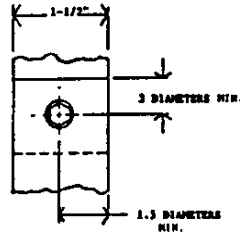
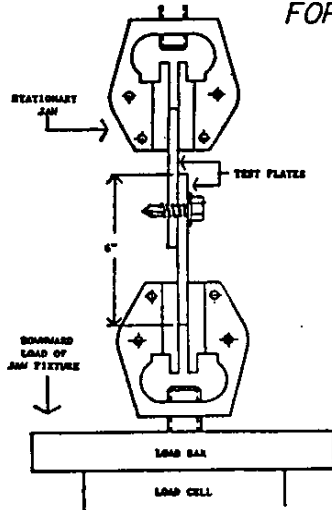
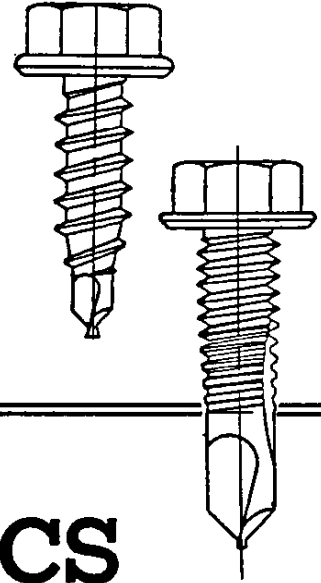


**SHEAR TEST
PROCEDURE
FOR FASTENER**

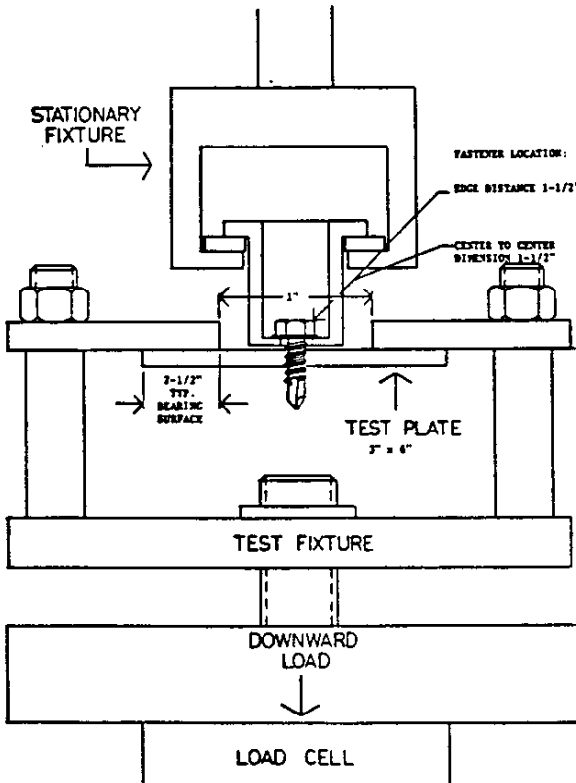


RATE OF LOADING
.2 INCHES PER MINUTE

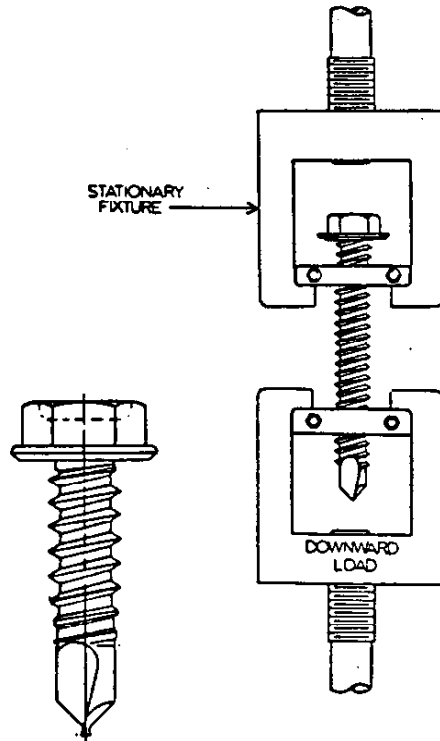


PERFORMANCE CHARACTERISTICS

**PULLOUT TEST
PROCEDURE
FOR FASTENER**

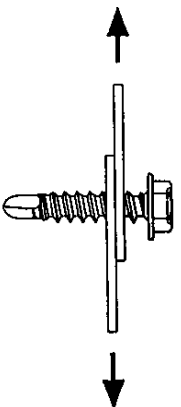


**TENSILE TEST WITH
TINIUS-OLSEN**



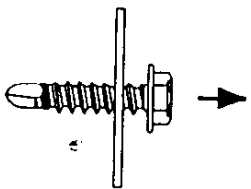


FASTENER PERFORMANCE DATA SHEET: SINGLE LAP SHEAR



DIAMETER	THREADS PER INCH	POINT	ULTIMATE SHEAR VALUES (POUNDS)																
			GAUGE																
			26-26	24-24	22-22	20-20	18-18	16-16	14-14	12-12	1/8-1/8	3/16-3/16	1/4-1/4						
12	14	1	432	703	753	1018	1452												
1/4	14	1	511	849	885	1244	1764												
8	18	2	294	496	560	740	1060	1078											
10	16	2	312	478	589	830	1206	1268											
12	14	2	365	600	623	898	1370	1758	2138										
8	18	3				730	1090	1210	1214										
10	16	3				728	1266	1540	1552										
10	24	3				751	1208	1554	1694										
12	14	3				769	1358	1620	1970	1986									
1/4	14	3				930	1442	2100	2584	2650	2820								
12	24	4								2048	2030								
12	24	5										2700	2720	2762					

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 ULTIMATE VALUES FOR DESIGN PURPOSES. FOR ADDITIONAL TECHNICAL INFORMATION, CALL 1-800-323-0720.



ITW Buildex

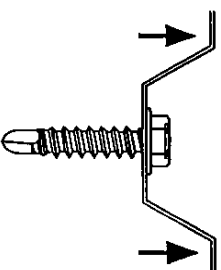
FASTENER PERFORMANCE DATA SHEET: PULLOUT

DIAMETER	THREADS PER INCH	POINT	TRAXX ULTIMATE PULLOUT VALUES (POUNDS)															
			GAUGE															
			26	24	22	20	18	16	14	12	1/8"	3/16"	1/4"					
8	18	T/2	119	193	265	298	491	703	959	1558								
		T/3	120	191	239	285	470	663	910	1424								
		T/1	148	241	311	357	565	826	1111	1796								
10	16	T/2	131	214	272	368	547	784	1033	1653								
		T/3	124	208	266	299	499	708	967	1474								
		T/1	121	200	251	333	495	701	900	1375	2612							
12	14	T/1	158	261	338	390	649	908	1259	1949								
		T/2	156	243	283	375	605	848	1181	1856	3520							
		T/3	142	211	289	341	551	757	1063	1631	2998							
12	24	T/4					495	697	986	1532								
		T/5					487	699	913	1527								
		MINI	208	329	428	562	800	1151										
1/4	14	T/2	166	265	314	430	645	922	1152									
		T/3	141	231	293	346	613	880	1145	1858	4550							
		T/3	140	334	271	363	556	781	1005	1678	3554							
1/4	20	T/4					554	788	1116	1803								

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FASTENER PERFORMANCE DATA SHEET: PULLOVER



DIAMETER	THREADS PER INCH	POINT	HEAD STYLE	ULTIMATE PULLOVER VALUES (POUNDS)					
				STEEL GAUGE					
12	14	1	HWH	26	24	22	20	18	16
12	14	2	HWH	571	983	1258	1441	2176	2337
12	14	2	HWH	544	819	1107	1247	1830	2482
12	14	2	MAXISEAL	629	977	1193	1614	2641	3166
12	14	2	SCOTS	687	1029	1274	1368	2433	3039
12	14	3	HWH	550	928	1087	1452	1830	2452
12	14	3	BONDED	663	971	1151	1354	2033	2412
12	14	3	MAXISEAL	625	984	1291	1585	2732	2991
12	14	3	SCOTS	610	1013	1128	1163	1887	2305
1/4	14	1	HWH*	614	966	1149	1431	1973	2358
1/4	14	1	MAXISEAL*	642	992	1188	1673	2899	3839
1/4	14	1	SCOTS*	602	1018	1198	1382	2307	2843
1/4	14	2	HWH	684	895	1162	1347	2092	2498
1/4	14	3	HWH	598	932	1276	1393	1950	2388
1/4	14	3	BONDED	660	1027	1085	1420	2114	2537
1/4	14	3	MAXISEAL	602	987	1193	1631	2599	3142

* 5/16" ACROSS FLATS

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FASTENER PERFORMANCE DATA SHEET: HARDENED CARBON STEEL - TENSILE, SHEAR, & TORSIONAL



THREAD DIAMETER	THREADS PER INCH	THREAD FORM	MAX. ROOT DIAMETER (INCHES)	AREA ROOT DIAMETER (SQ. INCHES)	ULTIMATE TENSILE (LBS.)	STRESS TENSILE (PSI)	MIN. TENSILE (LBS.)	THEORETICAL SHEAR 60% MIN. TENSILE (LBS.)	ULTIMATE SHEAR (LBS.)	AVERAGE ELONGATION @ ULTIMATE TENSILE (INCHES)	MINIMUM TORSIONAL (IN.-LBS.)
10	16	SPACED THREAD	0.141	0.0156	2420	155,128	1936	1162	1400	0.053	61
10	24	MACHINE THREAD	0.139	0.0152	2702	177,763	2162	1297	1500	0.062	65
12	14	SPACED THREAD	0.164	0.0211	3472	164,549	2778	1667	2000	0.063	92
12	24	MACHINE THREAD	0.165	0.0214	3775	176,401	3020	1812	2100	0.053	100
12	24	MODIFIED TEKS/5	0.180	0.0254	3985	156,889	3188	1913	2200	0.055	130
1/4	14	SPACED THREAD	0.192	0.0290	5075	175,000	4060	2436	2600	0.082	150
1/4	20	MACHINE THREAD	0.189	0.0281	4825	171,708	3860	2316	2700	0.082	168

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