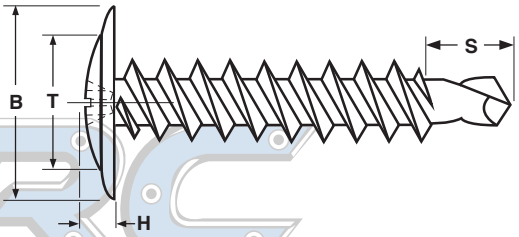
Modified Truss Phillips SELF-DRILLING



Modified Truss Head Phillips Self Drilling Screws

Nominal Size & Number of Threads per inch	B		H		D1		D2		Point Size	S		Phillips Driver Size
	Overall Head Diameter		Total Head Height		Minor Diameter		Major Diameter			Protrusion Allowance		
	Max	Min	Max	Min	Max	Min	Max	Min		Max	Min	
4-24	.261	.242	.079	.066	.086	.081	.114	.109	#2	.112	.082	1
6-20	.401	.385	.099	.070	.104	.098	.139	.131	#2	.158	.117	2
8-18	.446	.426	.098	.082	.122	.116	.165	.161	#2	.197	.149	2
10-16	.441	.425	.098	.079	.141	.135	.189	.183	#2	.228	.118	2
10-16	.441	.425	.098	.079	.141	.135	.189	.183	#3	.307	.256	2
12-14	.464	.440	.124	.101	.164	.156	.215	.208	#2	.250	.205	3
12-14	.464	.440	.124	.101	.164	.156	.215	.208	#3	.315	.275	3
1/4-14	.583	.551	.134	.118	.220	.214	.246	.239	#3	.374	.334	3

Tolerance on Length	Nominal Screw Size	Nominal Screw Length		
		Thru 1 in.	Over 1" to 2" incl.	Over 2 in.
	#4 thru #10	+0, -.03"	+0, -.047	+0, -.06
		Up to 3/4", incl.	3/4 to 1 1/2", incl.	Over 1 1/2"
	#12 thru 1/4"	+0, -.03"	+0, -.05"	+0, -.06"

NOTE: There is no single standard for Modified Truss self-drilling screws. These values are offered as a guide; deviations from these specifications may occur.

Description	A fastener with an extra wide head, twinfast thread and self drilling point. The head is an integrally formed round washer with a low rounded top that is approximately 75% the diameter of the washer.		
Applications/ Advantages	Common usage is to attach wire or metal lathe to metal studs of a thickness between 12 - 20 gauge. The head design offers low clearance and an extra large bearing surface. The recommended drive speed for installation is 2500 rpm.	Offers superior corrosion resistance, but can only be used in softer materials. Hardness of the material to be drilled should be a minimum of 10-20 Rockwell hardness points less than the fastener.	Not as corrosion-resistant as the 18-8 variety but will drill through harder materials than the 18-8 screw. The same hardness gradient rule applies: material drilled should be a minimum of 10-20 Rockwell hardness points less than the fastener.
Material	AISI 1016 - 1022 or equivalent steel.	18-8 stainless	410 stainless
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 625°F minimum.	-	Screws shall be hardened and tempered by heating to 1800°-1900°F sufficient for austenitization, held for at least 1/2 hour and rapid air or oil-quenched then reheating to 500°-600°F for at least 1 hour and air cooled to provide the required tensile, yield and hardness properties.
Surface Hardness	Rockwell C 52 - 58	-	Rockwell C 55 minimum
Case Depth	#4 & #6 diameters: .002 - .007 #8 thru #12 diameters: .004 - .009 1/4" diameter: .005 - .011	-	-
Core Hardness	Rockwell C 32 - 40 (after tempering)	-	Rockwell C38 - 42 (after tempering)
Plating	See Appendix-A for details.	Usually supplied without a secondary finish.	