

TABLE 3 Mechanical Requirements
Nuts with UNC, 8 UN, 6 UN and Coarser Pitch Threads

Grade of Nut	Nominal Nut Size, in.	Style of Nut	Proof Load Stress, ksi ^A		Hardness			
			Non-Zinc-Coated Nuts ^B	Zinc-Coated Nuts ^B	Brinell		Rockwell	
					min	max	min	max
O	¼ to 1½	square	69	52	103	302	B55	C32
A	¼ to 1½	square	90	68	116	302	B68	C32
O	¼ to 1½	hex	69	52	103	302	B55	C32
A	¼ to 1½	hex	90	68	116	302	B68	C32
B	¼ to 1	hex	120	90	121	302	B69	C32
B	1⅛ to 1½	hex	105	79	121	302	B69	C32
D ^C	¼ to 1½	hex	135	135	159	352	B84	C38
DH ^D	¼ to 1½	hex	150	150	248	352	C24	C38
DH3	½ to 1	hex	150	150	248	352	C24	C38
A	¼ to 4	heavy hex	100	75	116	302	B68	C32
B	¼ to 1	heavy hex	133	100	121	302	B69	C32
B	1⅛ to 1½	heavy hex	116	87	121	302	B69	C32
C ^C	¼ to 4	heavy hex	144	144	143	352	B78	C38
C3	¼ to 4	heavy hex	144	144	143	352	B78	C38
D ^C	¼ to 4	heavy hex	150	150	159	352	B84	C38
DH ^D	¼ to 4	heavy hex	175	150	248	352	C24	C38
DH3	¼ to 4	heavy hex	175	150	248	352	C24	C38
A	¼ to 1½	hex thick	100	75	116	302	B68	C32
B	¼ to 1	hex thick	133	100	121	302	B69	C32
B	1⅛ to 1½	hex thick	116	87	121	302	B69	C32
D ^C	¼ to 1½	hex thick	150	150	159	352	B84	C38
DH ^D	¼ to 1½	hex thick	175	175	248	352	C24	C38
Nuts with UNF, 12 UN, and Finer Pitch Threads								
O	¼ to 1½	hex	65	49	103	302	B55	C32
A	¼ to 1½	hex	80	60	116	302	B68	C32
B	¼ to 1	hex	109	82	121	302	B69	C32
B	1⅛ to 1½	hex	94	70	121	302	B69	C32
D ^C	¼ to 1½	hex	135	135	159	352	B84	C38
DH ^D	¼ to 1½	hex	150	150	248	352	C24	C38
A	¼ to 4	heavy hex	90	68	116	302	B68	C32
B	¼ to 1	heavy hex	120	90	121	302	B69	C32
B	1⅛ to 1½	heavy hex	105	79	121	302	B69	C32
D ^C	¼ to 4	heavy hex	150	150	159	352	B84	C38
DH ^D	¼ to 4	heavy hex	175	150	248	352	C24	C38
A	¼ to 1½	hex thick	90	68	116	302	B68	C32
B	¼ to 1	hex thick	120	90	121	302	B69	C32
B	1⅛ to 1½	hex thick	105	79	121	302	B69	C32
D ^C	¼ to 1½	hex thick	150	150	159	352	B84	C38
DH ^D	¼ to 1½	hex thick	175	175	248	352	C24	C38

^A To determine nut proof load in pounds, multiply the appropriate nut proof load stress by the tensile stress area of the thread. Stress areas for UNC, UNF, and 8 UN thread series are given in Table 4.

^B Non-zinc-coated nuts are nuts intended for use with externally threaded fasteners which have a plain (nonplated or noncoated) finish or have a plating or coating of insufficient thickness to necessitate overlapping the nut thread to provide assemblability. Zinc-coated nuts are nuts intended for use with externally threaded fasteners which are hot-dip zinc-coated, mechanically zinc-coated, or have a plating or coating of sufficient thickness to necessitate overlapping the nut thread to provide assemblability.

^C Nuts made in accordance to the requirements of Specification A 194/A 194M, Grade 2 or Grade 2H, and marked with their grade symbol are acceptable equivalents for Grades C and D nuts. When A 194 zinc-coated inch series nuts are supplied, the zinc coating, overlapping, lubrication and rotational capacity testing shall be in accordance with Specification A 563.

^D Nuts made in accordance with the requirements of Specification A 194/A 194M, Grade 2H, and marked with its grade symbol are an acceptable equivalent for Grade DH nuts. When A 194 zinc-coated inch series nuts are supplied, the zinc coating, overlapping, lubrication and rotational capacity testing shall be in accordance with Specification A 563.

oversize by a diametral amount sufficient to permit assembly on the coated bolt thread.

7.5.3 The allowable oversize tapping shall not exceed that specified in Table 5.

8. Workmanship

8.1 Surface discontinuity limits shall be in accordance with Specification F 812/F 812M.

Fred:
see note "D"