



Atlantis Rail's SunRail™ Latitude railing system features prefabricated 316L stainless steel posts and horizontal cable infill, utilizing RailEasy™ round base tensioners and top rail mounting plates. These top rail mounting plates offer easy installation with no hardware obstruction and allow a wide variety of top rail options. The SunRail™ Latitude system is sold in off-the-shelf kits allowing for easy ordering and fast delivery.

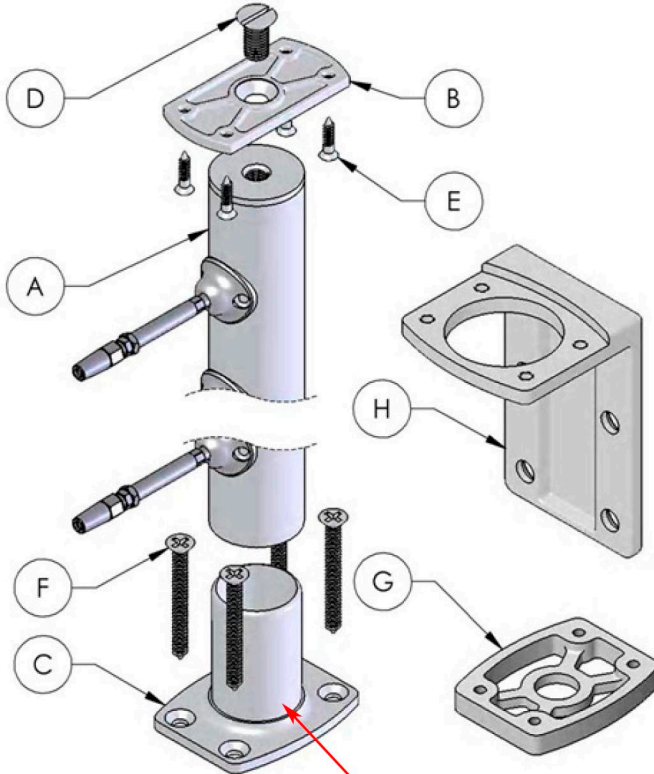
Tools

Required

- Drill
- #2 Phillips Driver
- #4 Phillips Driver
- 1/4" Drill Bit
- 1/8" Drill Bit
- 7/16" Open Wrench
- 5/16" Open Wrench
- 3/8" Open Wrench
- Cable Cutter
- Pencil

Recommended

- Drill Extension
- Vise Grips
- Electrical Tape
- Carpenters Square
- Chalk Line
- Gloves
- Safety Glasses
- Level



Base Assembly Requires LIDO WELD on Joint

ATLANTIS RAIL CONTACT INFORMATION

Customer Service

(800) 541-6829
(508) 732-9191

Facsimile

(508) 732-9798

Web Address

www.atlantisrail.com

Email

info@atlantisrail.com

Mailing Address

Atlantis Rail Systems
70 Armstrong Road
Plymouth, MA 02360

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SunRail™ Latitude Kits

Part Number	Description
S0952-E036	SunRail™ Latitude 36" End Post Kit
S0952-M036	SunRail™ Latitude 36" Mid Post Kit
S0952-C036	SunRail™ Latitude 36" Corner Post Kit
S0952-E042	SunRail™ Latitude 42" End Post Kit
S0952-M042	SunRail™ Latitude 42" Mid Post Kit
S0952-C042	SunRail™ Latitude 42" Corner Post Kit

SunRail™ Latitude Components

A	SunRail™ Latitude Post
B	SunRail™ Latitude Mounting Plate
C	SunRail™ Mounting Base
D	1/2"-13 FH Machine Screw Slotted
E	#12x1" Wood Screw – Qty: (4)
F	5/16"x3" Base Wood Screw (Not in Kit)
G	SunRail™ Concrete Mounting Base (Not in Kit)
H	SunRail™ Fascia Mounting Bracket (Not in Kit)

Installing the Posts

SunRail™ Latitude Kits

The SunRail™ Latitude standard post kits contain the post, mounting base, mounting top plate and necessary fasteners. Fasteners to mount the base to the decking surface are sold separately. Speak with your sales representative about the various mounting options. The following section will show you how to install the posts on straight sections of your deck.

Measure & Mark Your Centerlines

Use a tape measure to find the centerline of your railing system. Measure from the edge of the deck to the center of the structure or blocking below (See *Figure A*). This is typically $3\frac{1}{2}$ ". It is important that all the fasteners are secured to the structure or appropriate blocking. With the centerline measured, carefully snap a chalk line around the perimeter of the deck. This will be your centerline throughout the project. Make sure that the center of all of your bases fall along this line.

Install Your Post Bases

Begin with the end posts and corner posts. Place the base along the centerline being careful to make sure the base is properly oriented. Using the base as a template, mark the 4 holes for the screws. Use a $\frac{1}{4}$ " drill bit to drill a pilot hole for the base screws. It is important to drill a proper pilot hole as this will help prevent the base screws from stripping. Use a #4 screwdriver or driver bit to fasten the base to the deck (See *Figure B*). Simply slide the end and corner posts onto the base and orient the tensioners the proper way. **NOTE: All bases must be fastened with Lido Weld Epoxy between base and post.**

Install the Mid Posts

Measure the distance between each section. Divide the section evenly into the required number of sections. **To ensure code compliance, Atlantis Rail does NOT recommend exceeding 4' (48") on center between cable support posts.** Mark the center locations for the mid post bases once again taking care that the base is located on the centerline and oriented properly. Install the mid post bases as prescribed above.

Installing the Top Rail

Measure, Mark & Cut

As with the bases, measure for the top rail from post to post at the center line. Cut and miter the wood to fit. With the mounting plates secured to the posts and the top rail in place, mark the centers of the mounting plate onto the top rail. Using a $\frac{1}{8}$ " bit, pre drill the top rail for the screws. Take care to drill to a depth of approximately $\frac{3}{4}$ ". Do not drill completely through the top rail. Fasten the top rail with the four (4) included wood screws (See *Figure C*).

Finish the Guard Frame

Finish All Bases, Use Adhesive

With all the post bases mounted and the frame built, carefully lift each post off the base enough to place a small bead of adhesive around the throat of the base. Move the post up and down to spread the adhesive and wipe away any excess before it dries. The adhesive will begin to bond in only a few minutes and will be completely cured in 24 hours. Take care that the tensioners are all lined up and facing the proper direction. **Make sure the guard frame is finished entirely before tensioning cable!**

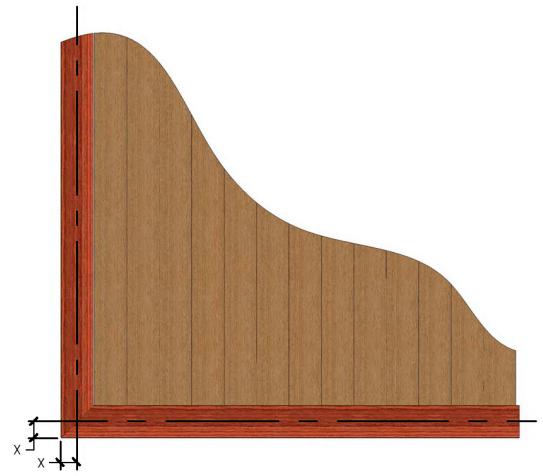


Figure A. Measure to the center of your structure or blocking and snap a chalk line to mark the centers. Do this around the perimeter of the deck.



Figure B. Fasten each base to the deck with four (4) screws.



Figure C. Fasten the top rail using the provided wood screws.

Helpful Tip: To ensure that the cables will run straight, run a single cable from end to end through the mid posts. This will help you see if something is not properly lined up. Do **NOT** tension the cable until the frame is completed as this will cause the posts to bend.

Install the Infill

Preparation

Before tensioning any of the cables, **it is important to be sure that the frame for the infill is completed.** Make sure the posts are installed securely and in accordance with the manufacturers recommended installation procedures. Install all top and intermediate rails. The posts will deflect beyond allowable limits if you attempt to tension the cables on an incomplete guard frame. Begin by removing the shrink tubing from the tensioner head. Be careful not to scratch the cone with a knife as this will open the cone up to corrosion issues. Next, extend the threaded receiver outward a minimum of $\frac{3}{4}$ " for any cable run up to 20 feet. For every 10 feet thereafter, extend the receiver an additional $\frac{1}{4}$ ". Maximum recommended cable span is 48 feet.

Install the Cables

Insert the cable into the cone, wedge and washer until it is fully seated in the threaded stud (See *Figure D*). Thread the cone assembly onto the threaded stud. Tighten the cone until the threads are no longer visible (if possible). With one end successfully terminated, pull the cable the length of the run to the tensioner on the other side. Using the opposite tensioner as a guide, mark and cut the cable where it lines up with the hex flats on the threaded receiver. Repeat the above process for each end of each cable before proceeding.

Tensioning the Cables

Begin by hand tensioning all the cables. Do this by holding the cable and stud assembly still and rotating the body. It's important not to rotate the cable, only the tensioner body. Rotating the cable will weaken it and eventually cause it to snap. With all cables hand tight, begin tensioning with the wrenches. Start with the middle run of cable and alternate working above and below the center as if you were tightening the lug nuts of a tire. Hold the hex flats of the threaded stud with a $\frac{3}{8}$ " wrench and rotate the tensioner body with a $\frac{5}{16}$ " wrench until cable is taut (See *Figure E*). Tension the cable equally from both sides. Do not over tension. Tensioning one cable may cause the surrounding cables to lose tension. Simply go back over the cables in the same series getting down to half and quarter turns until all cables are tensioned. Tighten all the lock nuts until they are snug against the receiver body to ensure the cables don't lose tension.

SunRail™ Latitude Adjustable Components

Atlantis Rail offers adjustable base and top components for stair and ramp applications. These fittings will rotate to accommodate most standard stair and ramp pitches. Ask your Atlantis Rail sales representative for more information regarding building a SunRail™ Latitude for your staircase or ramp.

SunRail™ Latitude Specifications

Atlantis Rail's SunRail™ Latitude is comprised of stainless steel posts, tensioners, fittings and horizontal cable infill. Top rail is wood and is not supplied by Atlantis Rail.

	Material	Finish	Dimensions	Notes
Post	316 SS	Polished	2" OD, .06 wall	Available in 36" & 42"
Rail	--	--	--	Not supplied
Cable	316 SS	--	5/32" 1x19	580 lb. WLL
Tensioners	316 SS	Polished	See catalog for more information	Pre-assembled on posts
Fittings	316 SS	Polished	Base 3.75" x 3", Plate 4"x 2"x $\frac{1}{4}$ "	--
Fasteners	316 & 18-8 SS	--	--	--

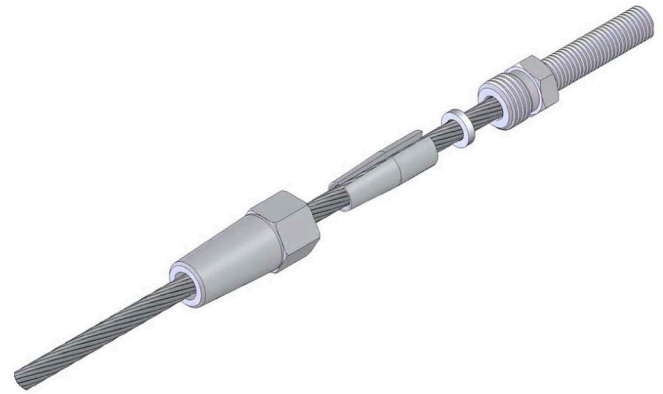


Figure D. Insert the cable into the cone, wedge and washer until it is fully seated in the threaded stud.

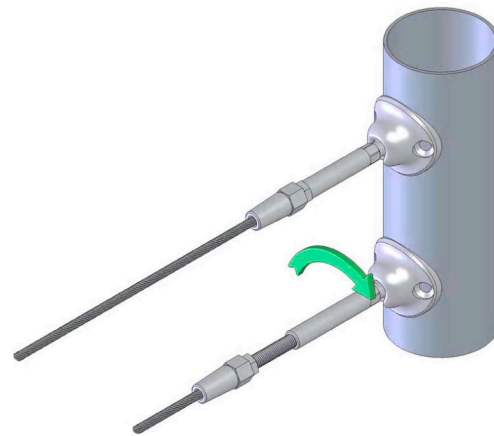
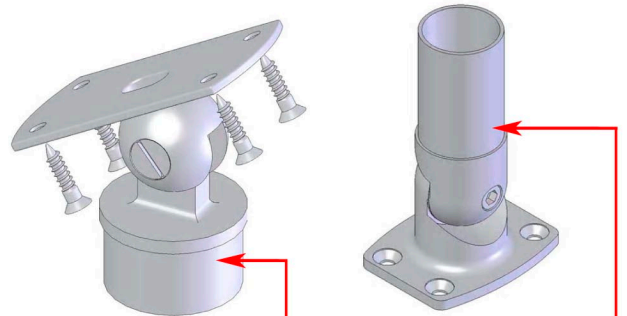


Figure E. Tension by holding the threaded stud in a fixed position with a $\frac{3}{8}$ " wrench while rotating the tensioner body using a $\frac{5}{16}$ " wrench.



Assemblies Require LIDO WELD on Joint