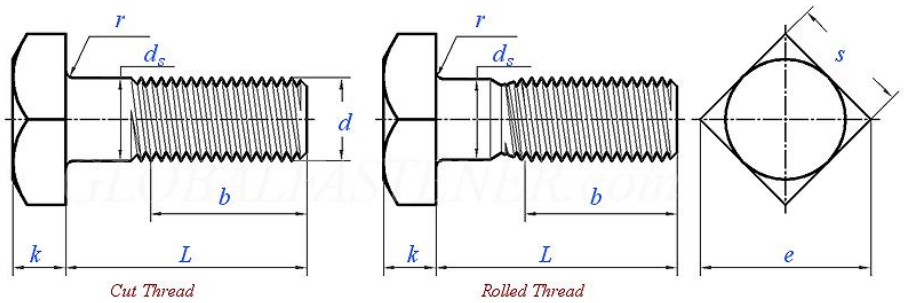
ANSI B18.2.1 Square Bolt

Leader-Fastener is a manufacturer and distributor of **ANSI B18.2.1 Square Bolt.** We have a complete line of service from having invested in production plants, export department and to having a quality control team and center to meet your requirements. We regard quality as the life of the company. We persist in good quality as the first policy and have established a set of quality control and inspection system according to the international standard.We have carried out ISO9001 Quality Guarantee System in every course of production, transportation and selling.We do hope we could be your partner in business by topping quality, knight service and competitive price in the near future and be your friends as well.

The square head bolt has a square style head, the top of which is fully chamfered with the diameter of chamfer circle equal to the maximum width across flats, F. Compared to hex bolt, the square head bolt is not so prevalent in modern engineering. It is usually required during refurbishment of old project. Square Head Bolts were once the most common form of bolt, until they were replaced by hex head bolts. They are covered under **ANSI Standard B18.2.1** and are now most commonly used for aesthetic purposes to provide a rustic look .

Square head bolt design enables an easier wrench grip for nut tightening. They are usually used in new construction along with square plate washer and taper washers. There is also a requirement to mimic an older fastener aesthetic in both new and old buildings.Square bolts are now most commonly used for aesthetic purposes to provide a rustic look in a new structure or to match existing fasteners in an older structure. Square lag screws are also used for these purposes. Crossarm or machine bolts are commonly supplied for the utility industry and included an added cone point.

ANSI B 18.2.1 - 1996 Square Bolts



Screw Thread d	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	1-3/8	1-1/2

d		0.25	0.3125	0.375	0.4375	0.5	0.625	0.75	0.875	1	1.125	1.25	1.375	1.5
PP	UNC	20	18	16	14	13	11	10	9	8	7	7	6	6
d_s	max	0.26	0.324	0.388	0.452	0.515	0.642	0.768	0.895	1.022	1.149	1.277	1.404	1.531
	min	0.237	0.298	0.36	0.421	0.482	0.605	0.729	0.852	0.976	1.098	1.223	1.345	1.47
s	Nominal Size	3/8	1/2	9/16	5/8	3/4	15/16	1-1/8	1-5/16	1-1/2	1-11/16	1-7/8	2-1/16	2-1/4
	max	0.375	0.5	0.562	0.625	0.75	0.938	1.125	1.312	1.5	1.688	1.875	2.062	2.25
	min	0.362	0.484	0.544	0.603	0.725	0.906	1.088	1.269	1.45	1.631	1.812	1.994	2.175
e	max	0.53	0.707	0.795	0.884	1.061	1.326	1.591	1.856	2.121	2.386	2.652	2.917	3.182
	min	0.498	0.665	0.747	0.828	0.995	1.244	1.494	1.742	1.991	2.239	2.489	2.738	2.986
k	Nominal Size	11/64	13/64	1/4	19/64	21/64	27/64	1/2	19/32	21/32	3/4	27/32	29/32	1
	max	0.188	0.22	0.268	0.316	0.348	0.444	0.524	0.62	0.684	0.78	0.876	0.94	1.036
	min	0.156	0.186	0.232	0.278	0.308	0.4	0.476	0.568	0.628	0.72	0.812	0.872	0.964
r	max	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.06	0.09	0.09	0.09	0.09	0.09
	min	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
b	L≤6	0.75	0.875	1	1.125	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25
	L＞6	1	1.125	1.25	1.375	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5