



ULTIMATE VALUES

Modern design and high performance

U2 Fasteners Ultimate Withdrawal and Pull-Through Values

Screw Type and Diameter		ULTIMATE PULL-THROUGH VALUES (P) ARE IN POUNDS PER INCH (LBS/IN.)		
		Specific Gravities		
		0.36	0.55	LVL 0.50
Universal Screw	# 9	294	422	841
	# 10	375	550	1,018
	# 12	362	689	1,328
Construction Screw	# 10	845	1,874	1,936
	# 5/16	1,458	1,989	2,474
	# 3/8	1,554	2,251	2,712
316 SS Universal Screw	# 9	287	-	468
	# 10	332	-	552
316 SS Construction Screw	# 5/16	1,764	2,498	2,575

* Pull-through testing performed in accordance with ASTM D 1073

Screw Type and Diameter		ULTIMATE WITHDRAWAL VALUES (W) ARE IN POUNDS PER INCH OF THREAD PENETRATION		
		Specific Gravities		
		0.36	0.55	LVL 0.50
Universal Screw	# 9	375	717	761
	# 10	369	666	794
	# 12	485	856	860
Construction Screw	# 10	453	581	739
	# 5/16	592	887	830
	# 3/8	565	1,016	988
316 SS Universal Screw	# 9	697	-	860
	# 10	1,004	-	1,108
316 SS Construction Screw	# 5/16	1,098	1,553	1,301

* Withdrawal test performed in accordance with ASTM D1761. Withdrawal values can be multiplied by the thread length of thread penetration into the main member (including tip)

Fastener Steel Tested Strength (As Tested-NO FOS APPLIED) Ultimate Loads

FASTENER DESIGNATION	FASTENER SIZE	Minor Thread (ROOT) Diameter, D1(in.)	Unthreaded Shank Diameter (in)	Major Thread (OUTSIDE) Diameter d (in.)	Bending Yield (Fyb) (psi)	Tensile (lbf)	Shear Thread (lbf)	Shear Shank (lbf)
Fine Screw 316 Stainless	# 8	0.104	0.116	0.159	150,000	982	765	773
	# 9	0.113	0.131	0.176	163,000	1,275	966	982
Universal Screw 316 Stainless Steel	# 9	0.113	0.131	0.176	168,000	1,426	954	-
	# 10	0.130	0.146	0.197	187,000	1,605	1,201	1,222
Construction Screw 316 Stainless Steel	# 5/16	0.170	0.197	0.274	200,000	3,202	2,328	2,622
Fine Screw	#8	0.104	0.116	0.159	189,571	1,286	868	1,035
	#9	0.113	0.131	0.176	187,000	1,860	931	1,159
Universal Screw	#9	0.113	0.131	0.176	215,000	1,770	1,012	-
	#10	0.130	0.146	0.197	220,000	2,414	1,208	1,570
	#12	0.154	0.172	0.237	235,000	3,336	1,813	2,314
Construction Screw	#10	0.130	0.146	0.197	225,000	2,304	1,239	-
	#1/4				233,000	3,461	2,144	2,356
	#5/16	0.170	0.197	0.274	220,000	3,825	2,173	2,895
	#3/8	0.194	0.225	0.312	215,000	5,012	2,841	4,086

THESE FIGURES ARE ULTIMATE LOADS AND ARE NOT REDUCED BY ANY SAFETY FACTORS. FOR SAFETY FACTOR REQUIREMENTS IN YOUR AREA, CONTACT YOUR LOCAL BUILDING OFFICIAL, ARCHITECT OR ENGINEER OR FOR MORE INFORMATION SEE ER-454.



CONSTRUCTION SCREW



UNIVERSAL SCREW