

HEAD STYLES



Binding - undercut unless otherwise specified -not recommended for phillips recess



Fillister - deep slot used for counter bored holes



Flat Fillister - same as standard fillister without oval top



Flat 82± - used where flush surface is desired



Flat 100± - larger head than 82° used for thin metal soft plastic



Flat Trim - same as 82± except diameter and countersink depth reduced



Flat Undercut - standard 82± with lower 1/3 countersink removed for short screws



Hexagon - manufactured as trim hex or indented hex



Hex Washer - same as hexagon with washer section



Oval - same as flat head with rounded surface for appearance



Oval Undercut - similar to flat undercut with rounded surface



Oval Trim - same as oval - smaller diameter and countersink



Pan - recommended to replace round, truss binder



Round - general purpose (see pan head)



Round Countersunk - bolts only - similar to flat head with no driving recess



Round Washer same as round head with integral washer for bearing surface.



Square - bolts only - large bearing surface for wrench tightening



Square Countersunk - for use on plow bolts



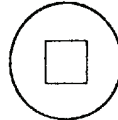
Square (Set Screw) - recommended for high torque assembly



Truss - similar to round head with larger diameter (see pan head)

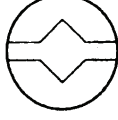
DRIVING RECESS

CROSS-RECESSED (PHILLIPS)



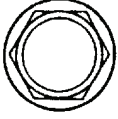
SQUARE SOCKET

POZI-DRIV



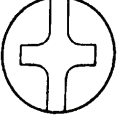
SLOT & SQUARE SOCKET

FREARSON



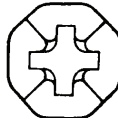
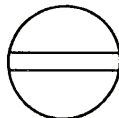
INDENT HEX WASHER

PHILLIPS & SLOT



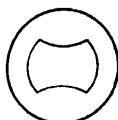
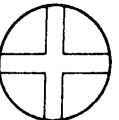
INDENT SLOTTED HEX WASHER

SLOT

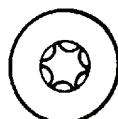


PHILLIPS PYRAMID

CROSS-SLOT



CLUTCH



TORX®

Refer to the listing opposite page 1 for head illustrations by size.

POINT STYLES

TYPE AB



TYPE 17



TYPE BP



TYPE A



TYPE B



TYPE BT(25)



TYPE C



TYPE T(23)



TYPE D(1)



TYPE F



TYPE G



TYPE BF



TYPE U



TYPE TT



TYPE CA



DOG POINT



FASTENER TERMINOLOGY

- Bolt:** An externally threaded, headed fastener. Difference between a bolt and a screw is: a bolt is generally used through a hole with a mating nut; a screw is used in a threaded hole without a nut.
- Class Of Thread:** A system used to distinguish thread tolerance differences. Classes 1A, 2A, and 3A apply to external threads, and 1B, 2B, and 3B to internal threads. Classes 2 and 3 apply to both external and internal threads.
- Crest:** The outermost tip of male thread from the fastener cylinder, or innermost tip of female thread.
- Driving Recess:** A recess in the fastener head designed to accept a driving tool.
- External Thread:** The male thread. Thread outside of the cylinder surface.
- Internal Thread:** Female thread. Thread on the inside surface of a cylinder or cone.
- Left-Hand Thread:** Thread that winds counter-clockwise from the starting end of a fastener.
- Major Diameter:** The largest diameter of a screw thread, on a straight thread it is the diameter of an imaginary cylinder which would pass through the crest of an external thread or the root of an internal thread.
- Minor Diameter:** On a straight thread it is the diameter of an imaginary cylinder bounding the root of an external thread or the crest of an internal thread.
- Nominal Diameter:** Basic diameter that determines the size and dimensional limits of fasteners.
- Pitch:** Distance from a point of a screw thread to a corresponding point on the next thread measured parallel to the axis.
- Right-Hand Thread:** A thread that winds clockwise from the starting end of a fastener (when viewed from the starting end).
- Screw:** A headed fastener which is externally threaded.
- Sems®:** A term applied to preassembled screw and washer assemblies. Washers are placed on screws before roll threading. Threads being of larger diameter than the washer hole thus prevent the washer from slipping off the screw.
- Stud:** A threaded rod - at both ends or for entire length.
- Tapping Screw:** A hardened thread screw made to cut or form its own mating thread in an untapped hole.
- Teks®:** A screw which drills its own hole and then threads in.
- Thread Pitch:** The distance from the crest of one thread to crest of another.

PLATINGS AND FINISHES

Finish	Color	Anti-Corrosion Properties	Characteristics And Uses		
Black Oxide	Black	Good (Interior Only) - 8 Hr. Salt Spray	Most Metals	Decorative finish. Used only on interior applications.	
Black Zinc	Black	Excellent - 72 Hour Salt Spray	All Metals	Rich and lustrous. With or without lacquering.	
Cadmium	Bright Silver-Gray Dull or Burnished	Very Good - 24 Hour Salt Spray	Most Metals	Non-porous metallic plating. Rich appearance, good rust resistance, low cost, good electrical conductivity. Bright silver-gray dull gray or black electroplated finish.	
Chromium (Chrome)	Bright Blue-White	Excellent - 24 Hour Salt Spray	All Metals	Used when a beautiful finish is desired. Bright blue-white lustrous appearance. Electroplated.	
Dichromate Dip	Rainbow	Excellent	All Metals	A yellow, brown, green or iridescent colored coating. Increases rust resistance. Add to Zinc or Cadmium plating.	
E-Coat	Black	Excellent - 168 Hour Salt Spray	All Metals	Added protection containing corrosion inhibitors. Excellent for exterior applications.	
Iridite	Green Olive drab Bronze	Blue Red Black	Excellent	All Metals	Coloring dip which adds rust resistance. Usually applied on Zinc or Cadmium.
JS-500	Chrome-like luster	Excellent - 500 Hour Salt Spray	All Metals	Outstanding corrosion resistant finish that provides economical corrosion protection without adversely affecting dimensions.	
Mechanical Zinc	Gray	Very Good - 48 Hour Salt Spray	All Metals	A chemical process of rust-proofing steel.	
Nickel	Silver	Very Good - 24 Hour Salt Spray	All Metals	A hard, stable, dull white or bright burnished finish. Used for appliances and hardware.	
Parkerized	Black	Excellent - 72 Hour Salt Spray	Ferrous Metals	Added protection when oiled with a non-drying petroleum oil containing corrosion inhibitors. Good lubricity.	
Phosphating	Dull, Gray, Black, or Blue	Excellent - 72 Hour Salt Spray	Ferrous Metals	A chemical process of rust-proofing steel.	
Passivating	_____	Excellent	Stainless Steels	For stainless steels. A nitric acid dip to remove foreign material and brighten finish.	
Zinc Electrogalvanized	Gray	Very Good - 24 Hour Salt Spray	All Metals	Good rust resistance, appearance & low cost.	
Zinc Electroplated	Blue To Blue-White-Gray	Very Good - 24 Hour Salt Spray	All Metals	Commonly used finish.	