



Tap-Flex™ Thread-Forming Structural Screws

Increased thread engagement with strength and ductility



Feature a unique thread profile to ease installation and increase performance.

Specifications

- Diameters: 3/8", 1/2", and 5/8"
- Head Style: Hex washer
- Threads: E-Form® five-lobe thread forming
- Material: Alloy steel
- Finish: Silver Stalgard® SUB coating
- Heat Treat: Grade 5; meets ASTM A449 specifications (120 KSI strength)

Features and Benefits

- E-Form thread overcomes friction build-up and reduces drive torque
- Roll forms own work-hardened thread to resist loosening and provide enhanced pull-out values
- Virtually immune to delayed embrittlement failures
- Stalgard SUB coating provides 2000 hours of salt spray resistance (per ASTM B117)

Size	Catalog No.	Finish	Load-Bearing Length	Quantity	Weight
3/8" Diameter, Hex Washer Head					
3/8-16 x 1-1/2	ESU310	Stalgard SUB	1.00"	500	34
3/8-16 x 2	ESU320	Stalgard SUB	1.49"	500	40
3/8-16 x 2-1/2	ESU330	Stalgard SUB	1.99"	500	46
1/2" Diameter, Hex Washer Head					
1/2-13 x 1-1/2	ESU410	Stalgard SUB	0.875"	250	36
1/2-13 x 2	ESU420	Stalgard SUB	1.365"	250	41
1/2-13 x 2-1/2	ESU430	Stalgard SUB	1.865"	250	47
5/8" Diameter, Hex Washer Head					
5/8-11 x 1-1/2	ESU510	Stalgard SUB	0.800"	250	46
5/8-11 x 2	ESU520	Stalgard SUB	1.24"	150	33
5/8-11 x 2-1/2	ESU530	Stalgard SUB	1.74"	150	38

Performance Data

Seating Torque (inlbs)

Fastener Size	6063 T5 Aluminum			6061 T6 Aluminum			6063 T5 on 1018 Steel				6061 T6 on 1018 Steel			
	1/8	3/16	1/4	1/8	3/16	1/4	1/8	3/16	1/4	3/8	1/8	3/16	1/4	3/8
3/8-16	171	214	285	231	328	490	412	638	805	858	389	581	740	771
1/2-13	255	368	471	338	547	767	558	955	1375	1895	513	807	1189	1658
5/8-11	261	486	662	343	694	943	654	1258	1662	2976	600	1061	1492	2083

Note: These numbers were calculated from the maximum reading (failure torque) during drive-to-fail testing (Seating Torque = Failure Torque x .75).

Shear (Ultimate lbs)

Fastener Size	6063 T5 Aluminum			6061 T6 Aluminum			6063 T5 to 1018 Steel				6061 T6 to 1018 Steel			
	1/8 to 1/8	3/16 to 3/16	1/4 to 1/4	1/8 to 1/8	3/16 to 3/16	1/4 to 1/4	1/8 to 1/8	3/16 to 3/16	1/4 to 1/4	1/4 to 3/8	1/8 to 1/8	3/16 to 3/16	1/4 to 1/4	1/4 to 3/8
3/8-16	2321	3476	4979	3560	5205	6885	5015	6560	6975	6965	5711	8701	7721	7611
1/2-13	2784	3669	5230	4482	6167	8718	4773	6455	8396	8689	6052	9769	13976	13340
5/8-11	2696	3775	5455	4216	6768	9292	4558	6196	8290	8060	5967	9577	13124	15309

Pull Out (Ultimate lbs)

Fastener Size	6063 T5 Aluminum			6061 T6 Aluminum			1018 Steel			
	1/8	3/16	1/4	1/8	3/16	1/4	1/8	3/16	1/4	3/8
3/8-16	1311	2365	3281	2080	3805	5981	3501	5986	11440	11862
1/2-13	1431	2230	3694	2190	3869	7527	3668	7411	13613	20440
5/8-11	1755	2907	4191	2641	5202	8210	4500	8300	16678	26680

Identification



E-Form® Profile