

# How Structural Blind Fasteners Work

## HOW STRUCTURAL BLIND FASTENERS WORK

The shear strength of structural blind fasteners is generated by the combined resistance against failure of the pin and sleeve. This takes place along the joint's shear line between fastened plates.

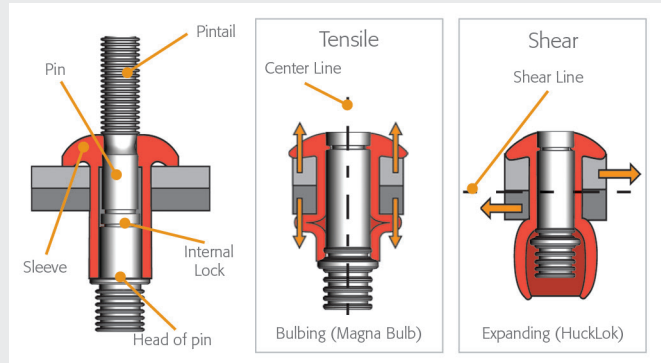
The **tensile strength of structural blind fasteners** differs to that of LockBolts, as they form a blind side positive lock either by bulbing or expanding of the sleeve. The sleeve, assisted by the permanently secured pin, therefore resists failure along its centre line.

### 1. Bulbing

The sleeve of the fastener is compressed, causing it to fold outwards to form a bulb. This forms itself tightly against the joint material. Once the pin is permanently locked into place the pintail will break off, completing the installation.

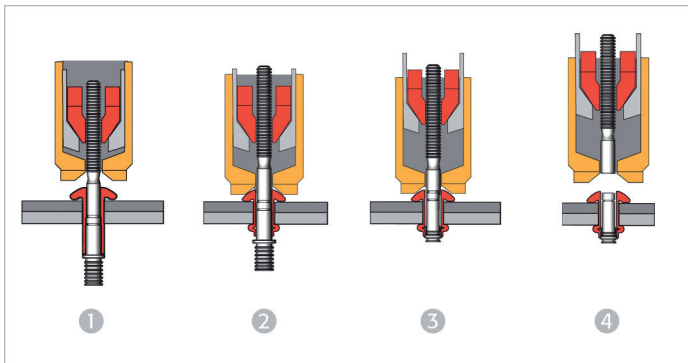
### 2. Expanding

Pulling on the pintail causes the head of the pin to draw into the sleeve. This expansion causes a foot print to form against the joint material.



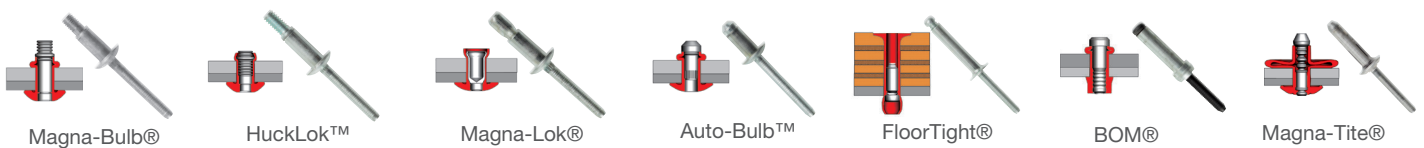
**Note:** The pre-load of blind rivets is generally not published, as it varies widely depending on the application.

## BLIND FASTENER INSTALLATION SEQUENCE



1. Pin placed into prepared hole
  - o Tool is placed over the fastener pintail
2. Tool activated
  - o Deforming of blind side begins
3. Joint tightened
  - o Internal locking mechanism formed
4. Pintail breaks, installation complete

## STAR FASTENERS Huck Blind Fasteners Range - for blind and shear joints



Disclaimer  
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