

## About This System

The Tensioner Swage Stud System is a popular streamline system for **straight** and **angled** sections using **metal** posts. This system is unique as it passes through both sides of the starting post and terminates to minimise visible fittings once installed.

**This method requires Hydraulic Swaging at an additional cost. Wire rope is costed per metre.** Factory hydraulic swaging applies tonnes of pressure onto the fitting in order to secure the wire into the swage end of the fitting. When you order this system it will come pre-swaged to your specifications.

## Included With This System



6mm Hex Head  
Tensioner  
(S7500-06)



M6x40mm RHT  
Swage Stud  
(S7801R-030640)



3.2mm Swage  
Terminal  
(S7807-03)



3.2mm Flip Toggle  
(S7808-03)

## Related Products



ProRig® Multi Tool  
(CSPAN-PR)



Bevelled Washer  
(S7702)

# Tensioner Swage Stud Flip Toggle System

*For Metal Posts*



## D.I.Y

Scan this code with  
your smart phone  
to see our online  
installation video.



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# FAQ

## Can I install this method myself?

Yes, even someone with no experience can easily install all our wire balustrade systems.

## Do I need any special tools?

Other than common handyman tools such as an electric drill with 6mm, 7.5mm and 9mm drill bits, you will also need a 6mm allen key. You can purchase an optional ProRig Multi Tool for easier installation.

## What size and type of stainless steel wire do I use?

This method is almost always used with 3.2mm 1x19 stainless steel wire rope. This wire is the most functional for stainless steel wire balustrade systems due to its bright surface finish, attractive appearance, durability, strength and low stretch.

## What spacing do I need between my wires?

When using 3.2mm 1x19 stainless steel wire, you will usually need 80mm spacing (usually 11 runs) between your wires when using a standard one (1) meter high handrail. Visit [www.miamistainless.com.au](http://www.miamistainless.com.au) for more information on building regulations and requirements.

## Can I use this balustrade system on a stair or angled section?

Yes, the Tensioner Swage Stud System with Flip Toggle can be used on a stair or angled section when used with bevelled washers.

## When using this system for metal posts, what size hole should I drill for my rod terminal and hex head tensioner?

A 6mm hole will suit the flip toggle end and the hex head tensioner end will require a 9.0mm hole.

## What size hole should I drill through my intermediate posts?

A 7.5mm hole through your intermediate posts will allow the swage stud pass through.

## What is the maximum length run I can do?

The Tensioner Swage Stud System with Flip Toggle can easily span up to 10 metres. Longer runs up to 16 metres can be achieved by using a tensioner at each end, please contact Miami Stainless for further information.

## Can I take my balustrade wire around corners?

It is not possible with this system to take the balustrade wire around corners.

## STEP 1

Mark out and pre-drill all end posts at the required spacing. Flip toggles require a 6mm hole drilled through the inside post face only. Hex head tensioners require a 7.5mm hole in the inside post face and a 9mm hole in the outside post face. Drill 7.5mm holes in all intermediate posts.

## STEP 2

Insert the flip toggle and swage terminal into the 6mm pre-drilled hole. Pull the wire to flip the toggle and lock the wire into place.

## STEP 3

Remove the nut from the swage stud and pass the opposite end of the wire through all intermediate posts.

## STEP 4

Insert the hex head tensioner into the 9mm hole on the outside face of your end post and thread the tensioner onto the swage stud, meeting inside the post.

## STEP 5

Tension the wire by inserting an M6 allen key into the hex head tensioner and holding a ProRig Multi Tool onto the swage stud. Tighten until desired tension is achieved. For accurate and consistent tension you will require a tension gauge, however you can measure the tension by a deflection test.

## HELPFUL TIPS

### Make a Template



Make a template for marking out the holes on your post for consistency.

Scan this QR code with your smart phone to learn more.

### Use Grommets



Grommets can be used to stop wiring chaffing in middle posts (tube or square posts).

Please note: If you are using grommets, the required drill size for posts is 11/32".

For further information talk to our helpful Sales Consultants by emailing [info@miamistainless.com.au](mailto:info@miamistainless.com.au), calling **1800 022 122** or posting your question on our Facebook page at [www.facebook.com/miamistainless](http://www.facebook.com/miamistainless).