Anchor Bolts ASTM F1554 Gr. 105
SUBMITTAL SPECIFICATIONS
Abstract of ASTM F1554-07A

Material Grade: Alloy, Heat Treated, High Strength 105 KSI Yield – ASTM F1554-105

Chemical Requirements (%)

Phosphorous (max):	0.040
Sulfur (max):	0.050
Copper (min)*:	0.20

*When Specified

Mechanical Requirements

SIZE IN INCHES	TENSILE KSI	YIELD(MIN) KSI	ELONGATION IN 2 IN. MIN (%)	ELONGATION IN 8 IN. MIN (%)	REDUCTION OF AREA MIN (%)
1/4 TO 3	125-150	105	15	12	45

Identification Marking: Color Code Red

-Color coding is required unless the grade is stamped in accordance with supplemental req.(S3)
-Stamping of F1554 bolts with manufacturers identification is a supplemental requirement (S2)

Recommended Hardware:

SIZE INCHES	PLAIN NUTS	HDG NUTS	WASHERS
1/4 TO 1-1/2	A563 DH HVY HEX	A563 DH HVY HEX	F436
1-3/4 TO 4	A563 DH HVY HEX	A563 DH HVY HEX	F436

Per ASTM A563, A194-2H may be substituted for A563-DH

Finish Options:

Plain   HDG to ASTM A153*F2329

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Supplementary Testing:

Supplementary requirements shall apply only when specified in the purchase order or contract

S1: Weldable version of the Grade 55 specification. Through chemical composition restrictions and by a carbon equivalency formula, S1 provides assurance of weldability. When S1 is not specified, the Grade 55 material may or may not be weldable.

S2: Permanent manufacturer's identification on the end of the anchor bolt that projects from the concrete.

S3: Permanent grade identification on the end of the anchor bolt that projects from the concrete in lieu of color coding. AB105 for Grade 105.

S4: Charpy Impact requirements at +40 deg F. The minimum Charpy V-notch energy requirement is an average of 15ft-lbs for three specimens, with no one specimen falling below 12ft-lbs.

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