

Straight Anchor Bolt with Plate (Plate Bolt)



Plate Bolts are straight anchor bolts with a plate washer added to one end. The plate can be welded directly to the anchor bolt or tack welded to the nut embedded in the concrete.

An anchor bolt is a steel bar or rod, one end of which is intended to be cast in concrete. The opposite end is threaded and projects from the concrete, for anchoring other material to the concrete.

Externally threaded steel anchor bolts are intended for anchoring structural supports to concrete foundations. Such structural supports include: building columns, supports for highway signs, street lighting and traffic signals; steel bearing plates and other similar applications.

Typical installation includes nuts and washers. Choose a compatible material where the proof load of the nut is greater than the tensile strength of the bolt. Be sure the thread pitch of the nut matches that of the bolt.

Available Materials

Anchor Bolt	Yield
ASTM F1554 Gr 36	36 ksi minimum
ASTM F1554 Gr 55	55 ksi minimum
ASTM F1554 Gr 105	105 ksi minimum
ASTM A193 Gr B7 (to 2-1/2" dia.)	105 ksi minimum
ASTM A193 Gr B8 Class 1	30 ksi minimum
ASTM A193 Gr B8M Class 1	30 ksi minimum
ASTM A354 Gr BD (to 2-1/2" dia.)	130 ksi minimum
ASTM A449 (to 1" dia.)	92 ksi minimum
ASTM A449 (1 to 1-1/2" dia.)	81 ksi minimum
ASTM A108-1008/1010	low carbon steel
ASTM A36/A 36M	36 ksi minimum
AISI 304 Stainless Steel	42 ksi minimum
AISI 316 Stainless Steel	42 ksi minimum

Thread Pitch

Form / Fit	Type
UNC Class 2A / 2B	Cut or Roll Thread

Protective Coatings

Specification	Method of Deposit / Material
Plain	None
ASTM F2329	Hot Dip Galvanized Zinc
ASTM B695 Cl. 55	Mechanical Galvanized Zinc

Flat Washer

Specification	Type
ASTM F436	Through Hardened Steel

Available Nuts

Specification / Grade / Type	Proof Load
ASTM A563 Gr A Hex	90 ksi minimum
ASTM A563 Gr A Heavy Hex	90 ksi minimum
ASTM A563 Gr C Hex	144 ksi minimum
ASTM A563 Gr D Hex	150 ksi minimum
ASTM A563 Gr DH Heavy Hex	175 ksi minimum
ASTM A194 Gr 2H Heavy Hex	175 ksi minimum
ASTM A194 Gr 8 Heavy Hex	80 ksi minimum
ASTM A194 Gr 8M Heavy Hex	80 ksi minimum
AISI 304 Stainless Steel Hex	85 ksi minimum
AISI 316 Stainless Steel Hex	85 ksi minimum

Ordering Information

Manufactured Per Print

Products manufactured and inspected per Quality System ASME B18.18.4M