



PRODUCT OVERVIEW

ASTM F1554 is an anchor bolt specification developed by the American Society for Testing and Materials that specifies straight, bent, headed or headless anchor bolts and fully threaded rod. It replaces ASTM A307 Grade C. The F1554 specification is used in construction-related projects such as commercial developments, structural supports and residential developments. Common examples of F1554 in use include freeway signs, street lights, traffic signals and large building columns.

- **Grade Offered:** Grade 55 (S1)
- **Diameters:** 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", and 1 1/2"
- **Lengths:** Any length up to 12'
- **Products:** [Threaded Rod](#), [Studs](#), and [Anchor Bolts](#)
- **Applications:** Bridges, Steel Buildings, Light Poles, Traffic Signals, Freeway Signs, Building Columns

GRADES

All America Threaded Products manufactures grade 55 S1 that can be supplied in lieu of grade 36. The material used to manufacture Grade 55 S1 meets the conditions for the Supplementary Requirement, meeting both grade 36 and 55 specifications. The S1 Supplementary Requirement is for a weldable grade 55 product. Meeting the chemistry, which supersedes conflicting provisions, requires certain chemical restrictions and meeting a carbon equivalency formula of less than 0.45%. Material certificates and material test reports are available upon request.

The grade number for F1554 designates the minimum yield strength of the selected grade. F1554 is manufactured in three grades: grade 36, grade 55 and grade 105.

Grade	Materials	Yield Strength	Benefits
36	Low carbon steel	36 ksi	Economical
55 (S1)	Low alloy steel	55 ksi	High strength, weldable grade
105	Steel alloy, heat treated	105 ksi	High strength

Note: It is not advisable to substitute A193 grade B7 for F1554 grade 55. Specialty steel is used to produce grade 55 products and is not prominent in the market.

F1554 PRODUCT OFFERING

AATP CAPABILITIES

Specification	Grade	Diameters	UNC/UNF	Products	Lengths	Stock Finishes	Special Finish
ASTM F1554	55 (S1)	1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-1/2"	UNC	Threaded Rod Threaded Studs Anchor Bolts	Any length up to 12'	Plain Hot-Dip Galvanized	Electro-Zinc

MECHANICAL PROPERTIES

Specification	Grade	Marking	Diameters	UNC/UNF	Tensile (ksi)	Yield (ksi min)	Elong % (min)	RA% (min)	HRC
ASTM F1554	55 (S1)	AB55 01EY	1/2", 5/8", 3/4", 7/8", 1", 1-1/8", 1-1/4", 1-1/2"	UNC	75-95	55	21	30	N/A

CHEMICAL PROPERTIES

Specification	Grade	Carbon	Manganese	Phosphorus	Sulfur	Silicon
ASTM F1554	55 (S1)	0.30 max	1.35 max	0.040 max	0.050 max	0.50 max