

# YOUR BUYING GUIDE TO BLIND RIVETS

#### TIPS TO CHOOSE THE RIGHT RIVET



**AUSTIN HARDWARE®** 

## INTRODUCTION

Blind rivets have several advantages over other permanently installed fasteners, such as solid or semi-tubular rivets, clinch fasteners, and traditional nuts and bolts. Because they can be installed from one side of the application, their use is paramount when the back side of an application is limited or non-existent. This also makes them more cost-efficient and versatile than other types of fasteners.

There are four basic elements to a blind rivet:

- 1. Material
- 2. Diameter
- 3. Grip Range
- 4. Head Style

Blind rivets are available in a wide range of materials, diameters, grip ranges, and head styles, allowing them to be used in a wide array of applications. We will explore these elements further and discuss their significance in maximizing joint integrity.





## THE FOUR BASIC ELEMENTS

#### MATERIAL

While most common blind rivets are available in aluminum, steel, and stainless steel, they are also available in copper, brass, and plastic.

#### DIAMETER

All blind rivets have a recommended hole size into which they can be installed based on the rivet diameter. This is critical because they are designed to expand and pull up within their recommended hole.

#### GRIP RANGE

This is the total material thickness in which the rivet is designed to work. When specifying a blind rivet, simply follow the manufacturer's guidelines for the total material thickness to which the rivet is designed to fasten.

#### HEAD STYLE

The selection of head style is important not only for the aesthetic of the finished piece but also for considering the strength of the materials being joined. The three most commonly available head styles are Dome Head, Countersunk, and Large Flange.





## **TYPES OF BLIND RIVETS**

#### **BREAK-STEM BLIND RIVETS**

Break-stem-type rivets are the most common type of blind rivet. They have a hollow core body with an integral mandrel. They can also be further divided into four sub-styles: open-end, Closed-End, Self-Plugging, and Structural.

#### MULTI-GRIP BLIND RIVETS

Multi-grip rivets are best suited for applications where different material thicknesses typically require several rivet sizes.

#### **DRIVE-PIN RIVETS**

Drive-pin blind rivets have a partial hole in the body and a mating pin that protrudes, positioned in the hole. The installer hammers the pin into the rivet body so that it is flush with the top of the rivet head.

#### **GROOVED BLIND RIVETS**

Grooved Blind Rivets, as the name suggests, have grooves around the body to provide enhanced gripping power for use with softer materials.





## **TYPES OF BLIND RIVETS**

#### PEEL RIVETS

Another type of blind rivet, known as a peel rivet, employs a concept similar to the trifurcating rivet but with a slightly different mechanism. With Peel rivets, the mandrel is made with knife points under its head, designed to split the rivet body into four sections upon installation. Those sections then expand and peel back, much like the petals of a flower.

#### TRIFURCATING BLIND RIVETS

The trifurcating blind rivet body has slots in the shank, which form "legs" during installation. These legs provide clamping force while spreading the clamp load of the rivet, which is essential when using them in ductile materials such as plastics. They prevent the pull-through of the installed rivet in applications where standard blind rivets would fail.

#### SOFT SET BLIND RIVETS

Soft Set Blind Rivets are similar to standard rivets but manufactured from softer materials such as aluminum. The mandrel breaks with less force than other blind rivets, making them suitable for use with more brittle materials.





The major producers of blind rivets, such as Huck, Stanley Engineered Fastening (the makers of the Pop and Avdel brands), and Industrial Rivet & Fastener, offer a myriad of choices. At Austin Hardware, we have relationships with all of these producers and the expertise to help guide you to the right decision for your applications. Contact your Austin Hardware sales representative or <u>your</u> <u>nearest Austin Hardware location</u> to consult our experts.

TO READ OUR COMPLETE GUIDE TO BUYING RIVETS AND LEARN ABOUT THE PRODUCTS AND BRANDS WE RECOMMEND, <u>CLICK HERE</u> OR SCAN THE CODE BELOW!



We work diligently to provide high-quality industrial-grade products and innovative solutions so that the companies who place their trust in us can deliver their products to the marketplace as effectively as possible.