

Installing a San Francisco System

Overview¹

This document contains the comprehensive information for installing components of the San Francisco cable railing system: posts, tensioners, and enders included.

[General Instruction Page](#)

[YouTube Installation - San Francisco Cable Rail System](#)

[Engineering Specifications](#)

Following these instructions will minimize maintenance on the cable system. The most common mistake in cable railing installation is twisting the cable while tensioning. This results in cable untwisting the tensioners and/or eye bolts over time. Also common is the tendency to over-tighten cables will eventually cause damage to the system. Make sure all cable spans are equally tight, over-tightening a middle cable will make the other cables loose.

Caution:

- Wear protective ANSI approved safety glasses, working gloves and breathing mask at all times
- Inspect before installation or use; do not use if parts are loose or damaged.
- Use for intended purposes only
- Beware of dynamic loading. Sudden jerks against load may briefly create excess load causing failure

It is the responsibility of Inline Design customers to comply with local, national, and international building codes. Please ensure proper research is conducted prior to installation, due to variations building codes, Inline Design will not be liable for ensuring that projects meet code requirements.

Tools Required

Mounting Posts:

- 1) Tape
- 2) Power drill
- 3) Connecting hardware for your mounting surface

We recommend using bolts rather than screws. Connecting hardware differs depending on the surface type. Due to the variety of floor surfaces, Inline Design customers must self-supply the connecting hardware for the base (i.e., bolts, anchor bolts, etc.)

- 1) Wood surface: 3/8 x 3" lag screws/bolts
 - 2) Steel tube: 10-24 machine screws
 - 3) Concrete or brick: sleeve anchor screws
- 4) Wrench
 - 5) Level

Installing Handrails

[Refer to this document for required tools and directions to attach handrails to posts](#)

¹ This document includes hyperlinks and is intended to be viewed as a PDF rather than print material

Installing Tensioners Style Cable Tensioners:

[Refer to this document for required tools and directions to tensioner fittings through posts](#)

Instructions

Part 1: Mounting Posts

- 1) Only if using [base covers](#): lift the base cover gently to have enough space to work. Tape the base cover so it doesn't fall down and is out of the way. Repeat for each step. Apply the same to all the posts. Skip this step if not using base covers.
- 2) Adjust the post positions on your surface, ensure that all the posts line up correctly for cables
- 3) Mark your drilling points through the base of your posts
- 4) Remove the posts
- 5) Perform the guide/spot drilling for the bolts
- 6) Put back the first post; use a level on all sides to ensure the post is perfectly level
- 7) Use a wrench to tighten bolts to your surface
Note: you may want to tape around the post before using the wrench in order to prevent scratching

Part 2: Cut Tubes to Size

If using Inline Design tubes for handrails, [refer to this document to properly cut stainless steel tubes](#)

Part 2: Install Handrails

[Refer to this document to attach your stainless steel handrails to the brackets on top of your posts](#). It is important that the handrails are installed before the spans of cable to support the tension of the wire running between posts.

Part 3: Install Cable Enders



- 1) Screw each threaded piece of the enders into the predrilled end posts and tighten with an 11mm wrench
Note: Use WD-40 if there is difficulty here
- 2) Use a 2.5mm allen wrench to back out each of the four hex screws 1-2 threads
- 3) Insert cable all the way into the cable ender and tighten the hex screws with the 2.5mm allen wrench

Part 4: Install Cable Tensioners



- 1) For the other side of the span, insert the threaded end of each tensioner into the hole of an end post
Note: Use WD-40 if there is difficulty here
- 2) On the outside of the post, screw the back of the tensioner in to tighten, then turn the nose of the tensioner about 5 full rotations
- 3) Use a 2.5mm allen wrench to back out the four hex screws only a few threads, then use a 3mm allen wrench to back out the lock nut from the back of the tensioner (on the outside of the post)
- 4) Pull cable taught from the ender side, and mark the cable just past the last hex nut on the tensioner
- 5) Cut the cable where it was marked, and insert cable into the tensioner
- 6) Tighten all hex screws with a 2.5mm allen wrench
- 7) Tension the cable: hold the tensioner in place with an 11mm wrench and turn the back with a 6mm allen wrench
- 8) Hold the tensioner nose in place with an 11mm wrench while using a 3mm allen wrench to tighten the lock nut in the back of the tensioner

Repeat parts 4 and 5 for each span of cable

Part 5: Maintaining a Stainless Steel Surface

[Refer to this document for direction on buffing and refinishing stainless steel surfaces](#)

NOTE: A small amount of surface corrosion is not uncommon after some exposure to weather or salty conditions; we recommend using our [passivation solution](#) or a stainless steel polish to prevent surface corrosion; more information available [on our Engineering Specs Page](#)