

## X-U Universal Knurled Shank Fasteners 3.2.3

Allowable Tensile Pullover and Shear Bearing Load Capacities for Light Steel Framing with X-U Powder-Actuated Fasteners 1,2,3,4

Fastener Description	Fastener	Head Dia. in. (mm)	Sheet Steel Thickness													
			14 ga.		16 ga.		18 ga.		20 ga.		22 ga.		24 ga.		25/26 ga.	
			Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)
0.157" shank with or w/o plastic washers or MX collation	X-U	0.322 (8.2)	825 (3.67)	1,085 (4.83)	685 (3.05)	720 (3.20)	490 (2.18)	525 (2.34)	360 (1.60)	445 (1.98)	300 (1.33)	330 (1.47)	205 (0.91)	255 (1.13)	120 (0.53)	145 (0.64)

- Allowable load values are based on a safety factor of 3.0 in accordance with the AISI NASPEC, 2001 edition with 2004 supplement.
- Allowable pullover capacities of sheet steel should be compared to allowable fastener tensile load capacities in concrete, steel, and masonry to determine controlling resistance load.
- Allowable shear load bearing capacities of sheet steel should be compared to allowable fastener shear capacities in concrete, steel and masonry to determine controlling resistance load.
- Data is based on the following minimum sheet steel properties,  $F_y = 33$  ksi,  $F_u = 45$  ksi (ASTM A 653 material).

### 3.2.3.4 Ordering Information

Fastener Description	Fastener Length in. (mm)	Shank Ø in. (mm)	Washer Ø	Packaging Qty
X-U 16	5/8 (16)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 19	3/4 (19)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 22	7/8 (22)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 27	1 (27)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 32	1-1/4 (32)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 37	1-1/2 (37)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 42	1-5/8 (42)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 47	1-7/8 (47)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 52	2 (52)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 57	2-1/8 (57)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 62	2-1/2 (62)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
X-U 72	2-7/8 (72)	0.157 (4.0)	Plastic 8 mm or collated	100 pcs / box
Fastener Description	Fastener Length in. (mm)	Shank Ø in. (mm)	Washer Ø	Packaging Qty
X-U 27 P8 S15	1 (27)	0.157 (4.0)	Steel 15 mm	100 pcs / box
X-U 32 P8 S15	1-1/4 (32)	0.157 (4.0)	Steel 15 mm	100 pcs / box
X-U 32 P8 S36	1-1/4 (32)	0.157 (4.0)	Steel 36 mm	100 pcs / box
X-U 72 P8 S36	2-7/8 (72)	0.157 (4.0)	Steel 36 mm	100 pcs / box
Fastener Description	Fastener Length in. (mm)	Shank Ø in. (mm)	Washer Ø	Packaging Qty
X-U 16 P8 TH	5/8 (16)	0.157 (4.0)	8 mm plastic & metal "tophat"	100 pcs / box
X-U 19 P8 TH	3/4 (19)	0.157 (4.0)	8 mm plastic & metal "tophat"	100 pcs / box
X-U 27 P8 TH	1 (27)	0.157 (4.0)	8 mm plastic & metal "tophat"	100 pcs / box

