

Wire Rope Balustrade System



stainless-handrailsystems.co.uk



Add a nautical look to any indoor or outdoor area with the SHS Wire Rope Balustrade System.

Versatile, reliable design

- Made to measure stainless steel posts
- Customise the number of wire rows
- Cylindrical top handrail



BALUSTRADES AND HANDRAILS

GET IN TOUCH

Call **01922 743842** to speak to a SHS specialist or visit stainless-handrailsystems.co.uk to receive an instant online quote.



STRENGTH TESTED
CERTIFICATION AVAILABLE

MADE IN
BRITAIN

Wire Rope Balustrade

Sturdy and sleek, our Wire Rope Balustrade System features made to measure stainless steel posts connected by wire rope infill with a cylindrical top rail. Specify the number of rows you would prefer, and we'll manufacture the system to your specifications.

Ideal system for:

- Internal or external areas
- Garden, walkways or stairs
- Domestic or commercial projects

Opt for straightforward self-assembly or take advantage of our in-house surveyors, CAD technicians and full installation team.

Maximum Centres	1200mm - 1500mm	Base Plates Available	100mm diameter/105mm base cover 120mm diameter/125mm base cover
Post Finishes	Mirror polished or brushed satin finish	Standard Height (To top of rail)	1100mm
Material Grades	Grade 316 (external)	Compatible Fixings	Wood, steel, brick or concrete
Standard Row Volumes	5. More or less rows available, prices will vary	Post Construction	Welded base plate, base cover, holes for wire, tube support for top rail
Tube Diameters	42.4mm 48.3mm	Wire Thickness	4mm



Bespoke design



24h shipping*



UK manufactured



Price match guarantee**

“Ordering was made easy with the help and advice of great customer service. Goods were delivered on time. The quality of the balustrade is superb, we are really pleased.” – Tim J

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*on specific stock items. Please call for further information. **SHS Products will match any genuine like for like quote.

View our full product range at stainless-handrailsystems.co.uk

Leading the way in balustrade and glass systems

SHS are the leading manufacturer, supplier and installer of balustrade and glass systems in the UK. We deliver top quality solutions that align with our customers' needs.

Fully customisable systems

We provide cost-effective solutions featuring exceptional safety and stunning design, with a wide range of sizes and grades of aluminium, steel, and customisable finishes. Most systems are fully customisable with the flexibility to go around corners and stairways, making it simple to bring unique projects to life.

Experience customer care

We have a robust and varied portfolio that spans the whole of the UK, from domestic homeowners to large scale commercial builders. We are fully committed to our customers and deliver the highest standards of service from initial contact to installation and completion. It's this genuine care and knowledge-based guidance that sets us apart.



“
Very pleased with the products supplied and the tools to enable fitting by myself. All staff were so helpful, and nothing was a problem. It makes a difference to receive such good service these days.”
– Mark W

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or visit stainless-handrailsystems.co.uk
to receive an instant online quote.



Components

All components are also available in 48.3mm diameter.



Mid Post (Eyelets not included)

Product Code	Ø	H	Grade
WRC.122.XX.16.S	42.4mm	1070mm	316

End Post (Eyelets not included)

Product Code	Ø	H	Grade
WRE.122.XX.16.S	42.4mm	998mm	316
WRE.122.70.16.S	42.4mm	1070mm	316



Corner Post (Eyelets not included)

A 3 way elbow will be supplied with this product.

Product Code	Ø	H	Grade
WRMT.122.XX.16.S	42.4mm	998mm	316

Wire Rope

Product Code	Ø	L	Grade
WR.04.50.16.S	4mm	50m	316



Swage Fork Terminal

Product Code	Grade
SF.04.16.S	316

Swage Rigging Screw

Product Code	Grade
ST.04.16.S	316



Eyelet - Wood

Product Code	Grade
EY.06.SC.16.S	316

Eyelet - Metal

Product Code	Grade
EY.06.MM.16.SM	316



Cable Holder

Product Code	Grade
CH.04.16.S	316



Hydraulic Crimping Tool

Product Code
WRCRIMPERS

Stainless Steel Tube (Top Rail)

Product Code	Ø	L	Grade
TB.110.XX.16.S	42.4mm	3000mm	316



Adjustable Corner Elbow

Product Code	Ø	Grade
TF.802.16.S	42.4mm	316

90° Elbow

Product Code	Ø	Grade
EB.202.XX.16.S	42.4mm	316



Wall Flange

Product Code	Ø	Grade
UC.001.03.16.S	42.4mm	316

Tube Connector

Product Code	Ø	Grade
EB.902.XX.16.S	42.4mm	316



End Cap

Product Code	Ø	Grade
EP.003.03.16.S	42.4mm	316

Glue 50ml

Product Code
GL.102



Face-Fix Clamp

Product Code	Ø
UC.002.03.16.S	42.4mm

48mm bracket available



Activator

Product Code
AL7649

Stainless Steel Cleaning Fluid 400ml

Product Code
CL.100



Scotch-Brite Cloth

Product Code
SBC.103



Note: All stainless steel products supplied are satin finished. If mirror finish is required please call for assistance.



How to measure your balustrade

- 1 Sketch a bird's eye view of your project area.
- 2 Measure and record the outside edge of your project area or substructure.
- 3 Use your recorded measurements to obtain an **instant online quote** via our website or send your drawing to sales@shsproducts.co.uk to start the conversation with an SHS systems specialist.



Video Guides
www.youtube.com/shslimited/videos



You must fit the system to a **solid structure**

It is essential that you fit your SHS balustrade system to a solid sub-structure made of durable materials. We cannot be held liable for the system being structurally unsound if it is fitted to an unsuitable sub-structure. If you are unsure about the durability of your sub-structure, please contact our technical team on **01922 743842**.

The fixtures required for your system will vary depending on the ground or wall you are fitting it to. A few typical examples include:

Material	Suggested Fixtures*
Wood	Coach screws or coach bolts
Metal	Nuts and bolts, drill and tap steel
Brick/Concrete	Anchor bolts, thunder bolts or threaded bar and resin

*These fixtures are purely a guide and are not suitable for every application.



Please do not arrange for installers until all of your items have arrived and been thoroughly checked.

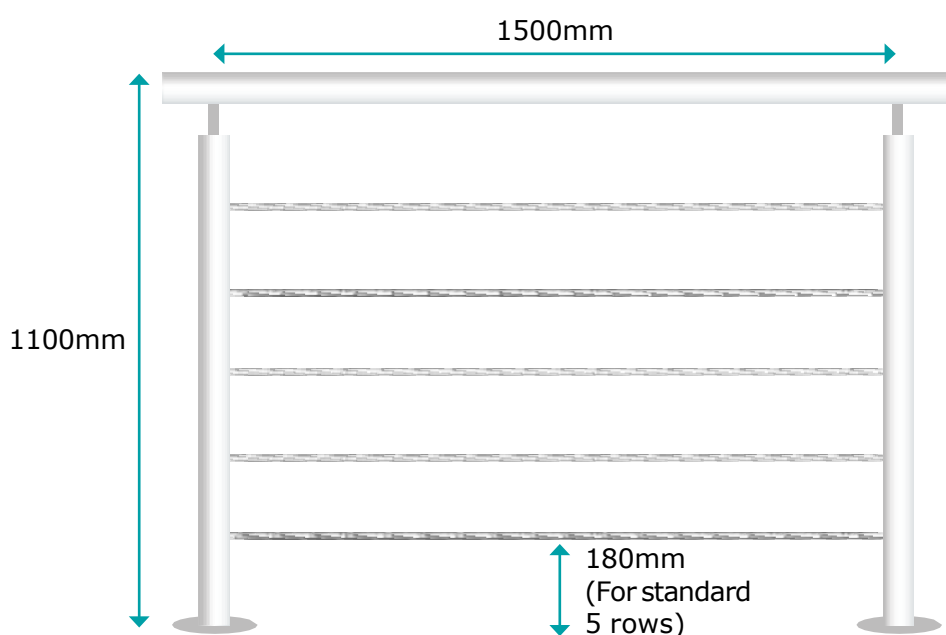


Your balustrade dimensions

Height and weight

The Wire Rope balustrade has a standard height of 1100mm and maximum width from centre post to centre post of 1500mm.

This system does not comply with building regulations for domestic properties where the fall is greater than 600mm. Please check with your building inspector before ordering your balustrade.



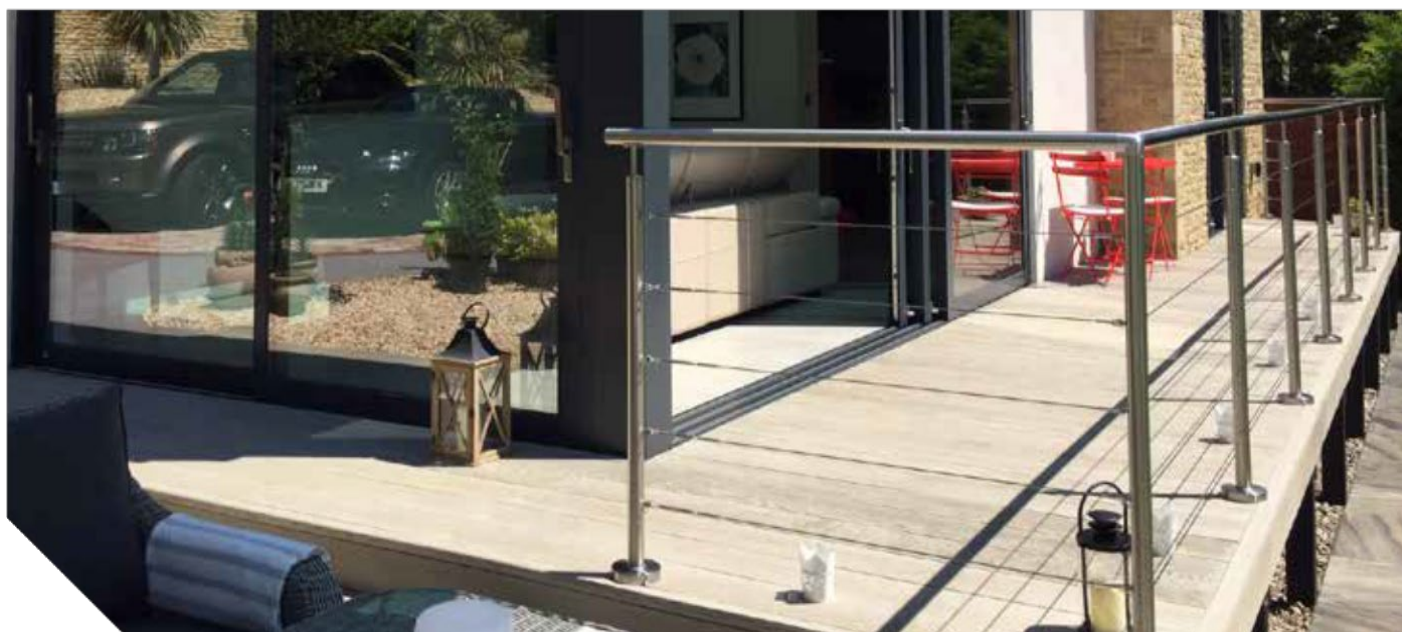
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Special consideration must be made when installing a wire frame system for a project which can be accessed by children who are 5 years or younger. Generally speaking, the Wire Rope system should not be easy for children to climb.

More specifically, the size of the gaps between the barrier or infill should be small enough to restrict a sphere of 100mm diameter from passing through. When measuring, please allow for deflection under load.

Please contact our team of specialists to determine if the Wire Rope balustrade system is the right option for your project.

This system does not comply to building regulations. Please consult your building inspector





Installation guide

Items supplied:

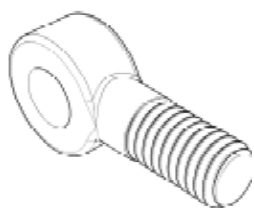
- Pre-drilled and tapped posts with welded baseplates
- Tube supports
- Base covers
- Eyelets
- Swage turnbuckles
- Swage forks

Items needed:

- 6mm Allen key
- 4mm Allen key

Assembling your posts

1. The tube support (saddle) will already be attached to your posts unless you have ordered adjustable saddles which will be supplied separately.
2. There will be 5 drilled holes in the posts as is standard on stock posts. Base plates are normally welded to the pre-drilled/tapped posts.
3. On the posts with M6 threaded holes, screw in the M6 threaded eyelets until tight. (Position all eyelets vertically.)
4. Repeat this process with your other posts making sure all eyelets are tight and level.



Eyelet



Base Cover

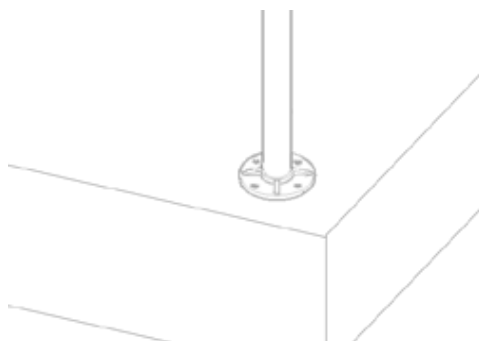
Installing your posts

Items needed:

- Masking tape
- Marker pen
- Spirit level



1. Lay down masking tape where your post will be placed.
2. Place your post on top and slide up your base cover.
3. Mark fixing holes and drill accordingly.
4. Repeat this process for all individual posts as base plate holes may differ from post to post.
5. Once you have positioned your posts and inserted your fixings, tighten them hand tight.
6. Now check your post with a level.
7. Adjust levelling screws accordingly until the post is level and tighten fixings fully.
8. Once done, repeat this with all other posts.





Below are typical examples of fixing methods:

Material	Example of typical fixing method*
Wood	Pilot drill and fix with M8 x80mm long stainless steel coachscrews
Steel	Drill and tap M8. Fix with 50mm long Hex setscrews and springwashers
Brick/Concrete	Drill to fastening manufacturer instructions and fix with M8 x 100 stainless steel floor anchor fixings. If resin is required, drill your hole 10mm to accommodate an M8 threaded bar and resin.

*These fixing methods are purely a guide and may not be suitable for your application.

Fitting your top rail

Items supplied:

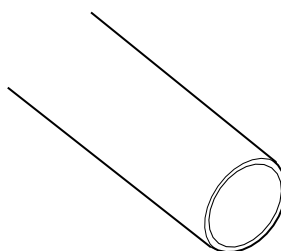
- Wall flange (optional)
- Top rails
- Tube rests
- Rawl plugs
- Stainless steel screws

Items needed:

- Clamps
- Drill bit
- Ratchet & tap
- Masking tape
- Marker pen
- 3-in-1 oil
- Drill



Wall Flange



Top Rail

1. Starting from left to right, assuming you are fitting your top rail to a wall on your left, you will need a wall flange (wall socket/wall rose).
2. Slide the wall flange onto the end of your rail and rest these onto the saddles.
3. Hold the top rail in place with clamps and position the wall flange in the desired spot.
4. Now mark out the holes through the wall flange.
5. Slide the top rail and wall flange away from the wall and drill the marked holes with a drill bit.
6. Insert the supplied rawl plug (if required) and slide the wall flange back into position and fix to the wall using the stainless steel screws provided (if suitable).



Visual learner? Watch our **3D animated installation videos** at www.youtube.com/shslimited/videos



Fitting the rail to tube saddles

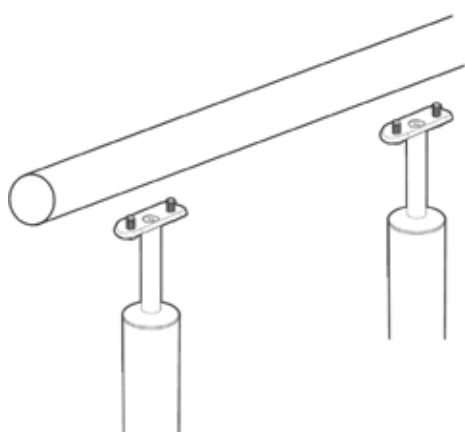
Items supplied:

- Wall flange
- Top rails
- Tube rests
- Rawl plugs
- Stainless steel screws
- Glue
- Elbows (if required)

Items needed:

- 4mm Allen key
- Clamps
- Drill bit
- Ratchet and tap
- Masking tape
- Marker Pen
- 3-in-1 oil

1. Wrap masking tape smoothly around the top rail at each point where it would rest upon the tube supports and clamp the tube in place.
2. Now mark the rail through the holes in the tube support.
3. Remove the rail and dot punch the marked holes on the top rail. Drill with the 5mm bit provided and tap with M6 tap. Whilst carrying out this process periodically apply the 3-in-1 oil to cool the drill and tap kit. [If the run is longer than 6 metres, then a Tube Connector (EB.900 series) will be required. To connect the two lengths of top rail together, glue using our Loctite 638 adhesive. This glue should always be applied to the inside of the tube and not to the fittings.]



Flat End Cap

4. Remove the masking tape and re-clamp the top rail. Then screw in the M6 button provided with your 4mm Allen key to fix down the rail. [Please note: For safety reasons, ensure you have clamped the opposite end of the top rail to prevent the rail from falling off.]
5. When you reach a corner or end where an elbow or three way corner is used, you will need to cut the top rail level with the end of the elbow with a tube cutter or, similar. Dry fit (without glue) to ensure all components fit correctly.
6. Then glue these into the top rail and post, applying the glue to the inside of the tube and NOT on the elbows. Use masking tape on the joints to prevent them from moving whilst the glue sets. We also recommend buying the Activator as well as the Glue as this ensures quick adhesion in all weather conditions, cutting curing time from 30 minutes to just 5 minutes. Care is to be taken when using the Activator. For both glue and curing agent avoid contact with eyes and skin.
7. Repeat this process for the entirety of the top rail.

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Now would be an ideal time to glue the end cap to your top rail. It will need at least 30 minutes to cure. Remember to apply the glue inside of the tube and not on the end cap. Secure with masking tape so that you can ensure it is positioned correctly.



Fixing your wire rope infills

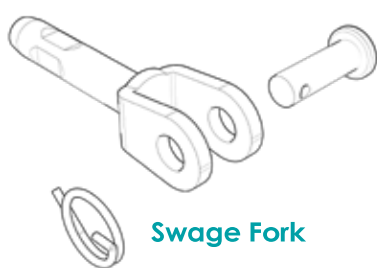
Items supplied:

- Eyelets
- Turnbuckles
- Swage forks
- Wire coil
- Crimping tool
- Cable holders (if purchased)

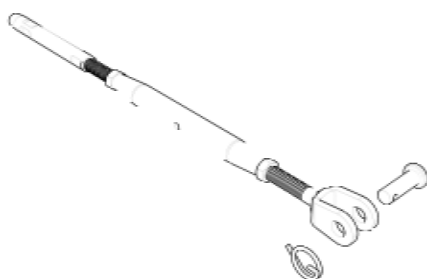
Items needed:

- 2.5 mm Allen key
- 10mm spanner for adjustments

1. Screw all eyelets into the threaded holes on end and corner posts. Unscrew both ends of the swage turnbuckle to make it longer (but do not unscrew fully).
2. Fit to the left hand side of the all run wires.
3. Fit all swage fork terminals to the right hand side of the wire runs.

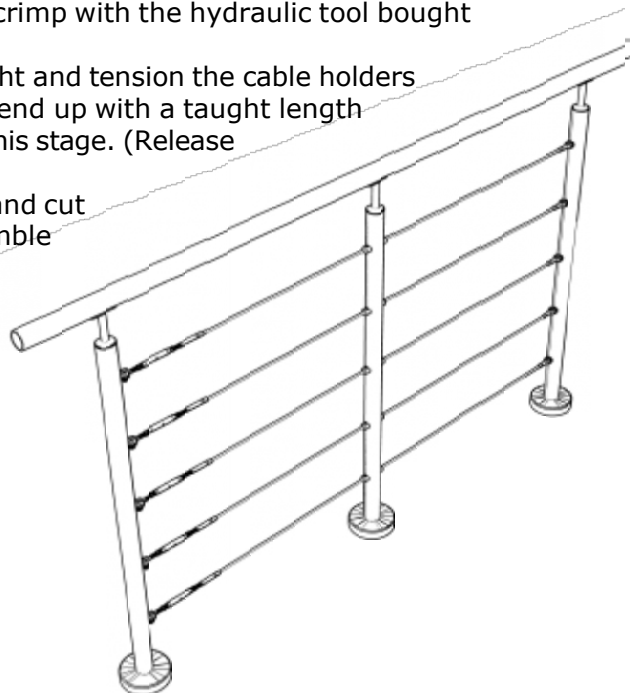


Swage Fork



Turnbuckle

4. Now feed the wire rope from left to right through all intermediate posts putting the cable holder on the wire each side of the post (but do not tighten at this stage).
5. Once the wire rope has been fed through all the intermediate posts to the swage fork then insert the wire in to the swage fork and crimp with the hydraulic tool bought from SHS.
6. Now working backwards pull the wire hand tight and tension the cable holders with your Allen key whilst taught so that you end up with a taught length of wire tensioned only by the cable holders at this stage. (Release for final tensioning.)
7. Now hold the cable alongside the turnbuckle and cut the wire level at the back of the swage, assemble part of the turnbuckle.
8. Insert the wire into the swage end and crimp again with the hydraulic tool.
9. Insert a 2.5mm Allen key through the hole in the centre part of the turnbuckle and turn to tension the final part of the wire to your satisfaction.
10. Now tighten both the locking nuts on the turnbuckle to prevent the wire coming loose and lock the cable holders.
11. Repeat this for all runs of wire.



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Please note: Periodically due to expansion it may be necessary to occasionally re-tension the wires.



BALUSTRADES AND HANDRAILS



Surveying



Manufacturing



Call:
01922 743842



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sales@shsproducts.co.uk



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Unit E6/E7 West Point,
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Drawing



3D Modelling



Domestic



Commercial



Building Regulations
Compliant



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