

## About This System

The ProRig Original Design Nutsert Tension Rod System is our most popular DIY streamline stainless balustrade system for **straight** sections using **metal** posts. This system can be installed in just a few steps and has few visible fittings once complete.

**This is a do-it-yourself method that requires hand swaging on-site. Wire rope is costed per metre.**

Hand swaging requires use of a HX-50 Hex Swaging Tool that is specifically designed to eliminate the need for hydraulic swaging equipment for this system.

## Included With This System



M8 RHT Nut Rivet  
(SBRNR-083.0)



M8 Tension Rod  
(S3320-0835)



M8 Finishing Cap  
(S3330-0825)



8mm RHT  
Finishing Stop  
(S3340-08)



Swage Terminal to  
suit 3.2mm Wire  
(S7807-03)

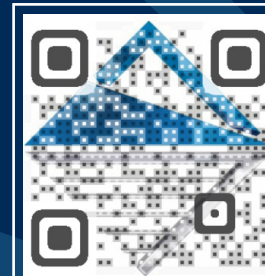
### Related Product



ProRig® Multi Tool  
(CSPAN-PR)

# Nutsert Tension Rod 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 4mm and 11mm drill bits, you will need a HX-50 Hex Swaging Tool, soft jaw pliers, an HN-02 Nut Rivet Tool and a set of wire rope cutters. Alternatively you can order posts with blind nut rivets pre-installed. 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) metre 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?

No, the Nutsert Tension Rod System cannot be used on a stair or angled section. However you can use the Jaw Swage Bottlescrew System for metal posts.

## When using this system for metal posts, what size hole should I drill for blind nut rivets?

You will require a 11mm hole to suit the rivets.

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

A 4mm hole through your intermediate posts will allow the wire rope pass through.

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

The Nutsert Tension Rod System can easily span up to 6 metres. Longer runs up to 12 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 with 11mm holes at the required spacing. Pre-drill all intermediate posts with 4mm holes. Insert nut rivets into posts using an HN-02 Nut Rivet Tool, alternatively you can order posts with these pre-inserted.

## STEP 2

Measure the distance between the inside faces of your end posts and cut your wire 70mm longer than your measured section.

## STEP 3

Thread the finishing stop head first onto the wire then insert the wire end into your swage terminal. Crimp the swage terminal four times spaced slightly apart using the HX-50 swage tool. Screw the finishing stop into your end post and tighten using soft jaw pliers.

## STEP 4

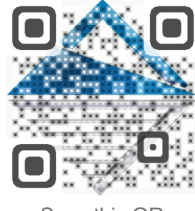
Pass the opposite end of your wire through all pre-drilled intermediate posts. Thread the open end of the wire through the finishing cap, then the tension rod and into the swage terminal. Crimp the swage terminal four times as per step 3. Insert the tension rod into the opposite end post and tighten using a ProRig Multi Tool.

## STEP 5

Lock the system in place by tightening the finishing cap against the head of the nut rivet using soft jaw pliers. For accurate and consistent tension you will require a tension gauge, however you can measure the tension by a deflection test.

## HELPFUL TIPS

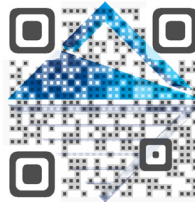
### HX-50 Hand Swaging Tool



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

The HX-50 is featured in our Nutsert Tension Rod System installation video.

### Make a Template



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

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

### 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).