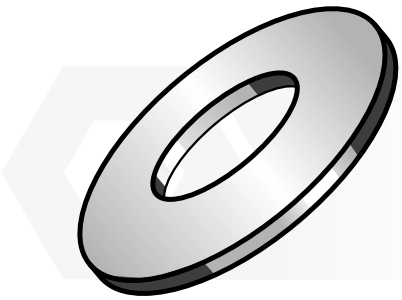
Types of Washers

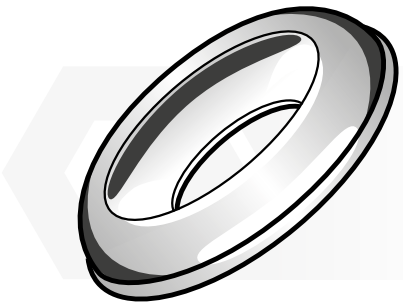
This resource gives an overview of the different types of washers stocked by Milsons. It includes information on the different types of washers (flat washers, spring washers, cup washers, etc.), their applications and material properties (metal treatments, finishes, etc.)



Belville Washer

Belville washers are a type of spring washer characterised by its conical shape. Unlike traditional flat washers, Belleville washers are designed to compress and flex under load, providing a resilient, spring-like effect. This unique design allows them to absorb shock, maintain tension, and compensate for the thermal expansion or contraction of components.

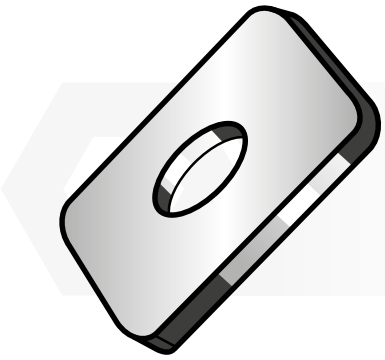
Finishes
- Stainless, 304



Cup Washer

Cup Washers are used with countersunk head self-tapping screws for aesthetic purposes. Being formed with a semi spherical shaped bottom they provide a tidy and smooth finish.

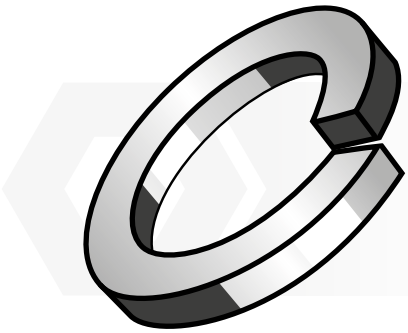
Finishes
- Stainless, 304



Square Washer

Square Washers have a square outside, and a hole in the middle. Like round washers, these are used to distribute a load over a greater surface area. They are mainly used in the construction industry for timber and concrete applications.

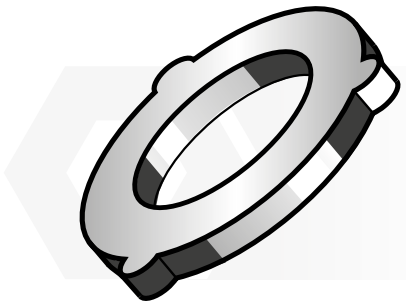
Finishes
- Galv
- Stainless, 304 & 316



Spring Washer

Spring washers, also known as split washers, are a type of lock washer. They have a split in the washer section, and the washer is formed so the ends of the split are proud. When a nut is tightened onto the washer, the ends bite into the mating surface of the nut preventing an anti-clockwise rotation and loosing of the nut.

Finishes
- Black
- Zinc
- Galv
- Stainless, 304 & 316

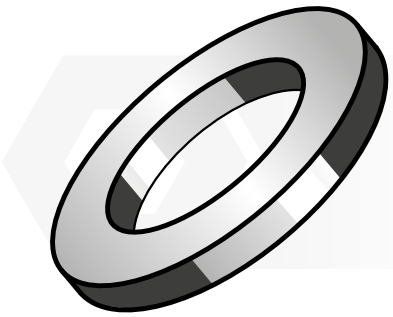


K0HSFG Structural Washers

Made from high-strength materials, Structural Washers are designed to withstand heavy loads and deformation under high stress. They are typically used in steel construction; each washer has 3 nibs around the outside making them easily identifiable as a Structural Washer.

Finishes
- Galv

Grade Label
- Class 8.8 - HSFG
- K0HSFG - 8.8

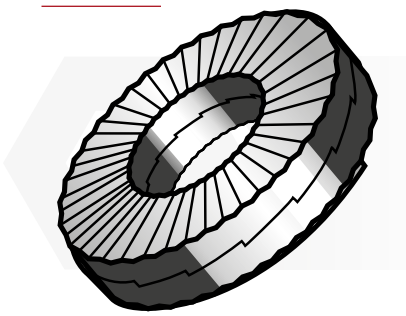


Hardened Washers

Hardened washers have been heat-treated to achieve increased hardness and strength. Unlike standard washers, hardened washers are specifically designed to withstand higher stress, wear, and impact, making them suitable for demanding applications where durability and resistance to deformation are critical. Made and stamped with identification to ASTM F436.

Finishes
- Yellow Zinc Plating

LOCK WASHERS



Wedge Lock Washer

Wedge Lock Washers are a two-part washer, with each part having cams on one side and gripping teeth on the other. When a nut is tightened onto the washer, the teeth grip the mating surfaces, causing the cams to slide onto each other. As the angle of the cam is greater than the thread pitch, this forms a wedge under the head, locking the nuts due to this tension.

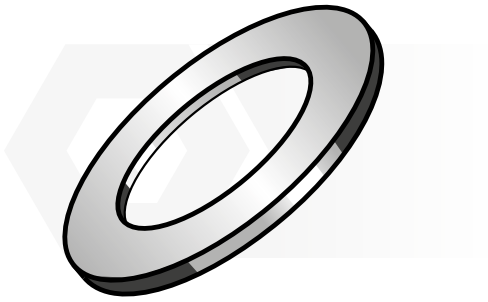
Finishes
- Zinc
- Stainless, 316

Internal & External Tooth Lock Washers

Tooth lock washers have serrated teeth either internally or externally. When a nut is tightened onto the washer these teeth bite into the mating surface which locks the nut in place. Tooth lock washers are best used on softer surfaces, as a hard surface will flatten the teeth, reducing the effectiveness of locking.

Finishes
- Stainless, 304

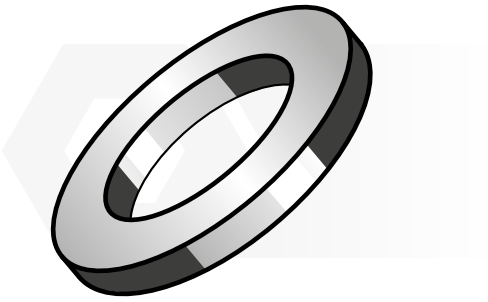
ROUND WASHERS



Light Washer

Light washers, also known as Flat washers, are a general-purpose washer used to distribute load across a greater surface area.

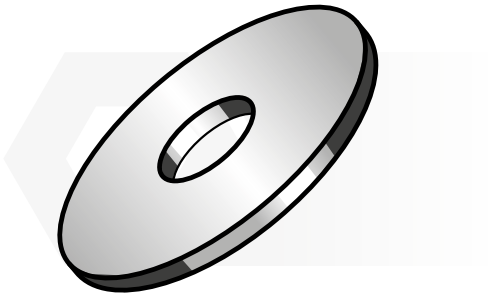
Finishes
- Brass
- Zinc
- Stainless, 304 & 316



Heavy Washer

Heavy washers are similar to light washers but with a greater thickness. This allows them to bear a greater load than a Light Washer.

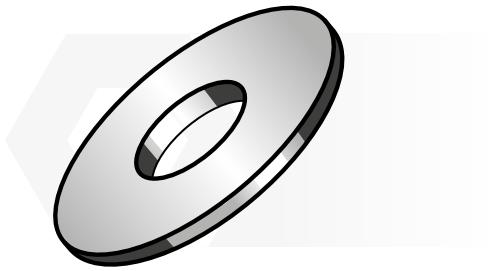
Finishes
- Black
- Zinc
- Galv
- Stainless, 304 & 316



Fender Washers

Fender washers are a type of large-diameter flat washers designed to distribute the load of a fastener over a large surface area. They are named “fender washers” because their large size and thin profile make them particularly useful in applications where a wide load distribution is needed, such as in automotive fender assemblies.

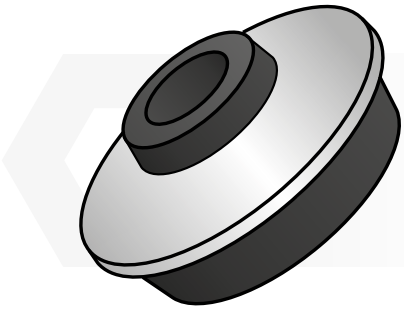
Finishes
- Zinc
- Stainless, 304 & 316



Mini Fender Washers

Mini fender washers are flat washers with a relatively large outer diameter and a small central hole, offering a broad bearing surface in a compact size. They are ideal for applications where space is limited but load distribution is still important – especially when fastening to thin or delicate materials. Commonly used in electronics, small appliances, and other precision assemblies, mini fender washers help prevent fastener pull-through and support a more secure hold in tight or lightweight spaces.

Finishes
- Zinc
- Stainless, 304 & 316



Bonded Sealing Washers

Bonded sealing washers combine a durable metal outer with a bonded rubber sealing layer to deliver both strength and watertight performance. The metal face provides structural support and load distribution, while the rubber insert compresses under fastening to create a tight, weather-resistant seal.
These washers are widely used in roofing, cladding, and external fixings where protection against water ingress, UV exposure, and temperature fluctuations is critical. EPDM-bonded options are particularly valued for their long service life and resistance to environmental degradation.

Finishes
- EDPM & Aluminium

Neoprene Washers

Neoprene Washers are made from Neoprene rubber offering a combination of sealing, cushioning, and vibration-damping properties. They are employed across various industries, including automotive, construction, industrial machinery, plumbing, and marine applications. Their ability to resist moisture, chemicals, and temperature variations make them ideal for applications requiring reliable sealing and protection.

Finishes
- Black