

About This System

The ProRig Original Design Insert Tension Rod System is our most popular DIY streamline stainless steel wire balustrade system for **straight** sections using **timber** 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
Threaded Insert**
(S3310R-0832)



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)



ProRig® Multi Tool
(CSPAN-PR)

Related Product

Insert Tension Rod System

For Timber 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 9.5mm drill bits, you will need an HX-50 Hex Swaging Tool, 8mm hex drive bit, soft jaw pliers and a set of wire rope cutters. 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 for more information on building regulations and requirements.

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

Yes, the Insert Tension Rod System can be used on a stair or angled section as long as the threaded inserts are inserted into your timber posts at the same angle as the stair or ramp section. A larger counter sink will be required to allow for the M6 locking nut. It is recommended you prepare a drilling jig to assist with drilling your pilot hole.

When using this system for timber posts, what size hole should I drill for my threaded inserts?

You will require a 9.5mm hole to suit threaded inserts.

What size hole should I drill through my intermediate posts?

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

What is the maximum length run I can do?

The Insert Tension Rod System can easily span up to 10 metres. Longer runs up to 16 metres can be achieved by using a tension rod 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 9.5mm holes at the required spacing. Pre-drill all intermediate posts with 4mm holes. Screw threaded inserts into end posts using a 8mm hex drive bit.

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



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



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

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, calling **1800 022 122** or posting your question on our Facebook page at www.facebook.com/miamistainless.