



ARCONIC

The Huck[®] Product Range




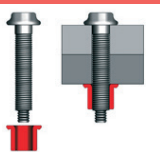


Huck LockBolts

Key Benefits:

- Permanent, mechanically locked fastener
 - Installation process automatically provides fastener values
 - No torque or re-torque required
- Unlike conventional nuts and bolts, they will not work loose, even during extreme vibration
- Rapid installation with quick and easy visual inspection
- Excellent gap closure capability
- Can be installed onto angled surfaces (5° maximum)
- Tamperproof

BobTail®

Unique helical lock groove (upwards from 9.5mm):
Holds pins and collar in place prior to installation*

No pin-tail: Reduced wastage, low installation noise

No pin-break: High corrosion resistance

Semi-automatic tooling installation: Minimises installation time

Pin head style: Brazier, truss, countersunk

Collar style: Flanged


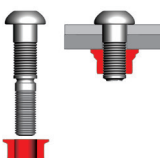
Materials: Steel (5.8/8.8 up to 9.5mm, 8.8/10.9 12mm and above)

Coating: High corrosion resistant coatings available

Diameters (mm)

6.4	7.9	9.5	12
12.7	14	15.9	16
19.1	20	22.2	24
25.4	27	30	36

C50L®

8.8 grade large diameter Lockbolt

Made to British Standard B7805: Part 2: 1997: A mark of quality, safety and performance

High tensile friction grip fastener

Pin head style: Round, truss, countersunk, thread head

Collar style: Standard, flanged, low profile

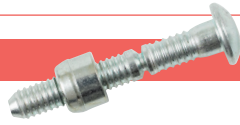
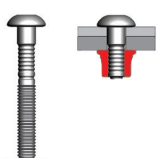
Materials: Steel, stainless steel, aluminium

Thread head variety available for rail track applications

Diameters (mm)

12.7	15.9	19.1	22.2
25.4	28.6	31.8	34.9

C6L® - The Original Huck Design

5.8 grade small diameter Lockbolt

Made to British Standard B7805: Part 1: 1997: A mark of quality, safety and performance

Wide flange collar available: Enables installation into non-metallic materials

Pin head style: Brazier, truss, countersunk, specific headstyle for palisade fencing

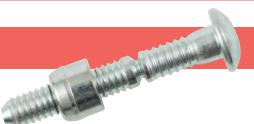
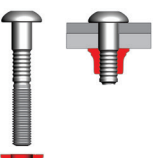
Collar style: Standard, flanged, wide flanged and low profile

Materials: Steel, stainless steel, aluminium

Diameters (mm)

4.8	6.4	7.9	9.5
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C120L®

8.8 grade small diameter Lockbolt

High tensile strength version of C6L

Pin head style: Brazier, truss, countersunk

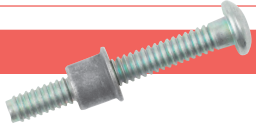
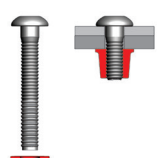
Collar style: Standard, flanged

Materials: Steel

Diameters (mm)

4.8	6.4	7.9	9.5
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Magna-Grip®

Huge grip range: Accommodates wide variations in joint thickness - 14.3/23.9mm**

One pin and one collar cover a wide variety of applications: Reducing the risk of incorrect fastener installation

Wide grip range minimises fastener inventory

Flush pinbreak: No catching on clothes, skin or goods

Pin head style: Button, truss, countersunk, rivet, broad truss


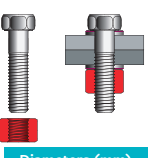
Collar style: Standard flange, medium flange, wide flange

Materials: Steel, aluminium

Diameters (mm)

4.8	6.4	7.9	9.5
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Huck 360® - Unique Lockbolt Solution

No special tooling system required:
Can be installed using a standard torque wrench

Ideal for use where installation accessibility is limited for a standard Lockbolt

Can be removed and re-tightened***

High speed installation: No prevailing torque


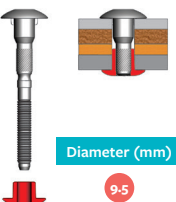
All the performance benefits of a 10.9 grade Lockbolt

Diameters (mm)

M10	M12	M16	M18
M20	M27	M36	

Imperial sizes available on request

Hucktainer® - Designed specifically for joining composite board in trailer applications.

Will not crush or damage the composite board

Integral seal around pin head prevents moisture ingress

Low profile on both sides when installed:
No catching on clothes, skin or goods. Not as grip sensitive as some competitor products

Pin head style: Standard low profile, encapsulated in plastic

Sleeve style: Wide bearing, medium bearing, clearance

Short grip version available

Materials: Steel

Diameter (mm)

9.5

* Special tab collar is needed to perform this function. ** Based on 6.4mm diameter. Two different grip lengths available. *** As long as the nut and bolt set remain free spinning after removal. Individual fastener benefits will vary depending on the application they are used in. Please discuss with your AFS Customer Manager prior to fastener choice.

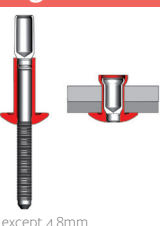


Huck Structural Blind Fasteners

Key Benefits:

- Internal locking mechanism retains the pin
 - Structural fastener after installation
 - Higher strength than a standard open end blind fastener
- Ideal for use where access is limited on one side of the application
- Preassembled fastener - Insert one part in the hole and install
- A variety of installation tooling options available

Magna-Lok®



Wide grip range:
Accommodates large variations in joint thickness

Structural fastener: High shear & tensile strength

Excellent gap closure capability

Outstanding hole filling on the blind side: Excellent joint tightness and very resistant to water ingress

Flush pinbreak: No catching on clothes, skin or goods. Quick and easy visual inspection

Internal pin locking mechanism: Secure within the rivet body and protected from corrosion

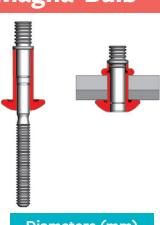
Headstyles: Protruding, truss, countersunk

Materials: Steel, stainless steel, aluminium

except 4.8mm

Diameters (mm)
4.8 6.4 9.5 12.7

Magna-Bulb®



Extra large blind side footprint: Ideal for lower strength or thin sheet joint materials

Structural fastener: Very high shear strength and high tensile strength

Flush pinbreak: No catching on clothes, skin or goods. Quick and easy visual inspection

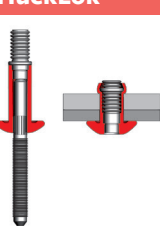
Internal pin locking mechanism: Secure within the rivet body and protected from corrosion

Headstyles: Protruding

Materials: Steel

Diameters (mm)
4.8 6.4 7.9

HuckLok™



Wide grip range:
Accommodates large variations in joint thickness

Structural fastener: High shear & tensile strength

Large blind side footprint: Ideal for lower strength or thin sheet joint materials

Flush pinbreak: No catching on clothes, skin or goods. Quick and easy visual inspection

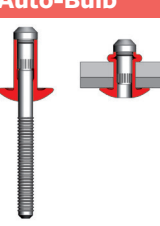
Internal pin locking mechanism: Secure within the rivet body and protected from corrosion, plus additional blind side pin locking for increased fatigue life

Headstyles: Protruding

Materials: Steel

Diameters (mm)
4.8 6.4

Auto-Bulb™



Purpose design blind side shape for easy hole location: Ideal for automated assembly

Large blind side footprint: Ideal for lower strength or thin sheet joint materials

Good blind side clearance: Less space required on the blind side prior to installation

High pin retention: Prevents possibility of noise or vibration in dynamic assemblies

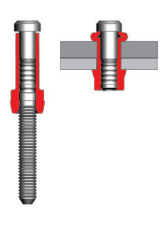
Recessed pinbreak: No catching on clothes, skin or goods

Headstyles: Protruding, Oval Countersunk

Materials: Steel, Stainless Steel

Diameters (mm)
6.4

BOM®



Very high strength/diameter ratio: Can be used in demanding structural applications as an alternative to threaded fasteners or welding

Very high joint tightness when compared to conventional blind fasteners

Very resistant to tampering, extremely hard to remove

Excellent gap closure capability

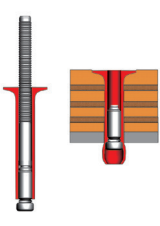
Large blind side footprint: Ideal for lower strength or thin sheet joint materials

Headstyles: Protruding

Materials: Steel

Diameters (mm)
4.8 6.4 7.9 9.5
12.7 15.9 19.1

FloorTight® - The flooring specialist fastener



Self countersinking head:
Ideal for use on timber flooring and phenolic faced plywood

Superior strength to conventional flooring screws:
Reduces the number of fasteners required and number of drilled holes

3 Clamp strengths available to suit your joint. No crushing or pulling through the board

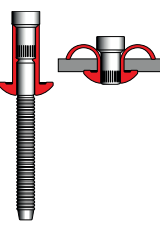
Recessed pinbreak: No catching on clothes, skin or goods

Headstyles: Standard flange and wide flange

Materials: Steel

Diameters (mm)
7.9

Penta-Lok™ - Specifically Designed for the Composite Panel Market



Specifically for joining load restrain profiles to lightweight panel

Penta-Lok "claws" unfurl and install inside the actual panel not on the blind side/back of panel

High pull out strength: Due the load spread of the "claws" inside the lightweight panel of approximately 16mm.

No through hole required in the lightweight panel:
Penta-Lok only needs a minimum 8mm of depth in the lightweight panel to insert the blind side of the fastener

Headstyles: Protruding

Materials: Steel

Diameters (mm)
6.4

Magna-Tite™ - The roofing specialist fastener



Polymer watertight seal:
Ideal for roofing or similar applications

Extra large blind side footprint: Ideal for lower strength or thin sheet joint materials

Low clamp load: Perfect for use in thin sheet material, composites and plastics

Flush pinbreak: No catching on clothes, skin or goods. Quick and easy visual inspection

Headstyles: Protruding, Low Profile, Shaveable, 100° Oval

Materials: Aluminium

Diameters (mm)
4.8 6.4

Individual fastener benefits will vary depending on the application they are used in. Please discuss with your AFS Customer Manager prior to fastener choice.



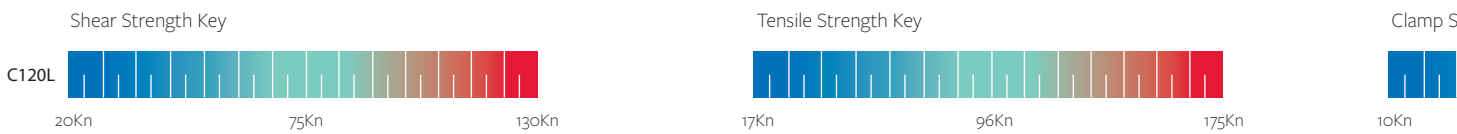
		Based on Diameter: 6.4mm Material: Steel				
4.8 to 9.5mm Diameter Lockbolts		Material Grade	Shear Strength	Tensile Strength	Clamp Strength	Steel
C6L	5.8				•	
C120L	8.8				•	
Magna-Grip					•	
BobTail	5.8/8.8				•	

Key for 4.8 to 9.5mm Diameter



		Based on Diameter: 16mm Material: Steel only					Material	
12 to 36mm Diameter Lockbolts		Material Grade	Shear Strength	Tensile Strength	Clamp Strength	Steel	Stainless Steel	Aluminium
C50L	8.8				•	•	•	
BobTail	8.8/10.9				•			

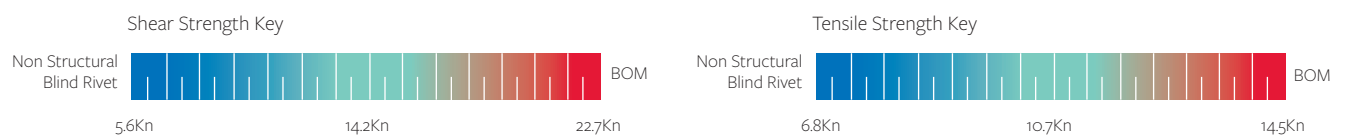
Key for 12 to 34.9mm Diameter



		Based on Diameter: 6.4mm Material: Steel								
Structural Blind Fasteners		Shear Strength	Tensile Strength	Material			4.8	6.4	7.9	
				Steel	Stainless Steel	Aluminium				
Magna-Lok			•	•	•	•	•			
HuckLok			•				•	•		
Magna-Bulb			•				•	•	•	
Auto-Bulb			•	•				•		
BOM			•				•	•	•	
FloorTight	*	*	•						•	
Magna-Tite	**	**			•		•	•		
Penta-Lok			•					•		

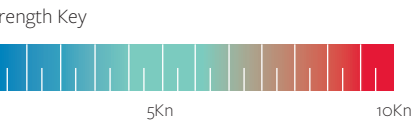
Key for 4.8 to 19.1mm Diameter

* only available in 7.9mm diameter. ** only available in aluminium.

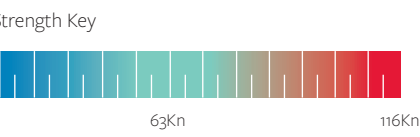




Material		Diameter (mm)								
Stainless Steel	Aluminium	4.8	6.4	7.9	9.5					
•	•	•	•	•	•		•			
		•	•	•	•		•			
	•	•	•	•	•	•	•	•		
•			•	•	•		•		•	•



Diameter (mm)																
12.0	12.7	14.0	15.9	16.0	19.1	20.0	22.2	24.0	25.4	27.0	30.0	36.0				
	•		•		•		•		•				•			
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•



Diameter (mm)													
9.5	12.7	15.9	19.1										
•	•			•	•				•				
				•	• Double				•	•			
					•				•	•	•		
•	•	•	•		•	•			•	•			•
				•	•				•		•		
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									•				

Icon Key

- Excellent Gap Closure
- Flush Pinbreak
- Pintail-less
- Includes Watertight Polymer
- Large Blindside Footprint
- Hole Seeking Tip
- Wide Grip Range
- Can be removed with a conventional tool
- Fit up Function
- Internal Pin Lock
- Flooring Fastener

How It Works

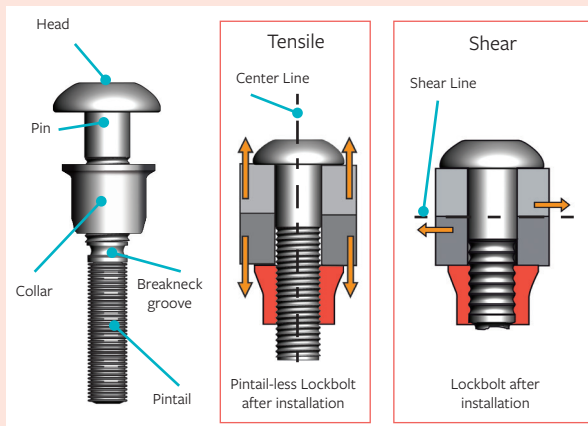
Huck Lockbolts

Clamp Force or Pre-Load: In the initial stages of the installation process, the tool engages and pulls on the pintail. The joint is pulled together before the conical shaped cavity of the nose assembly is forced down the collar. This progressively locks (swages) it into the grooves of the harder pin. The pin and swaged collar combine to form the installed fastener.

The squeezing action reduces the diameter of the collar, increasing its length. This in turn stretches the pin, generating a clamp force over the joint.

Shear strength of Lockbolts vary according to the material strength and minimal diameter of the fastener. By increasing the diameter or the grade of material, the shear strength of the fastener can be increased.

The tensile strength of Lockbolts is dependent on the shear resistance of the collar material and the number of grooves it fills.



Huck Structural Blind Fasteners

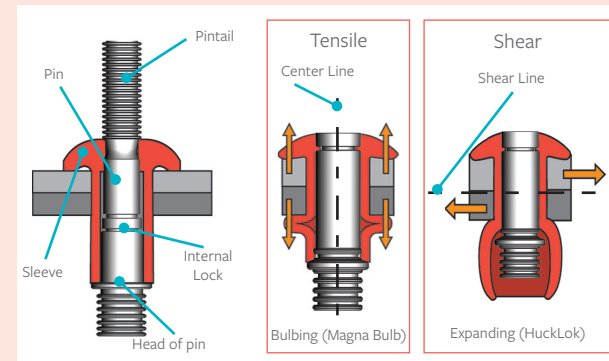
The **shear strength of structural blind fasteners** is generated by the combined resistance against failure of the pin and sleeve. This takes place along the joint's shear line between fastened plates.

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.

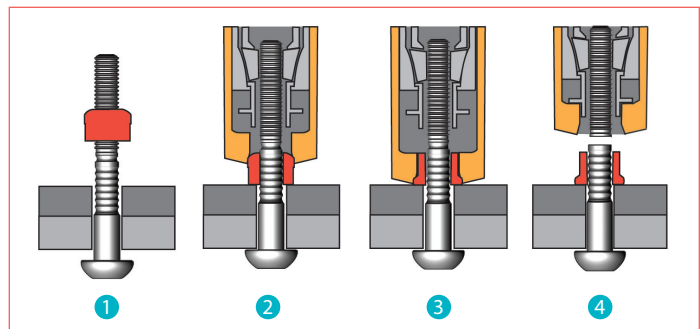
Note: The pre-load of blind rivets is generally not published, as it varies widely depending on the application



Installation Sequence

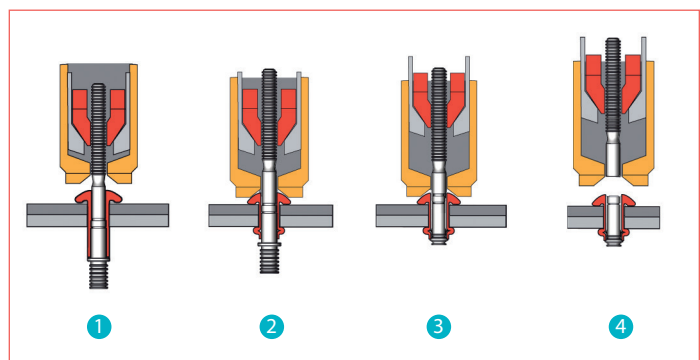
Lockbolt installation sequence

- 1 • Pin placed into prepared hole
• Collar placed over pin
- 2 • Tool is placed over the fastener pintail and activated
• Pin head pulled against material
• Anvil pushes collar against joint
• Initial clamp generated
- 3 • Tool swages collar, increasing clamp
- 4 • Pintail breaks, installation complete



Blind Fastener installation sequence

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





Huck Tooling Systems

Many different types of Huck installation tooling systems are available. Some of the most popular tools are shown below, but this is just a small part of our range. Discuss your requirements with our dedicated Systems Engineering Team to find the optimum solution to suit your need.

The basic tooling requirements to install Huck fasteners:

- **Installation Tool** – Either pneudraulic or hydraulic
- **Nose Assembly** – To match with the fastener and tool
- **Powerig®** – To supply power to hydraulic tools
- **Additional Hose Set** – Sometimes required to connect hydraulic tools to the Powerig

3585



Hydraulic installation tool. Installs 12, 14, 15.9, & 19.1mm diameter Lockbolts and 15.9 & 19.1 mm BOM® structural blind rivets.

Huck Range Force™ Battery Installation Tool



Battery powered installation tool with electronically adjustable pull force control. Installs structural blind rivets and LockBolts up to 6.4mm.

202V / 2025LB



Pneudraulic installation tool with vacuum pintail collection bottle. Installs 4.8 & 6.4mm structural blind rivets and small diameter LockBolts (2025LB only)

HuckForce Powerig™ Range



3 phase electric power rig options, suitable for use with all Huck installation tools.

2583



Hydraulic installation with extra long stroke. Ideal for installing 9.5mm Magna-Lok® and 7.9 mm Floortight®.

Will also install 7.9 and 9.5mm Lockbolts & structural blind rivets.

Swageforward® Range



Picture shown is for illustration purposes only, other tools are available in Swageforward range

Diameters: 9, 5 - 12 12, 7 - 14 - 15,9 - 16 19,1 - 20 - 22,2 - 25.4 - 27 - 30 - 36

Hydraulic tooling. Ideal for use when application space is limited. Installs 9.5mm and 12 - 25.4mm BobTail LockBolts.

2480L



Hydraulic compact installation tool; high speed & high durability. Ideal for high volume production to install 4.8 & 6.4 mm small diameter LockBolts and structural blind rivets.

The **Unshakeable World** of Huck Fastening Systems

For more than 60 years, the business Lou Huck founded and the fasteners he designed are still solving the problem of coping with extreme stress and vibration, providing strength and facilitating lighter, stronger, more durable structures.

Today the product range based on his original drawing of a Lockbolt now known as the HuckBolt® has evolved to include small and large diameter fasteners, medium and heavy duty blind fasteners and associated installation tooling.

Solution Needed, **Solution Provided**

Make our engineers part of your team at the concept stage. Their unrivalled knowledge of advanced fastener function can make the impossible possible. A standard fastener in our range may provide your answer. If not, we can produce a cost-effective tailor-made solution.

The Huck Fastening System – Key Benefits:

- Will not loosen even under extreme vibration
- Maintenance free joints – no need to torque or re-torque
- Lower lifetime total cost of joint - high shear and tensile strengths for increased fatigue life of the joint
- High speed, easy to install systems can reduce production time by 75%
- Improves health and safety - replace welded joints
- Tamperproof – once installed cannot be removed without specialist tooling



Contact us



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