Headed Anchor Studs are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

Ferrules: All orders for studs include required ferrules

Length: Length is before weld. Stud diameters (D) 1/2” and below will be approximately 1/8” shorter after stud welding. 5/8”-7/8” will be approximately 3/16” shorter after stud welding. 1” will be approximately 1/4” shorter after stud welding.

Made to order lengths are available upon request

<table>
<thead>
<tr>
<th>Mechanical Property Requirements</th>
<th></th>
<th>Stud Specification</th>
</tr>
</thead>
</table>
|                                   | Type A              | Type B              | Material | Low Carbon Steel (1010-1020) ASTM A29
|                                  |                     |                     |          | ASTM A108
| Tensile Strength                 | 61,000 psi min      | 65,000 psi min      | Stud Diameter (D) | 1”
| Yield Strength                   | 49,000 psi min      | 51,000 psi min      | Stud Standard Length (L) | 5-1/4
| Elongation (% in 2”)             | 17% min             | 20% min             | Stud Head Diameter (HD) | 1-5/8
| Elongation(% in 5x dia)          | 14% min             | 15% min             | Stud Head Thickness (HT) | 1/2
| Reduction of Area                | 50% min             | 50% min             | Stud Part # | HSC 1 514
| Ferrule Part #                   |                     |                     | Ferrule Part # | FER16-F

Type A Studs are general purpose studs
Type B Studs are headed, bent, or of other configuration that are used as essential component in composite beam design.