



ATLANTIS RAIL Contact Information:

Atlantis Rail Systems

70 Armstrong Road
Plymouth, MA 02360

3900 Civic Center Drive
North Las Vegas, NV 89030

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

(508) 732-9798

www.atlantisrail.com

SunRail™ Glass Installation Instructions

The SunRail Glass railing design utilizes special glass clips set into highly polished or brushed finish stainless steel rails. Our glass panel connectors are attached to the tubing at the factory and are ready for installation. The SunRail Glass railing system requires no special assembly skills or tools. Our stainless steel glass railing is perfect for interior or exterior applications where clients require a glass railing system.



**ATLANTIS RAIL PROVIDES THE RAILINGS ONLY.
ATLANTIS RAIL DOES NOT OFFER GLASS PANELS AS
PART OF THE RAILEASY GLASS RAILING SYSTEM.**



Warning



Note



Requirement

Table of Contents

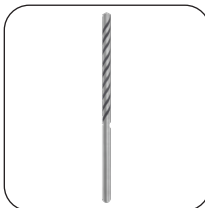
Tools	1
Tips for a Successful Installation	2
SunRail Glass System Components	2
Additional Components	2
Preparation	3
Straight Section - Installing the Posts	3
Straight Section - Installing the Rails & Glass Infill	4
Stair & Ramp Section - Installing the Posts	5
Stair & Ramp Section - Installing the Rails Glass Infill	5
Additional Components	6
SunRail Glass System Specifications	8
SunRail Glass System Product Specifications	8

Tools

Required & Recommended



Power Drill



1/4" Drill Bit
(for bases)



#4 Phillips Driver Bit



1/8", 4mm, 5.5mm &
8mm (5/16")
Allen Wrench



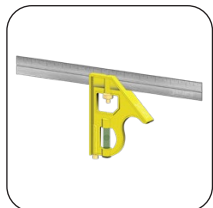
Chalk Line



Loctite® 326



Gloves



Carpenter's Square



Level



Ratchet Strap



Safety Glasses



Tape Measure

Tips for a Successful Installation

- Read the instructions completely before beginning the installation.
- Plan your railing project. Sketch your project with the actual measurements of your deck or balcony complete with post locations.
- Check carton(s) to determine part count is complete.
- Installation is best accomplished with two (2) people.
- Always wear personal protection equipment; safety glasses, work gloves, etc.
- Use care not to over-torque the screws. Pre-drilling is recommended.



ATLANTIS RAIL SYSTEMS PROVIDES A VARIETY OF MOUNTING OPTIONS FOR POSTS AND RAILS USED IN OUR SYSTEMS. PRODUCTS OF THIS NATURE REQUIRE THAT MOUNTING SURFACES ARE CONSTRUCTED TO BE CONSIDERED STRUCTURAL PER BUILDING CODE DEFINITION FOR THE SURFACE MATERIAL USED. STRUCTURAL INTEGRITY AND BUILDING CODE COMPLIANCE OF MOUNTING SURFACES ARE THE RESPONSIBILITY OF THE END USER AND / OR INSTALLER. THE USE OF ANY OF OUR MOUNTING METHODS ARE AT THE OPTION AND DECISION OF THE END USER AND / OR INSTALLER AND SHOULD BE SELECTED TO MATCH THE STRUCTURAL MATERIAL USED TO CREATE THE MOUNTING SURFACE.



STORE YOUR ORDER INDOORS TO KEEP DRY!
Some items in your order have been shrink wrapped with a protective poly film. Avoid exposing these items to harsh weather and moisture to avoid damaging stainless steel surfaces. When you're ready to install product, remove the protective shrink wrap before or immediately after installation.



ALWAYS REFER TO YOUR LOCAL BUILDING CODE OFFICIALS PRIOR TO INSTALLING ANY ATLANTIS RAIL SYSTEM TO ENSURE ALL CODE AND SAFETY REQUIREMENTS ARE MET. ATLANTIS RAIL SYSTEMS IS NOT RESPONSIBLE FOR IMPROPER OR NON-RECOMMENDED INSTALLATIONS.

SunRail Glass System Components



S0950-0010

Glass Panel Connector - 3/8"



S0950-0013

Glass Panel Connector - 1/2"



S0925-0010

Glass Panel Base

Additional Components



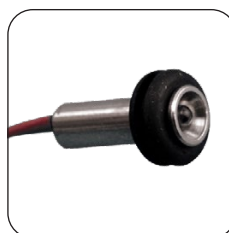
Concrete Mounting
Base



Fascia Mount Bracket



Micro Star™
Transformers



Micro Star LED Light*

* Micro Star LED lights can be integrated into the top rail for sublet illumination.

Preparation

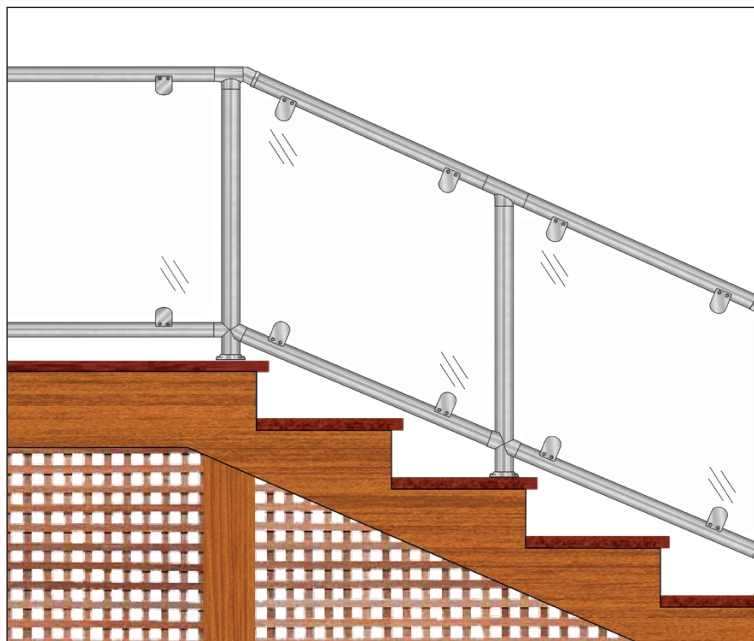
Reading & Understanding Your Assembly Drawing

Your assembly drawing is laid out numerically from the left of your drawing beginning with rail section one. For two rail systems, each rail section will have two rails, an upper hand rail (labeled UH) and a lower hand rail (labeled LH). Your railing system will be packaged in the same numeric fashion that it is labeled on your assembly drawing. This is so you can lay your boxes out according to which rail goes to which section.

Locate & Check the Parts of Your Rail System

When your rail system arrives on site, take the time to make sure that all the parts you were supposed to receive are present and undamaged. Report any inconsistencies with your building products supplier or Atlantis Rail Sales Representative as soon as you are aware of the issue.

Lay out your rails and posts on the appropriate deck. Open the boxes of fittings and lay the appropriate fittings out along with the rails. When all the parts are laid out and accounted for, you are ready to begin.



Straight Section - Installing the Posts

SunRail Posts

The following section will show you how to install the posts on straight sections of your deck.

Measure & Mark the 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 3-1/2". 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 the 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 (See Figure B, mark the 4 holes for the screws. Use a 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 (not included) to fasten the base to the deck (See Figure C). Simply slide the end and corner posts onto the base. Check for level.



IF USING FASCIA MOUNT BRACKETS (PART # S0950-0002) OR CONCRETE BASES (PART # S0950-0006), PLEASE REFER TO SEPARATE INSTALLATION INSTRUCTIONS INCLUDED IN YOUR PACKET. WHEN READING YOUR ASSEMBLY DRAWING, ALWAYS REMEMBER THE TOP RAIL IN THE PROJECTION VIEW IS ALWAYS FACING THE PLAN VIEW.

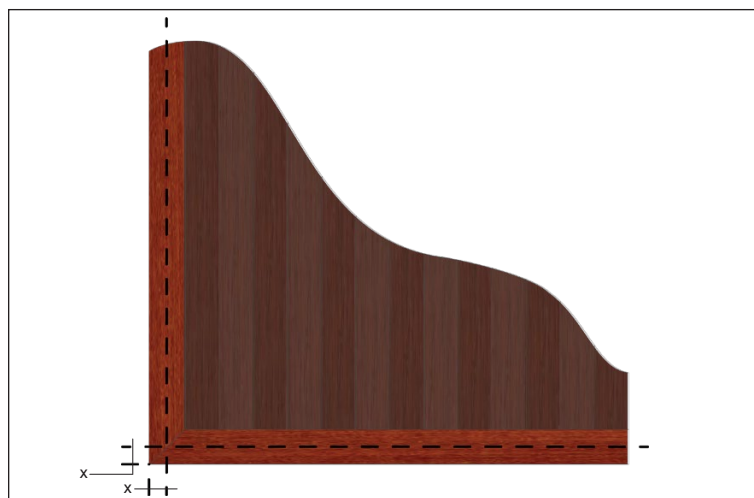


Figure A. Measure to the center of your structure or blocking and snap a chalk line to mark the centers. Do this around the perimeter of the deck.

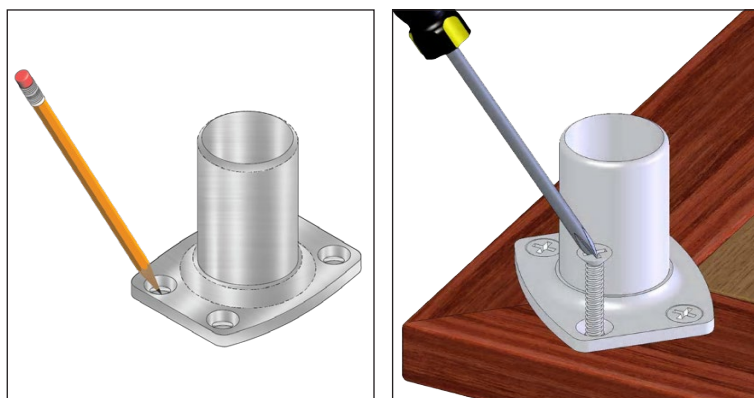


Figure B. (LEFT) Using the base as a template, mark the 4 holes for the screws.

Figure C. (RIGHT) Fasten each base to the deck with four (3) 5/16" x 3" lag screws.

Straight Section - Installing the Rails & Glass Infill



IF INSTALLING THE MICRO STAR LED LIGHTING, PLEASE REFER TO THE MICRO STAR INSTALLATION INSTRUCTIONS FOR SUNRAIL SYSTEMS.

Dry-Fit Railing Section

Build one (1) section at a time. Assemble the rail frame to be sure that everything fits into place properly. Using a level, be sure that the posts are standing vertical and rails are sitting level (shim bases as needed). This can effect placement of the posts, so before marking or drilling any holes for mounting, make sure that the section is plumb (See *Figure D*).

Assemble the Frame

When you are comfortable that the dry-fit sections are correct, lift up each post and apply a thin bead of Loctite brand adhesive to the base (See *Figure E*). Place the post back on the base working the adhesive all around spreading it evenly. Wipe off any excess adhesive immediately. Continue around the deck with the adhesive securing the posts to the bases. The Loctite brand adhesive will keep the posts from pulling up or rotating.



ALWAYS USE WORK GLOVES AND WEAR SAFETY GLASSES TO PROTECT YOUR HANDS AND EYES.



LOCTITE 326 BRAND ADHESIVE CREATES A STRONG BOND. BE SURE YOU HAVE THE RIGHT COMPONENTS BEFORE APPLYING THE ADHESIVE.

Place Lower Rail

Before beginning, make sure you have time to complete each section you start. Begin by removing the rail straight connector from the dovetail on the post. Apply a thin bead of Loctite 326 adhesive to each dovetail connector (See *Figure F*) and work it around, spreading it evenly on the fitting. Do this for both ends of the tube. From the top, place the lower rail down onto the dovetails and replace the machine screws using a 5.5 mm Allen wrench (See *Figure G*). Rotate the tube until the glass panel connectors are facing directly upward and are plumb (vertically). Do the same for the other sections on a dry fitted run. When you install the glass into the top and bottom rail, it will force the tubes to be rotated correctly. Do not leave adhesive to set until rails and infill are installed.

Install the Top Rail

Place top rail into the posts (See *Figure H*). Slowly lift the elbows from the post enough to apply a small amount of adhesive. Make sure glass panel connectors are facing downward and plumb (vertical). Do the same for either end of the top rail. Compress the top and bottom rails together using a ratchet buckle to ensure the proper fit. Leave assembled for adhesive to set.

Now, loosen the side of each Glass Panel Connector on the lower and upper rails using a 4mm Allen wrench and remove the plastic pin to allow for the glass panel to be temporarily inserted (See *Figure I*).

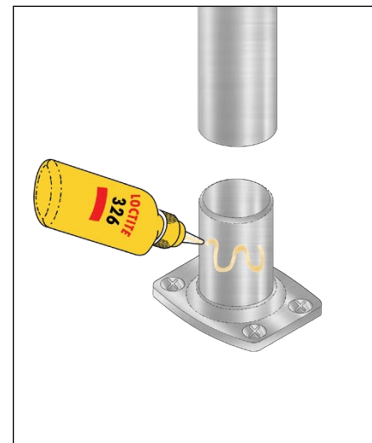
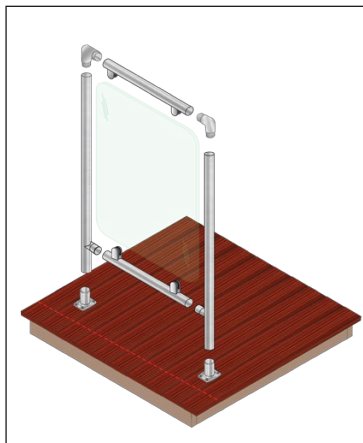


Figure D. (LEFT) Dry-fit each railing section to ensure that everything fits properly. Use a level to make sure that the section is plumb.

Figure E. (RIGHT) Apply a thin bead of Loctite 326 brand adhesive to the bases when you are comfortable that the dry-fit sections are correct.



ATLANTIS RAIL RECOMMENDS USING LOCTITE 326 ON THE BASES, TOP RAILS AND FITTINGS. THE ADHESIVE WILL KEEP POSTS AND RAILS FROM PULLING UP AND ROTATING. USE A DAMP CLOTH TO CLEAN UP EXCESS RESIDUE IMMEDIATELY.



BE SURE TO WIPE DOWN INSIDE OF POSTS/RAILS AND OUTSIDE OF BASES/ FITTINGS BEFORE APPLYING ADHESIVE TO ENSURE THE STRONGEST BOND BETWEEN MATERIALS. DO NOT APPLY LOCTITE PRIMER.

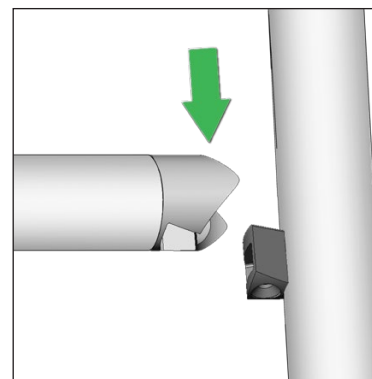
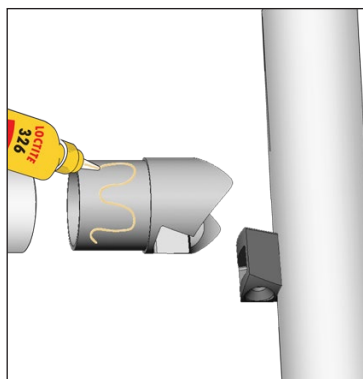


Figure F. (Left) Apply a thin bead of Loctite 326 adhesive to each dovetail connector.

Figure G. (Right) From the top, place the lower rail down onto the dovetails and replace the machine screws using a 5.5mm Allen wrench.

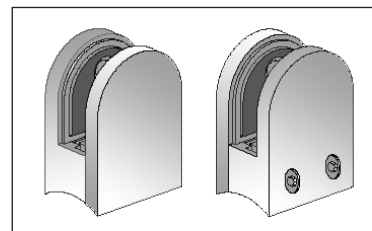
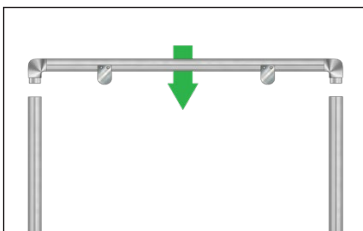


Figure H. (Left) Place top rail into the posts.

Figure I. (Right) Loosen the side of each Glass Panel Connector on the lower and upper rails and remove the plastic pins for the glass panels to be inserted.



THE PLASTIC PIN IS NOT A STRUCTURAL FEATURE. REMOVE AND DISCARD.

Install Glass Infill

Remove the side of each Glass Panel Connector on the lower and upper rails (now installed) using a 4mm Allen wrench to allow for the glass panel to be positioned securely between the neoprene pads. Ensure the hardware is stored in a safe place when removed. Position the glass infill between the neoprene pads of the lower rail and upper rail. Center the glass panel. Re-attach the Glass Panel Connector sides (See Figure J).



WHEN INSTALLING YOUR GLASS PANELS, MAKE SURE YOUR GLASS CONNECTORS FACE THE SAME DIRECTION (SCREWS FACING INWARDS)

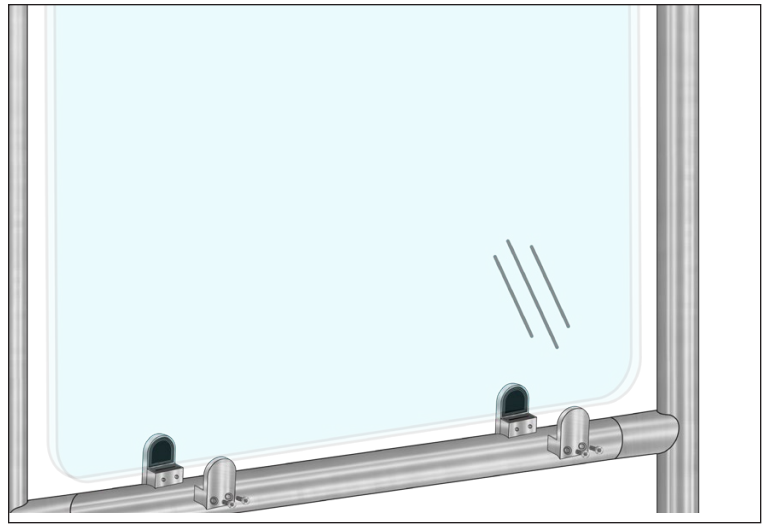


Figure J. Remove the side of each Glass Panel Connector and install glass infill between neoprene pads and center. Re-attach Glass Panel Connector sides.

Stair & Ramp Section - Installing the Posts

The following section will show you how to install the posts on stairs and ramps of your deck.

Install the Post Bases

Depending on the configuration of the stairs install either the Rail Mounting Base (part # S0950-0001 - See Figure K) or the Rail Adjustable Base (part # S0950-0003 - See Figure L). Use a 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. Simply slide the end and corner posts onto the base. Check for level.



IF USING FASCIA MOUNT BRACKETS (PART # S0950-0002) OR CONCRETE MOUNTING BASES (PART # S0950-0006), PLEASE REFER TO SEPARATE INSTALLATION INSTRUCTIONS INCLUDED IN YOUR PACKET.

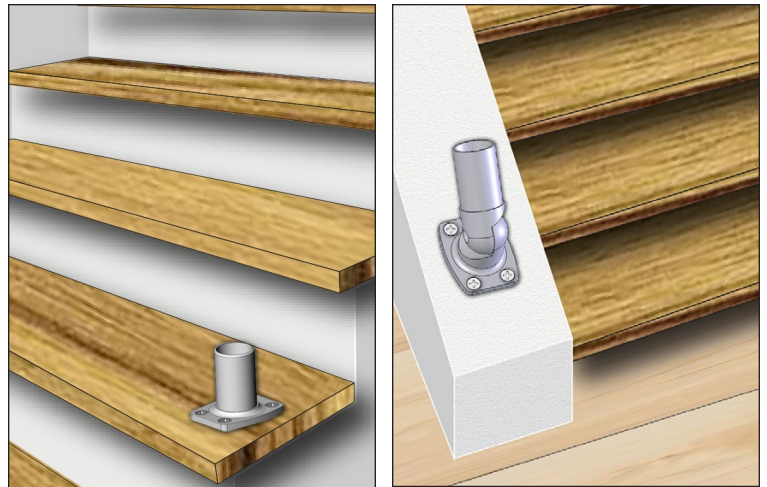


Figure K. (Left) Rail Mounting Base installed to a flat surface.

Figure L. (Right) Angle Adjustable Base installed to an angled surface.

Stair & Ramp Section - Installing the Rails & Glass Infill

Dry Fit the Frame

Beginning with any posts you have installed for the stair and ramp sections, begin dry-fitting the stair sections (See Figure M). This again is to ensure that all components of the railing will fit together properly without forcing. Locate the center of the bases. You will find the dimensions to the center of the bases on your drawing. Use these dimensions for the initial fit. Adjust as necessary continually checking for plumb. If the drawing is followed correctly, the top handrail will be parallel with the slope of the stairs and between 34"-38" in height (measured vertically directly above the nosing of the stair).

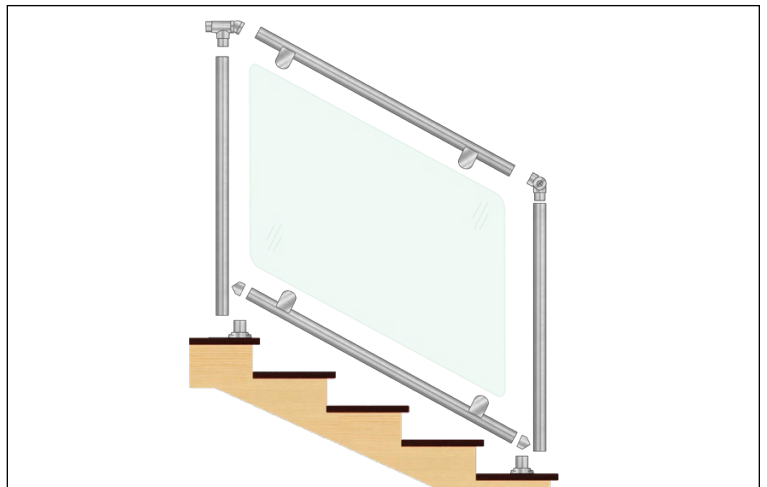


Figure M. Begin dry-fitting the stair sections.

Assemble the Frame

When you are comfortable that the dry-fit sections are correct, lift up each post and apply a thin bead of Loctite brand adhesive to the base (See Figure N). Place the post back on the base working the adhesive all around spreading it evenly. Wipe off any excess adhesive immediately. Continue around the deck with the adhesive securing the posts to the bases. The Loctite brand adhesive will keep the posts from pulling up or rotating.

Place Lower Rail

Before beginning, make sure you have time to complete each section you start. Begin by removing the Rail Adjustable Joint on the post. Apply a thin bead of Loctite 326 adhesive to connector (See Figure O) and work it around, spreading it evenly on the fitting. Do this for both ends of the tube. From the top, place the lower rail down onto the dovetails and replace the machine screws using a 5.5 mm Allen wrench (See Figure P). Rotate the tube until the glass panel connectors are facing directly upward and are plumb (vertically). Do the same for the other sections on a dry fitted run. When you install the glass into the top and bottom rail, it will force the tubes to be rotated correctly. Do not leave adhesive to set until rails and infill are installed.

Install Top Rail and Glass

Put the appropriate adjustable fittings on the top rail and rotate downward (See Figure Q). Apply adhesive to these connections. Apply adhesive to the top rail and work it around evenly. Compress the top and bottom rails together using a ratchet buckle to ensure the proper fit. Leave assembled for adhesive to cure. To install the glass panel infill repeat Figures H through J.

Clean and Wipe Railings

Finish by wiping down railings with warm water and a clean rag. It is a good idea to apply a protective coat of finishing compound. Atlantis Rail offers cleaning kits and rail care products. Ask your sales rep for more information.

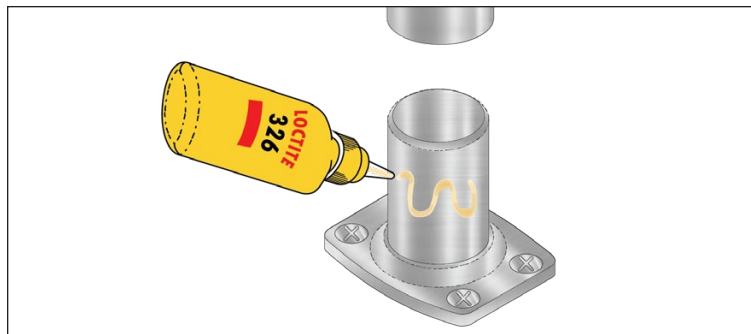


Figure N. Apply a thin bead of Loctite 326 brand adhesive to the bases when you are comfortable that the dry-fit sections are correct.

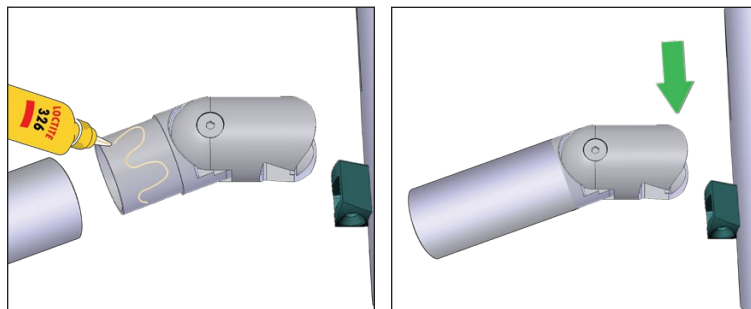


Figure O. (Left) Apply a thin bead of Loctite 326 adhesive to each Rail Adjustable Straight Joint.

Figure P. (Right) From the top, place the lower rail down onto the dovetails and replace the machine screws using a 5.5mm Allen wrench.

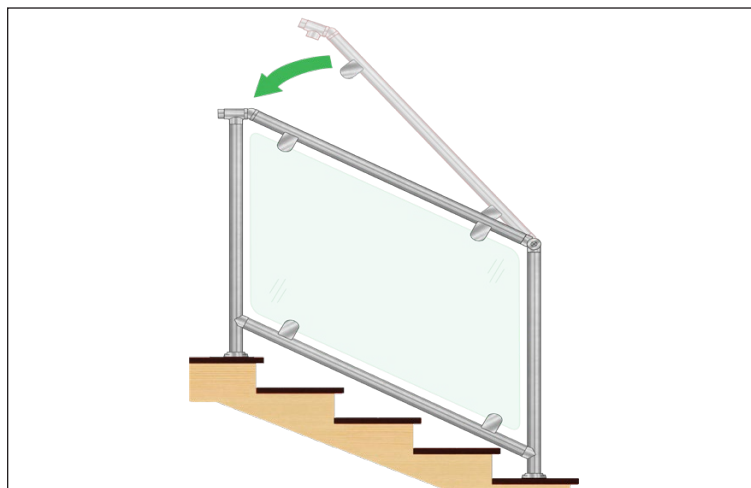


Figure Q. Put the appropriate fittings on the top rail and rotate downward.

Stair & Ramp Section - Installing the Rails & Glass Infill

Fascia Mount Bracket - S0950-0002

Atlantis Rail offers a fascia mounting option when installing a SunRail system with stainless steel posts (part # S0950-0002). This bracket is designed to be combined with the Atlantis Rail Mounting Base or Adjustable Base. It is used when a fascia mounting system is desired.

There are two methods for fastening the Fascia Mount Bracket. You can use four (4) 1/2" x 4-1/2" lag screws (not included). These screw through the side of the fascia bracket and into the fascia board (See Figure R). If you prefer through-bolting, use four (4) 1/2" x 4-1/2" machine screws, nuts and washers (included). Mark and drill through the fascia



Figure R. (Left) Install four (4) 1/2" lag bolts.

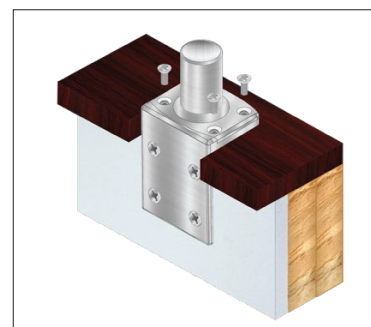


Figure S. (Right) Attach Rail Mounting Base with four (4) 5/16" x 1/2" machine screws.

screws, nuts and washers until tight.

When the fascia mount is securely fastened, attach the Rail Mounting Base using four (4) 5/16-18 x 3/4" long machine screws (included) into the top of the bracket (See Figure S). Tighten down, shim where necessary and install the rail as outlined in the Fascia Mount Bracket Installation Instructions.

Concrete Mounting Base - S0950-0006

Atlantis Rail offers a Concrete Mounting Base option when installing a SunRail system with stainless steel posts on a concrete surface. A single concrete anchor bolt (not supplied) is used to secure the mount (part # S0950-0006).

The Concrete Mounting Base (See Figure T) matches the profile of the Atlantis Rail Mounting Base (part # S0950-0001) and Adjustable Base (part # S0950-0003). Use four (4) 5/16" x 3/4" stainless steel machine screws to attach the mounting base to the Concrete Mounting Base. For more detailed information please refer to the SunRail Concrete Mounting Base Installation Instructions.

Micro Star Transformers - (S0802-0001 & S0832-0005)

The Micro Star Transformers (See Figure U) are used with all Micro Star lighting products. The heavy duty, water resistant construction provides years of reliable service. These transformers are DC and UL approved. The 5 amps transformer (part # S0832-0005) features a 6 ft. power cord and a 10 ft. connector lead. Available in 1 amp or 5 amps.



USE DC TRANSFORMER ONLY! RISK OF ELECTRICAL SHOCK. INSTALL ONLY TO A COVERED CLASS A GFCI RECEPTACLE THAT HAS A WATERPROOF ENCLOSURE WITH THE ATTACHMENT PLUG CAP INSERTED OR REMOVED.



MICRO STAR TRANSFORMER NO LONGER HAS AN OPTICAL LIGHT SENSOR. IT MUST PHYSICALLY BE TURNED ON AND OFF.

Micro Star LED Light - (S0801-PC01)

The Micro Star LED Light is the smallest self-contained LED on the market (See Figure V). These LED lights are available in 12v and each draws only .02 amps. Being completely waterproof and encased in a type 316 stainless steel housing, these lights are able to stand up to the most demanding environments. The Micro Star LED Light is both a functional and creative lighting alternative.



IF INSTALLING THE MICRO STAR LED LIGHTING, PLEASE REFER TO THE MICRO STAR INSTALLATION INSTRUCTIONS FOR SUNRAIL SYSTEMS.

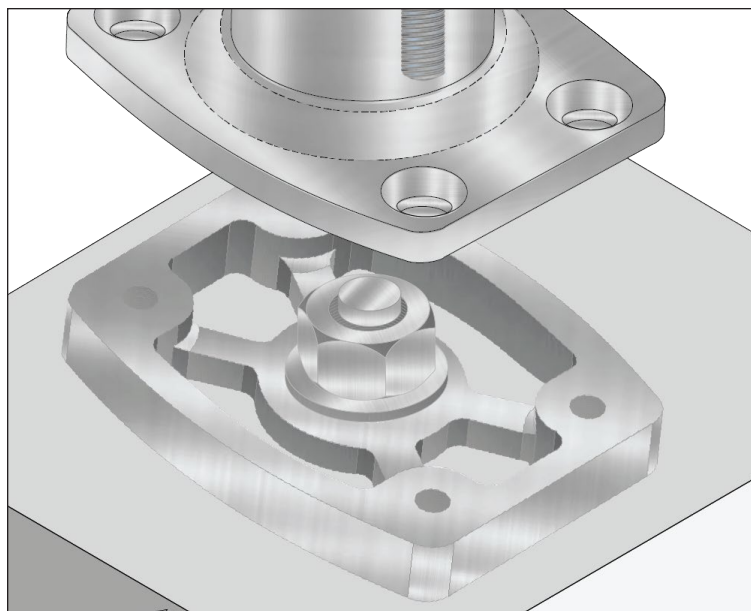


Figure T. Concrete Mounting Base (S0950-0006).



Figure U. Micro Star Transformers (S0832-0001 & S0832-0005).

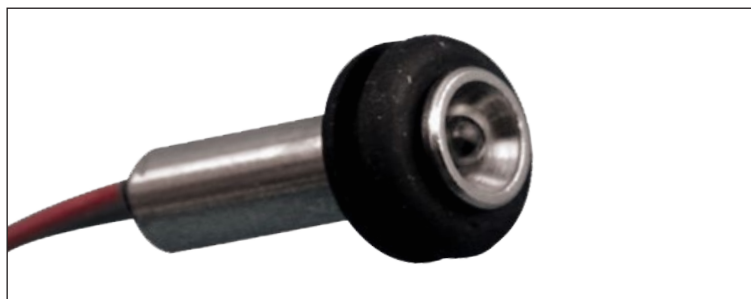


Figure V. Micro Star LED Light (S0801-PC01).

SunRail Glass System Specifications

The SunRail Glass System utilizes special glass clips set into highly polished or brushed finish stainless steel rails and posts. Our glass panel connectors are attached to the tubing at the factory and are ready for installation. The SunRail Glass System requires no special assembly skills or tools. It is perfect for interior or exterior, commercial or residential applications.



**ATLANTIS RAIL PROVIDES THE RAILINGS ONLY.
ATLANTIS RAIL DOES NOT OFFER GLASS PANELS AS
PART OF THE SUNRAIL GLASS RAILING SYSTEM.**

Straight Sections

The SunRail Glass System is offered in two standard post heights of 36" or 42" for straight sections. It is made up of stainless steel posts and rails with pre-attached glass panel connectors.

Stair Sections

Rail height for stair sections is available in 36" only.



**RAILING HEIGHTS ARE OFFERED IN THESE
DIMENSIONS DUE TO NATIONWIDE BUILDING
CODES.**

Between Post Lengths

Atlantis Rail requires staying within 5' section lengths to maintain structural integrity.

Railing Finish

The SunRail Glass is offered in a highly polished or brushed finish.

SunRail Glass System Product Specifications

Components

Product	Description	Dimensions	Fasteners	Notes
S0950-0010	Glass Panel Connector 3/8"	3/8" 316 stainless steel	--	Neoprene Pads
S0950-0013	Glass Panel Connector 1/2"	1/2" 316 stainless steel	--	Neoprene Pads
S0925-0010	Glass Panel Base	3/8" to 1/2" - 3.96" x 3.96" x 6.36"	Not Included	Plastic Insert & Wedges
S0950-0002	Fascia Mount Bracket	2" 316 stainless steel	--	--
S0950-0006	Concrete Mounting Base	2" 316 stainless steel	--	Anchor bolt not supplied
S0832-0001	Micro Star Transformer - 1 amp	100-240Vac - 50/60HZ	--	--
S0832-0005	Micro Star Transformer - 5 amp	100-240Vac - 50/60HZ	--	--
S0801-PC01	Micro Star LED Light	12 Volt DC	Push Connector (Male)	Color: White