

## Test Material Yield (ksi)

STEEL GAUGE								ALUMINUM 6063-T5		
18	16	14	12	1/8	3/16	1/4	5/16	1/8	1/4	3/8
97.7	111.2	97.9	117.6	56.9	65.0	48.1	49.1	32.4	32.1	27.2

## Pullout Values (avg. lbs. ultimate)

FASTENER			STEEL GAUGE (lbs.)								ALUMINUM 6063-T5		
DIA.	PT	HEAD	18	16	14	12	1/8	3/16	1/4	5/16	1/8	1/4	3/8
#10-16	3	HWH	605	822	958	2060	2183	-----	-----	-----	745	-----	-----
#12-14	3	HWH	551	884	1099	1943	2149	3044	-----	-----	1008	2543	-----
#12-14	3	UPFH	551	884	1099	1943	2149	2497	-----	-----	1008	2462	-----
1/4-14	3	HWH	777	1095	1205	2196	2320	4110	-----	-----	1017	3080	-----
1/4-20	4	HWH	-----	1054	1357	2266	2212	3304	4719	4699	970	2760	3851

## Shear Values (avg. lbs. ultimate)

FASTENER			STEEL GAUGE							ALUMINUM 6063-T5	
DIA.	PT	HEAD	18-18	18-14	16-16	14-14	1/8-3/16	3/16-1/4	12-1/4	1/8-1/8	1/8-1/4
#10-16	3	HWH	1523	1645	1522	-----	-----	-----	-----	1526	-----
#12-14	3	HWH	1613	2185	1828	1888	-----	-----	-----	1846	2488
#12-14	3	UPFH	1613	2185	1828	1888	-----	-----	-----	1846	2180
1/4-14	3	HWH	1838	2520	2478	2524	2636	-----	-----	2087	3328
1/4-20	4	HWH	1876	2730	2364	2460	2748	2881	2742	2106	3062

## Mechanical Properties

YIELD STRENGTH, F, Ksi (MPa)	TENSILE STRENGTH F, Ksi (MPa)
134 ksi	152 ksi
920 Mpa	1045 Mpa

The values listed are ultimate averages achieved under laboratory conditions and apply to Buildex manufactured fasteners only. Appropriate safety factors should be applied to these values for design purposes.