gauge

4. Test Specimens

4.1 One each of all different items.

5. Procedure

- 5.1 Measure each piece of hardware for correct dimensions.
- 5.2 Check bolts for A.307 designation.
- 5.3 Check pieces that can be checked for zinc coating and express in oz./sq. ft.

6. Calculations

Mils \div 1.7 = oz./sq. ft.

7. Report

Size of each piece, weight of zinc coating, and if the articles meet specifications. Test results are reported on Lab Form 921. Data and calculations are recorded on worksheet 921W.