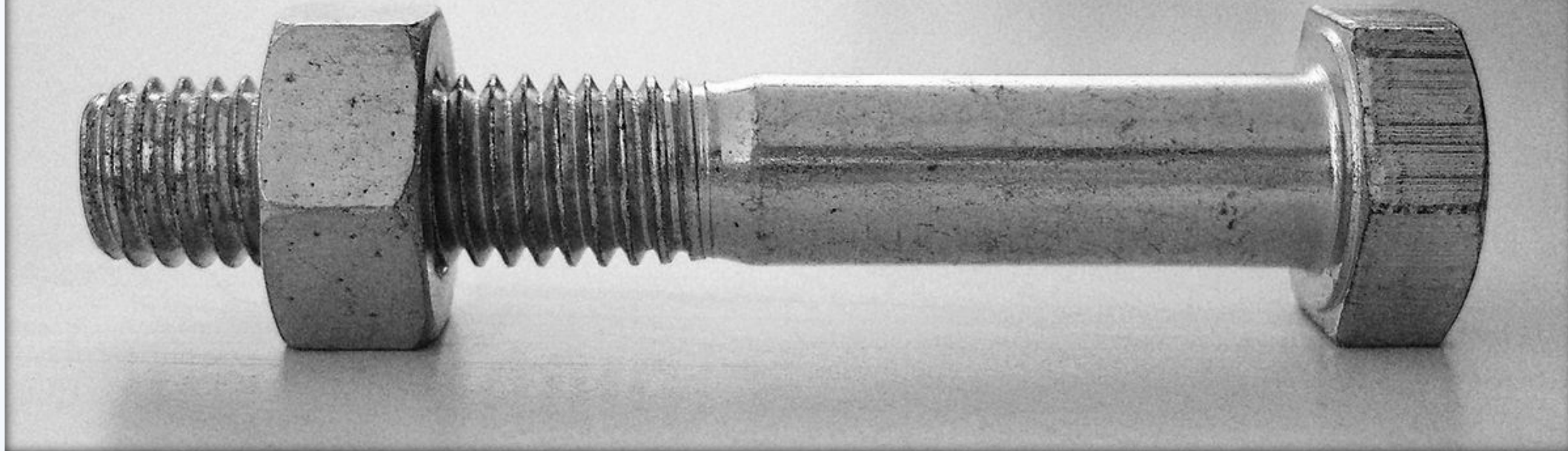


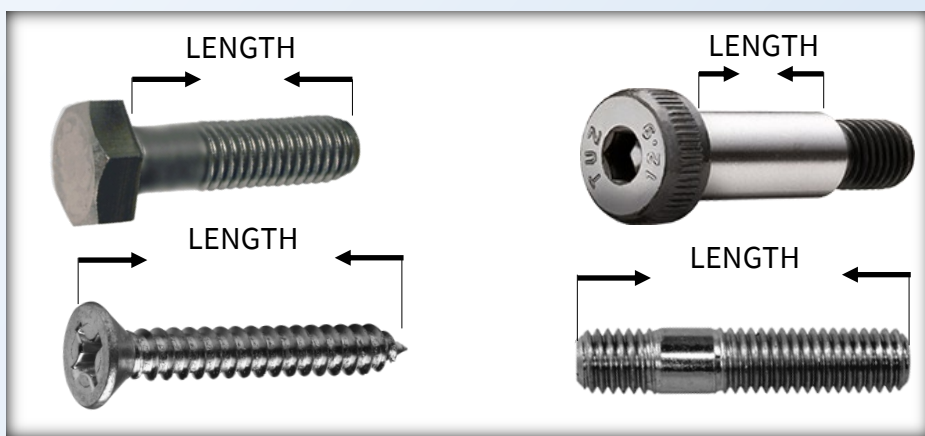
“HOW TO PROPERLY MEASURE A BOLT”



LENGTH

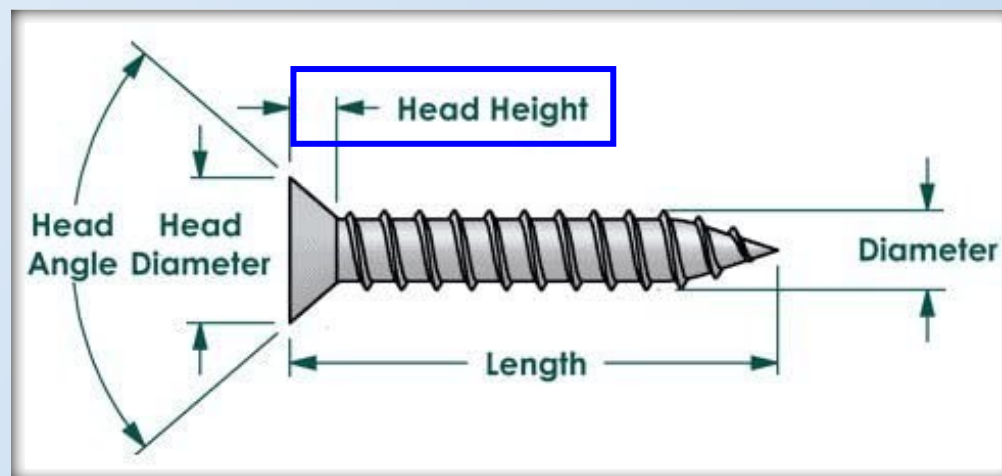
The length of a fastener is measured from the intersection of the largest part of the head & the bearing surface to the extreme point of the screw. There are exceptions:

- (1) A SHOULDER SCREW is the length of the shoulder ONLY!
- (2) A HEADLESS FASTENER is from one end to the other.



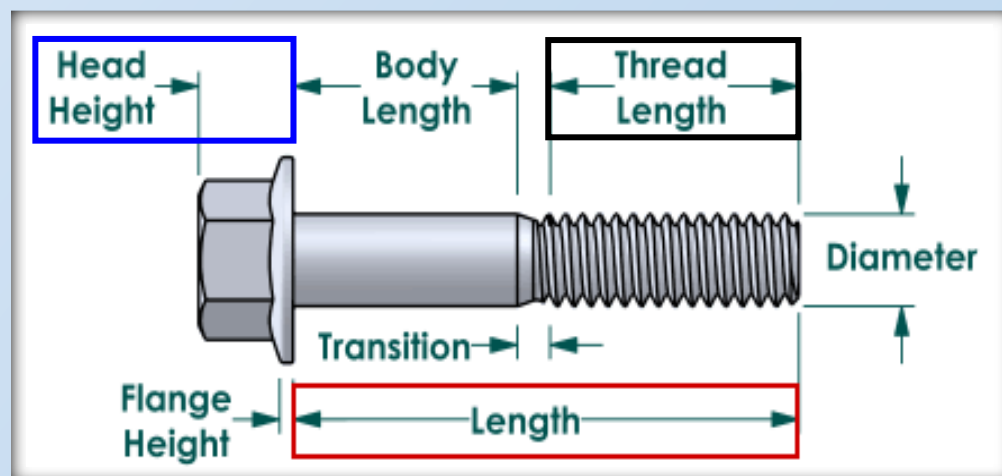
HEAD HEIGHT

The head height is the overall distance from the extreme top to the bearing surface. The exception is countersunk heads. In this case, is measured from the extreme top to the intersection of the bearing surface with the shank of the fastener.



THREAD LENGTH

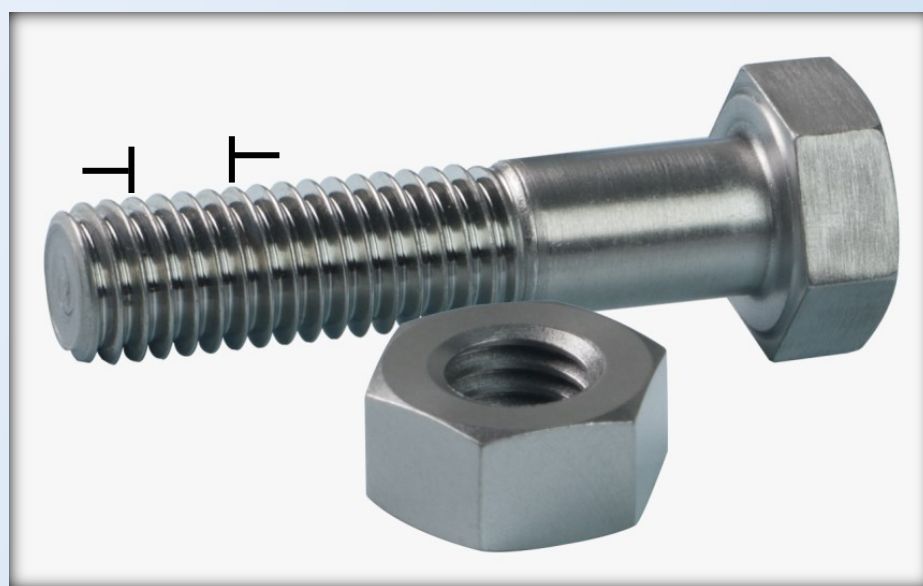
Thread Lengths Data: The length-of-thread on most screw and bolt products usually has a direct relationship either to the diameter, of the thread or the length of the part. This chart explains the formula upon which thread lengths are based for the various products. It also indicates the approximate diameter of the unthreaded portion of the shank depending on whether the product is a rolled or cut thread type.



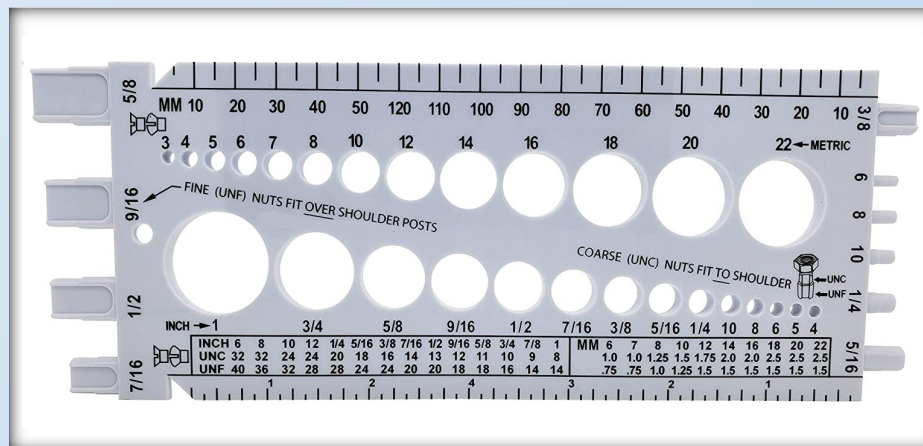
PRODUCT	THREAD LENGTH FORMULA	DIAMETER OF UNTHREADED SHANK (IF ANY)
Finished Hexagon Head Machine bolts and Cap Screws	6" and shorter: 2 diameters plus 1/4" Longer than 6": 2 diameters plus 1/2"	Equal to major diameter of thread
Finished Hexagon Head Silicon Bronze Machine Bolts	Fully threaded up to 2" in length. Over 2" in length minimum of 2" of thread.	No less than minimum pitch diameter or more than maximum major diameter.
Carriage Bolts	6" and shorter: 2 diameters plus 1/4" Longer than 6": 2 diameters plus 1/2"	Normally equal to major diameter of threads; can be pitch diameter or over depending upon specification.
Type A Tap End Studs	Normally 2 diameters plus 1/4" on the nut end (Class 2A), and one and one-half diameters on the stud end (Class 5).	Normally equal to major diameter or threads.
Type B Double End Studs	Normally based on the formula of 2 diameters plus 1/4"	
Type C Continuous Threaded Studs	Threaded entire length	
Hanger Bolts	Nut end is class 2A national coarse and is threaded to shoulder. Lag thread length is 1/8' to 1/2' more than half the overall length of the bolt.	Equal to major diameter of thread.
Set Screws	Fully threaded	
Tapping Screws	Fully threaded	
Wood Screws	Approximately 2/3 of length of screw.	Equal to nominal diameter of thread.
Machine Screws and Screw Bolts	Fully threaded up to 2' in length. Over 2' in length, minimum of 1-3/4' of thread	Not less than minimum pitch diameter or more than maximum major diameter.

LOCKING FEATURE LOCATION

Standard placement of locking patch, pellet, or strip allows for a minimum of a 1-1/2 thread lead.



STANDARD PATCH OR INSERT PLACEMENT
APPROXIMATELY FIVE (5) THREADS



THREAD MEASURING GAUGE
Available from your Stock'D Supply Team



Your Stock'd Supply representative is trained to assist you in the decisions you make each day in buying fasteners.

They stand ready at your nearest branch to help you solve your fastener dilemma.

Mark Novak, Chief Fastener Specialist