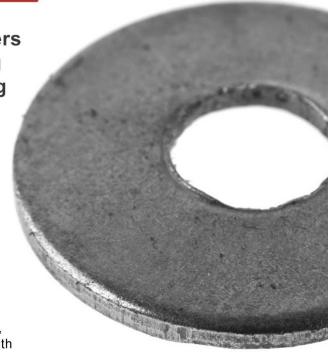
# **Washer Types**

At Fastener SuperStore, we specialize in washers of all types, and we are committed to delivering high-quality materials for all of your contracting and construction projects. See our full product listing below, how washers are used for different applications, and information about what Fastener SuperStore can do for you.



# FLAT WASHERS



### Flat Washers

Flat washers include a wide variety of styles, materials, and finishes. They can be used with machine screws and a variety of bolts.

USS flat washers are used for a variety of applications. SAE flat washers are common to the automotive industry.

# Material / Finish Options:

Steel / Zinc Steel / Black Oxide Steel / Black Zinc Steel / Zinc Yellow Steel / Hot Dip Galvanized Nylon 18-8 Stainless Steel 18-8 Stainless Steel / Black Oxide 316 Stainless Steel 300 Series Stainless Steel Grade 9 / EcoGuard Aluminum

# **FENDER WASHERS**



# **Fender Washers**

Featuring larger outer diameter options than flat washers, fender washers offer a larger bearing surface while using a thinner gauge metal.

# Material / Finish Options:

Steel / Zinc
Steel / Black Oxide
Steel / Hot Dip Galvanized
18-8 Stainless Steel
18-8 Stainless Steel / Black Oxide
316 Stainless Steel

# FASTENER SUPERSTORE

# Washer Styles cont.

# **LOCKWASHERS**

# INTERNAL TOOTH



# Internal Tooth Lockwashers

Internal Tooth Lockwashers feature twisted internal prongs that allow them to dig and lock into the adjacent material, while providing a finished look on the exposed outer diameter.

# Material / Finish Options:

Steel / Zinc Steel / Black Oxide Steel / Black Zinc Steel / Zinc Yellow 18-8 Stainless Steel 410 Stainless Steel







### **External Tooth Lockwashers**

External Tooth Lockwashers feature twisted prongs extending from the outer edge and offer a larger locking radius than other lockwashers, providing greater holding strength.

# Material / Finish Options:

Steel / Zinc

Steel / Black Oxide

Steel / Black Zinc

Steel / Zinc Yellow

18-8 Stainless Steel

18-8 Stainless Steel / Black Oxide

410 Stainless Steel

INTERNAL/EXTERNAL COMBO



# Internal / External Combo Tooth Lockwashers

Internal / External Combo Tooth Lockwashers feature twisted prongs on both the inner and outer edges. The teeth lock into the bearing surface to dig and lock with the adjacent material.

# Material / Finish Options:

Steel / Zinc Steel / Black Oxide Steel / Zinc Yellow 18-8 Stainless Steel





# Washer Styles cont.

# SPLIT LOCKWASHERS



# Split Lockwashers

Split Lockwashers feature offst split ends, which create tension when it is clamped down, creating a strong hold.

# Material / Finish Options:

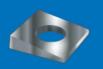
Steel / Zinc Alloy Steel / Zinc Yellow Steel / Plain Steel / Hot Dip Galvanized

Steel / Black Oxide 18-8 Stainless Steel

Steel / Black Zinc 18-8 Stainless Steel / Black Oxide

Steel / Zinc Yellow 316 Stainless Steel

# **BEVELED WASHERS**



### **Beveled Washers**

Used with structural bolts, beveled washers feature one bearing surface with an oblique angle and are useful in applications such as attaching through the flanges of an I-beam.

Available in Hardened Steel with a Plain finish.

# COUNTERSUNK FINISHING



# **Countersunk Finishing Lockwashers**

The shape of a countersunk finishing washer provides a decorative look and works with flat or oval head screws.

# Material / Finish Options:

Steel / Nickel Steel / Black Oxide Steel / Black Zinc Stainless Steel 18-8 Stainless Steel 316 Stainless Steel

# **DOCK WASHERS**



# **Dock Washers**

Dock washers offer significantly greater thickness than other washer styles. They're commonly used in dock and construction applications.

# Material / Finish Options:

Steel / Plain Steel / Hot Dip Galvanized

# **FASTENER**





# Washer Styles cont.

# **SEALING WASHERS**



# **Sealing Washers**

Sealing Washers feature a thin, conical washer that is bonded to a similarly shaped rubber-like piece. When the washers are assembled (rubber side down), they provide a seal.

# Material / Finish Options:

Steel / Galvanized 18-8 Stainless Steel

# SHOULDER WASHERS



### **Shoulder Washers**

Shoulder Washers feature an extended sleeve on the internal surface, which is inserted into the adjacent material. This allows the shoulder washer to unsulate metal screws in electrical applications. Can also be used to reduce friction between parts.

# Available in Natural White Nylon.

### STRUCTURAL WASHERS



### Structural Washers

Structural Washers are used with structural bolts and nuts.

They are manufactured from high grade steel and heat threaded.

# Available in a Plain finish.

# THRU HARD WASHERS



# Thru Hard Washers

Thru Hard Washers are designed for use with high strength hardened bolts. They offer tighter tolerances and are manufactured from higher grade steel than their counterparts.

# Material / Finish Options:

Steel / Plain Steel / Zinc Yellow Grade 9 / EcoGuard

# **FASTENER BUYING MADE SIMPLE**

The Fastener Superstore is your one stop shop for screws, nuts, bolts, washers, rivets, standoffs and more! We have everything you need right here.

- -Same Day Shipping on Most Orders
- -Order online, via phone, email or fax
- -Extended Customer Service Hours
- -Quotes Available for Larger Quantities -34,000+ Distinct Parts
- -All Pricing Online
- -No Registration Required

# FASTENER CONTROL OF THE PROPERTY OF THE PROPER



# Washer Styles cont.

# **MIL-SPEC WASHERS**

FLAT WASHERS

# Mil-Spec Flat Washers

# Material / Finish Options:

Steel / Cadmium Yellow 18-8 Stainless Steel 300 Series Stainless Steel 300 Series Stainless Steel / Black Oxide Finish Light Washer option available in 300 Series Stainless Steel

MACHINE SCREW WASHERS

# Mil-Spec Machine Screw Washers

# Material / Finish Options:

Steel / Cadmium Yellow 18-8 Stainless Steel

INTERNAL TOOTH LOCKWASHERS

# Mil-Spec Internal Tooth Lock Washers

# Material / Finish Options:

Steel / Cadmium Yellow Steel / Zinc Yellow 300 Series Stainless Steel 410 Stainless Steel

EXTERNAL TOOTH LOCKWASHERS

# Mil-Spec External Tooth Lock Washers

# Material / Finish Options:

Steel / Plain Steel / Zinc Yellow 410 Stainless Steel Grade 9 / EcoGuard

SPLIT LOCKWASHERS

# Mil-Spec Split Lock Washers

# Material / Finish Options:

Steel / Cadmiun Yellow Steel / Zinc Yellow 316 Stainless Steel 400 Series Stainless Steel

High Collar option available in Steel / Zinc Yellow or Steel / Black Phosphate



