

## Part 642 – Specifications

### Chapter 3 – National Standard Material Specifications

#### Material Specification 539—Steel Reinforcement (for concrete)

A. Scope

This specification covers the quality of steel reinforcement for reinforced concrete.

B. Quality

- (1) All reinforcement shall be free from loose or flaky rust, soil, oil, grease, paint, or other deleterious matter.
- (2) Steel bars for concrete reinforcement shall be grade 40, 50, or 60 deformed bars conforming to one of the following specifications:
  - (i) Deformed and plain billet-steel bars for concrete reinforcement—ASTM A615.
  - (ii) Rail-steel deformed bars for concrete reinforcement—ASTM A996.
  - (iii) Axle-steel deformed bars for concrete reinforcement—ASTM A996.
- (3) Dowels shall be plain round bars conforming to the same specifications listed above for steel bars.
- (4) Fabricated deformed steel bar mats for concrete reinforcement shall conform to the requirements of ASTM A184.
- (5) Deformed and plain steel welded wire reinforcement shall conform to the requirements of ASTM A1064.
- (6) Epoxy-coated steel bars for concrete reinforcement shall conform to the requirements of ASTM A775.

C. Dimensions of Welded Wire Reinforcement

Gauges, diameters, spacing, and arrangement of wires for welded steel wire fabric shall be as defined for the specified style designations.

D. Storage

Steel reinforcement inventories at the site of the work shall be stored above the ground surface on platforms, skids, or other supports and shall be kept clean and protected from mechanical injury and corrosion.