

ASTM A354



PRODUCT OVERVIEW

ASTM A354 BD is used for structural bolts. The specification is heat treated then tempered at 800° F, which creates a very strong part, but increases brittleness more than comparative specifications. These high-strength bolts are typically used in standard temperature and pressure level applications such as general-use construction projects.

- Diameters:** 3/8", 1/2", 5/8", 3/4", 7/8", 1"
- Lengths:** 1", 1 ¼", 1 ½", 2", 2 ½", 3", 3 ½", 4", 5", 6" 8"
- Finishes:** Plain, Yellow Zinc, Black Oxide
- Products:** Threaded Studs
- Applications:** Manufacturing and general-use construction projects

Click for a **QUICK QUOTE**

With a minimum tensile strength of 150 ksi and minimum yield of 130 ksi, it has a greater tensile and yield strength compared to other steel grades such as Grade 2, Grade 5, and B7. The material from AATP is 100 percent domestically melted and manufactured. Chemical requirements are provided from the steel mill, while mechanical requirements are provided from our third-party vendor responsible for heat treating after parts have been threaded.

Material certificate and material test reports are available upon request

AATP CAPABILITIES

Specification	Grade	Diameters	UNC/UNF	Products	Lengths	Stock Finishes	Special Finish
ASTM A354	BD	3/8", 1/2", 5/8", 3/4", 7/8", 1"	UNC UNF	Threaded Studs	Less than 8"	Plain	Yellow Zinc

MECHANICAL PROPERTIES

Specification	Grade	Marking	Diameters*	UNC/UNF	Tensile (ksi)	Yield (ksi min)	Elong % (min)	RA% (min)	HRC
ASTM A354	BD	01EY BD	3/8", 1/2", 5/8", 3/4", 7/8", 1"	UNC UNF	150 to 173	130	14	40	33 to 38

CHEMICAL PROPERTIES

Specification - Grade	Carbon	Manganese	Phosphorus	Sulfur	Treatment
ASTM A354 - BD	0.30 - 0.53	0.60 min	0.035 max	0.040 max	Quench/Temper