



HARPER STEEL

# ASTM F1554 ANCHOR RODS

**SCOPE** The ASTM F1554 specification was introduced in 1994 and covers anchor rods (bolts) designed to anchor structural supports to concrete foundations. F 1554 anchor rods can take the form of either headed bolts, straight rods or bent rods. The three present grades 36, 55 and 105 designate the yield strength (see table) of the anchor rod. The bolts can be either cut or roll threaded with grades 36 and 55 also weldable. A color code identifies grade 36 BLUE, 55 YELLOW, and 105 RED facilitating an easy inspection in the field.

**APPLICATIONS** Structural steel framed buildings, traffic signals, mast arms, columns, light poles and highway sign structures are all covered under ASTM 1554

## MECHANICAL PROPERTIES

GRADE	SIZE	TENSILE, KSI	YIELD, KSI	YIELD, MPa	ELONG % min	RA % min
36	1/4"-4"	58-80	36	248	23	40
55	1/4"-2"	75-95	55	380	21	30
	2 1/8"-2 1/2"	75-95	55	380	21	22
	2 5/8"-3"	75-95	55	380	21	20
	3 1/8"-4"	75-95	55	380	21	18
105	1/4"-3"	125-150	105	724	15	45

## EQUIVALENT NUT AND WASHER PAIRING

GRADE	SIZE	PLAIN NUT	GALV. NUT	WASHER
36	1/4"-1 1/2"	A563A FIN.	A563A FIN	A36
	1 5/8"-4"	A563A HEAVY	A563A HEAVY	A36
55	1/4"-1 1/2"	A563A FIN.	A563A HEAVY	F436
	1 5/8"-4"	A563A HEAVY	A563A HEAVY	F436
105	1/4"-1 1/2"	A563D FIN.	A563DH HEAVY	F436
	1 5/8"-3"	A563DH HEAVY		F436

Note: Different grade nuts having proof loads higher than those specified are also suitable.

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Information cited above is for reference purposes only. For more details see ASTM PUB 1554 2004, F436, A563, 153, 123, B633.