ATLANTIS® RAIL SYSTEMS

Spectrum Railing System

Spectrum System Installation Instructions

Atlantis Rail's Spectrum System is an easy to install, universal cable railing product. It utilizes surface or fascia mounted square posts and a horizontal cable infill choice between HandiSwage™ studs with 1/8" or 5/32" cable. The Spectrum System is offered in a standard black or metallic silver color option. Other colors are available. Ask your Sales Representative for details. Customers must source their own flat hardwood top rail (minimum of 2" x 4").

⚠ Warning   📝 Note   💡 Hints

Table of Contents

Tools

Required & Recommended

Power Drill

#2 Phillips Driver Bit

5/32", 7/32" Drill Bit

1/2" Socket & Ratchet

Pencil

Safety Glasses

Gloves

Level

Tape Measure

Carpenter's Square

Chalk Line

Vice Grips

Coping Saw

Silicone Caulk

1/4" Wood Dowel

Loctite® 242

Hand Swager

Combination Wrench 3/8" & 7/16"

Hacksaw

7/16" Open Wrench

Grommet Install Tool

Cable Cutter

November 2019

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.

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.

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.

HandiSwage Components

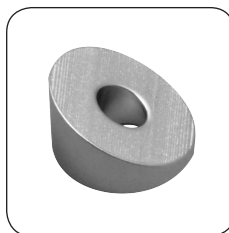|	
C0731-H0703-2	HandiSwage Standard Stud 1/8" - 2 Pack
C0731-H0703-10	HandiSwage Standard Stud 1/8" - 10 Pack
C0731-H0704-2	HandiSwage Standard Stud 5/32" - 2 Pack
C0731-H0704-10	HandiSwage Standard Stud 5/32" - 10 Pack

Additional Components

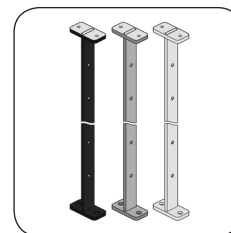
Acorn Nut Set

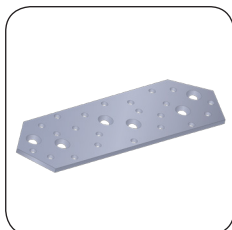Deluxe Cover Nut Set

HandiSwage Cover Nut Sets
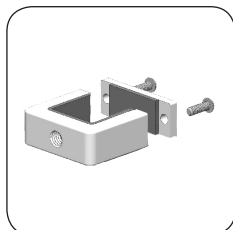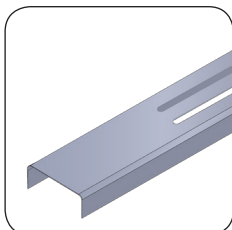
30°, 34° & 38° Stair Spacer

Cable Grommets

Spectrum Surface Mount Stabilizer Kit

Wide Mounting Plate

ADA Mounting Clamp

Reinforcing Channel
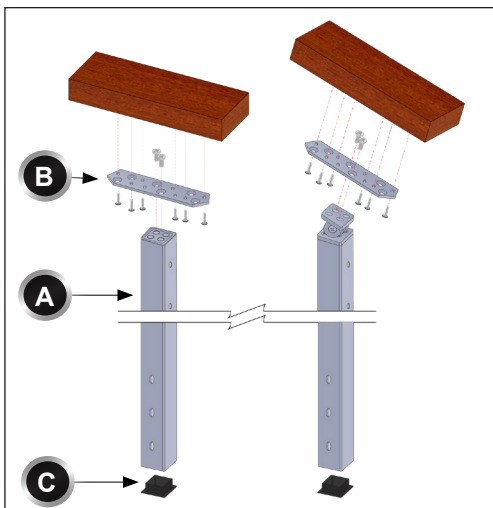
Spectrum Fascia Mount Post Kit Components
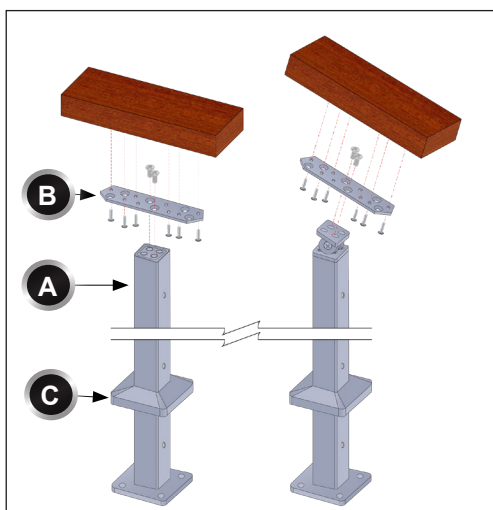
A.	Spectrum Square Post	
B.	Top Mounting Plate Assembly	
C.	Plastic Bottom Cap	

NOTE: Surface mounting fasteners & hardware sold separately.

Spectrum Surface Mount Post Kit Components

A.	Spectrum Square Post	
B.	Top Mounting Plate Assembly	
C.	Base Cover	

NOTE: Surface mounting fasteners & hardware sold separately.

START BY MARKING POST LOCATIONS USING REMOVABLE TAPE ON THE DECK SURFACE. INSTALL STAIRS FIRST, FOLLOWED BY CORNER AND END POSTS.

ALWAYS USE WORK GLOVES AND WEAR SAFETY GLASSES TO PROTECT YOUR HANDS AND EYES WHILE WORKING WITH CABLE. DO NOT OVER-TENSION.

Installing the Surface Mount Stair Posts

IF INSTALLING THE FASCIA MOUNT POSTS, PLEASE SKIP AHEAD TO THE INSTALLING THE FASCIA MOUNT STAIR POSTS SECTION (PAGE 5).

Find the Location of the Top Stair Post

Begin at the top of the stairs. Mark the location of the deck post (post A) adjacent to the top stair post (post B). Place your top stair post (post B) and position it so the space between the

November 2019

stair and deck posts is less than 4" (See *Figure A*). At the same time, make sure the deck post (post A) is aligned with the stair post (post B).

Find the Location of the Lower Stair Posts
Place the lower stair post (post C) and insert a 1/4" wooden dowel through the bottom cable holes of the top and lower stair posts (posts B & C) to visualize the alignment. Code requires that a 6" sphere cannot fit through the triangle created by the stair rise, stair tread and the bottom row of cable (*See Figure A*). Repeat this process and mark the position of all lower stair posts.

Install the Posts
Once the stair posts are marked for location, begin installing using the instruction below. The first installed post should be the deck post (post A) adjacent to the top stair post (post B) (*See Figure A*).
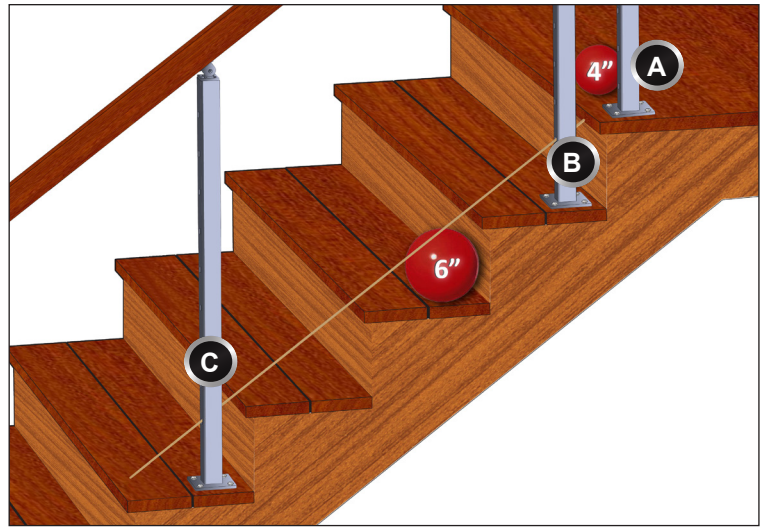

Figure A. Place your top stair post and position it so the space between the stair and deck posts is less than 4". Code requires that a 6" sphere cannot fit through the triangle created by the stair rise, stair tread and the bottom row of cable.

Surface Mount Posts Preparation

PREPARE PROPER BLOCKING PER LOCAL BUILDING CODE TO ENSURE SAFE AND CODE COMPLIANT INSTALLATION.

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 B*). 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.

3-1/2"   3-1/2" *Typical*

Figure B. 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.

Assemble the Corner Brackets
Assemble the top mounting plates in the necessary corner configuration. Use the corner mending plate and four (4) 1/4" screws to rigidly hold the assembly (*See Figure C*). The top mounting plates assemble into 90° or 135° corner brackets by using different edges of the corner bracket and a different hole pattern on the mending plate (*See Figure D*).

Assemble the Corner Posts
With the corner brackets assembled, attach a post to each mounting plate, using the center hole pattern, with two (2) 1/4" screws. Corners require two (2) posts. Make sure that the post holes for the cable are running parallel with the long side of the plate on both sides.
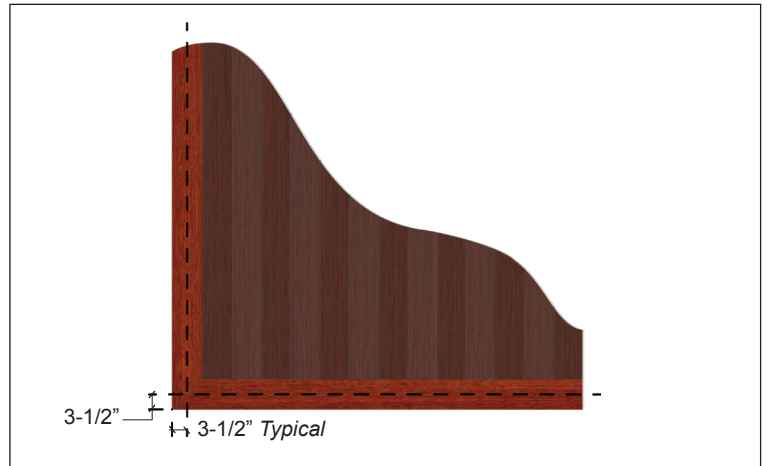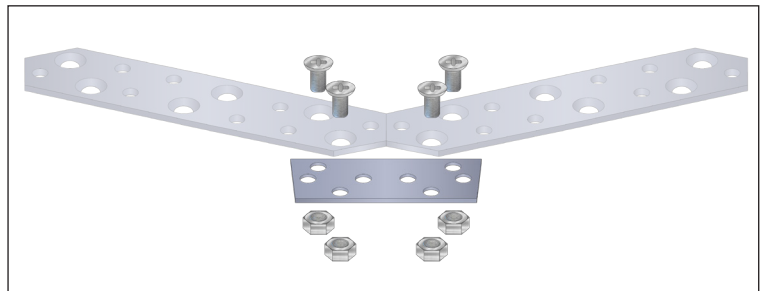

Figure C. Use the Corner Mending Plate Set to hold the top mounting plates together.
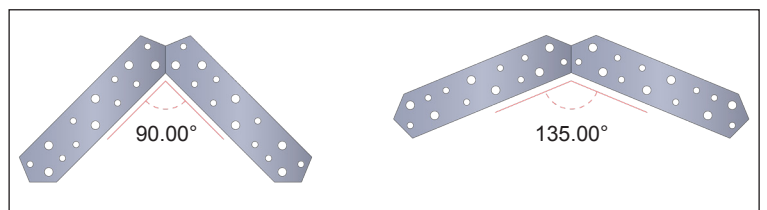

90.00°   135.00°

Figure D. The top mounting plates can be assembled into 90° and 135° corner brackets.

Installing the Surface Mount Posts

Install the Corner & End Posts
Beginning with corner posts, place the bases along the centerline being careful to make sure the bases are properly oriented. Using the base as a template, mark the four (4) holes for the screws (*See Figure E*). Use a 7/32" drill bit to drill a pilot hole for the lag bolts. Take extra care to be sure the holes are drilled into joists or blocking.

With the holes pre-drilled, install the corner posts with the hex lag screws using a 1/2" socket and ratchet set. When installing the posts, constantly check for level. Once the posts are installed, apply silicone to the hex lag screws and secure the supplied hex lag screw caps to prevent moisture from getting to the hex lag screws (*See Figure F*). Slide the base cover onto the base BEFORE installing the cable (*See Figure G*). Check for level and adjust accordingly.

Repeat the steps above to install the end posts.

Install the Mid Posts
When you have the end and corner posts installed, measure the distance between the end and corner. Divide this measurement evenly to get the required number of sections. Mark the center locations for the mid post bases once again taking care that the base is located on the centerline and oriented properly. Follow the steps above to install the mid posts.

Spectrum Surface Mount Cable Stabilizer Kit
A surface mount cable stabilizer kit is available. More information available on pages 7 and 11 of these installation instructions.
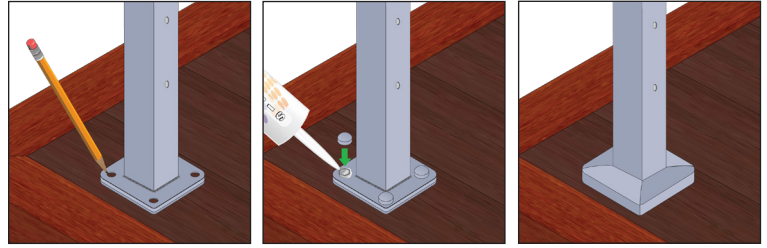

Figure E. **(Left)** Use the base as a template and mark the four (4) holes for the screws.
Figure F. **(Center)** Apply silicone to the hex lag screws once installed and secure the hex lag screw caps.
Figure G. **(Right)** Slide the base cover onto the base BEFORE installing the cable.

> *TO ENSURE CODE COMPLIANCE, ATLANTIS RAIL DOES NOT RECOMMEND EXCEEDING 4' (48") ON-CENTER BETWEEN CABLE SUPPORT POSTS. DO NOT EXCEED 48' BETWEEN TERMINATION HARDWARE.*

Installing the Fascia Mount Stair Posts

Find the Location of the Top Stair Post
Begin at the top of the stairs. Mark the location of the deck post (post A) adjacent to the top stair post (post B). Place your top stair post (post B) and position it so the space between the stair and deck posts is less than 4" (*See Figure H*). At the same time, make sure the deck post (post A) is aligned with the stair post (post B).

Find the Location of the Lower Stair Posts
Place the lower stair post (post C) and insert a 1/4" wooden dowel through the bottom cable holes of the top and lower stair posts (posts B & C) to visualize the alignment. Code requires that a 6" sphere cannot fit through the triangle created by the stair rise, stair tread and the bottom row of cable (*See Figure H*). Repeat this process and mark the position of all lower stair posts.

Install the Posts
Once the stair posts are marked for location, begin installing using the instruction below. The first installed post should be the deck post (post A) adjacent to the top stair post (post B) (*See Figure H*).
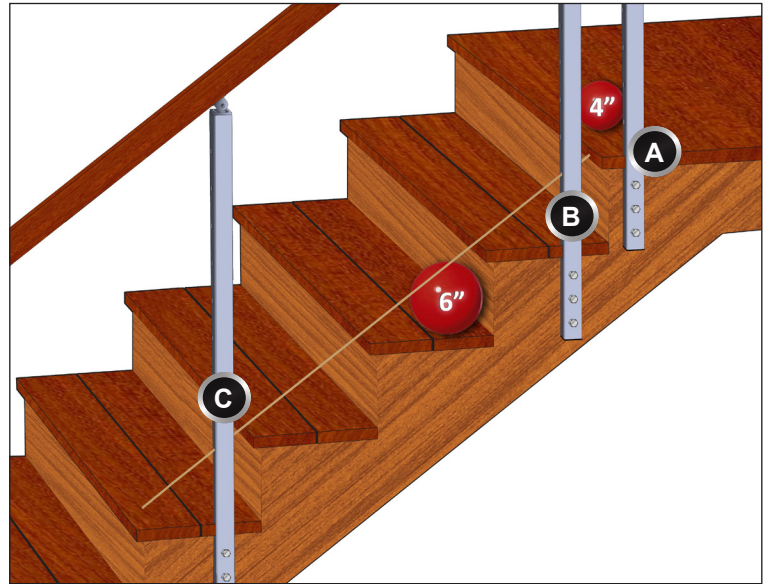

Figure H. Place your top stair post and position it so the space between the stair and deck posts is less than 4". Code requires that a 6" sphere cannot fit through the triangle created by the stair rise, stair tread and the bottom row of cable. Please note that stair railings that take a corner to a level surface, the straight post adjacent to the top stair post will be closer together.

Fascia Mount Posts Preparation

Assemble the Corner Brackets
Start by assembling the top mounting plates in the necessary corner configuration. Use the corner mending plate and four (4) 1/4" screws to rigidly hold the assembly (*See Figure I*). The top mounting plates assemble into 90° or 135° corner brackets by using different edges of the corner bracket and a different hole pattern on the mending plate (*See Figure J*).

Assemble the Corner Posts
With the corner brackets assembled, attach a post to each mounting plate, using the center hole pattern, with two (2) 1/4" screws. Corners require two (2) posts. Make sure that the post holes for the cable are running parallel with the long side of the plate on both sides (*See Figure K*).

Measure the Height
To begin, measure the thickness of your top rail and add 6-1/8". This is the distance from the top of the deck surface to the bottom of the post. As an example, a 1-1/2" thick top rail will require the post to sit 7-5/8" (1-1/2" + 6-1/8") below the top of the deck surface (*See Figure L*).

Block Out or Notch the Deck
You'll need to account for any overhang of trim your deck may have. This can be accomplished one of two ways, by either notching out the trim piece with a coping saw or similar, or by blocking out underneath the overhang. Use the completed corner assembly and mark on either side of each post and cut or block accordingly.

Mark the Centers
Using the completed corner assembly as a guide, mark the centers of the corner posts on either side of the fascia. Use a carpenter's square to draw a vertical line on the fascia board at the center mark (*See Figure M*). Measure down to the height as determined in the previous step, in our example, 7-5/8" and draw a mark. With the centerline drawn, hold the post on the center line at the height mark you just made, and carefully mark the centers of the (3) mounting holes (*See Figure N*).
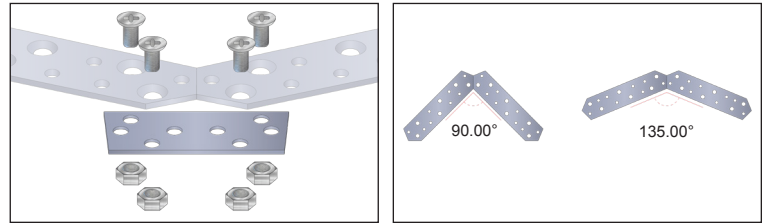

Figure I. **(Left)** Use the Corner Mending Plate Set to hold the top mounting plates together.
Figure J. **(Right)** The top mounting plates can be assembled into 90˚ and 135˚ corner brackets.
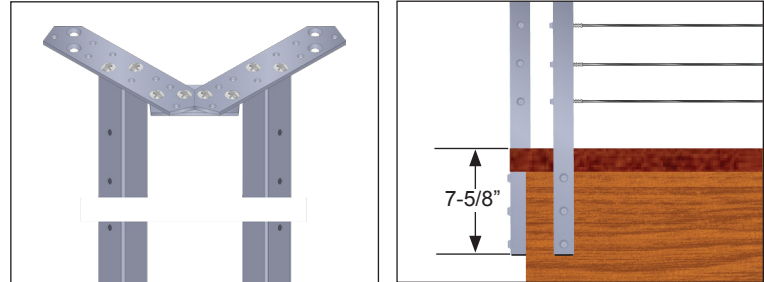

Figure K. **(Left)** Attach a post to each plate using the center hole pattern.
Figure L. **(Right)** Determine the length below the top of the deck surface by adding 6-1/8" to the thickness of the top rail.
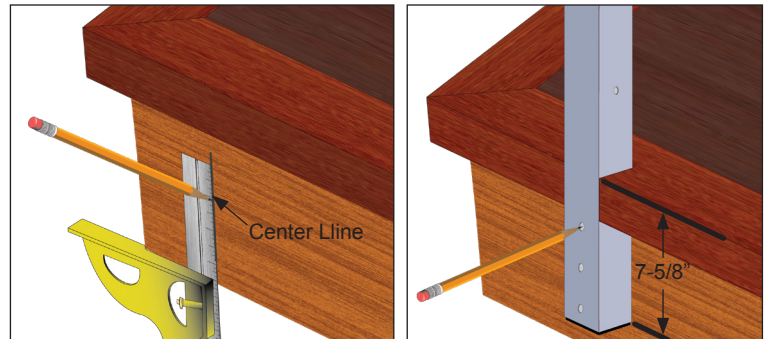

Center Lline

Figure M. **(Left)** Use a carpenters square to draw a vertical line at the center mark of the post.
Figure N. **(Right)** With the post held in place, carefully mark the centers of the mounting holes.

Installing the Fascia Mount Posts

Pre-Drill the Fascia
Using a 7/32" drill bit, pre-drill the fascia at the marks made in the previous step to a depth as needed, once again, beginning with the corner posts. Take extra care to be sure the holes are drilled straight into the fascia.

Install the Hex Lag Screw
With the holes drilled for the fascia, install the post with the hex lag screws using a 1/2" socket and ratchet set. When installing the post, constantly check for level, both side to side and front to back. Over tightening the hex lag screws may cause the post to pitch forward (*See Figure O*). If this happens and the post is pulled out of level, simply loosen the offending screw slightly until the post comes back to square and shim as required to keep the post plumb. Once the post is installed, press on the supplied hex lag screw caps for a finished look (*See Figure P*).
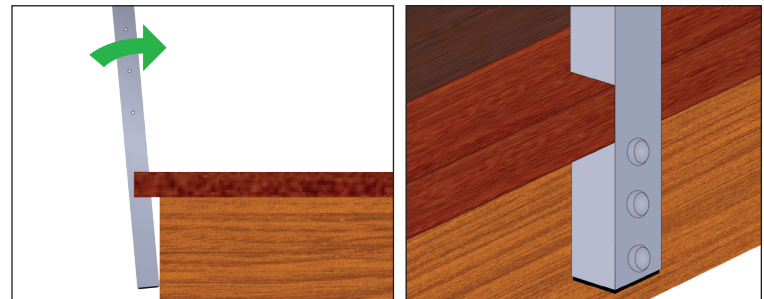

Figure O. **(Left)** Check the post for level as you tighten the hex lag screws. Adjust the tightness of the bolts as necessary and shim as required to ensure that the post is level front to back and side to side.
Figure P. **(Right)** Attach the supplied hex lag screw caps for a finished look.

REMOVE THE BOTTOM CAPS FROM EACH POST AND RINSE OUT ANY DEBRIS, SUCH AS PRESSURE TREATED LUMBER FROM THE INSTALLATION PROCESS. FAILURE TO DO SO MAY RESULT IN STAINING OF FASCIA BOARDS. BOTTOM CAPS CAN BE REINSTALLED UPON COMPLETION OF THE SYSTEM.

November 2019

Repeat

When you have the end and corner posts installed, measure the distance between the end and corner. Divide this measurement evenly to get the required number of sections. Repeat the above steps to install the mid posts.

Installing the Top Rail

Install the Top Plates

Secure the top plates to each of the posts using two (2) 1/4" -20 RH screws. For mid posts, use the hole pattern in the center of the plate (*See Figure Q*). For end posts use the side hole patterns. Be sure to have the corner plates pre-assembled for ease of installation.

Install the Top Rail

Carefully measure and cut your top rail taking into account any mitering of joints you may need to do. Piece by piece; lay your top rail on the center of the mounting plate being sure that the top rail covers the top plate in its entirety. With the top rail in place, using a 7/32" drill bit, pre-drill for the wood screws that attach the top rail to the mounting plate. Use up to six (6) #10 pan head screws (supplied) to fasten the wooden top rail to the Spectrum posts (*See Figure R*).
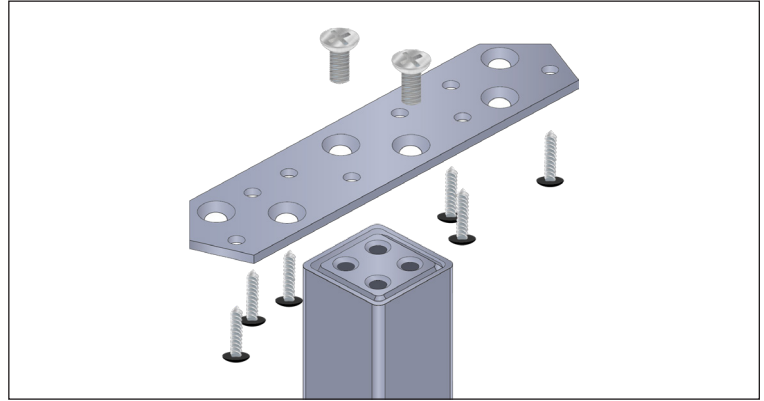

Figure Q. For mid posts, use the hole pattern in the center of the plate and secure using two (2) 1/4"-20 RH screws.
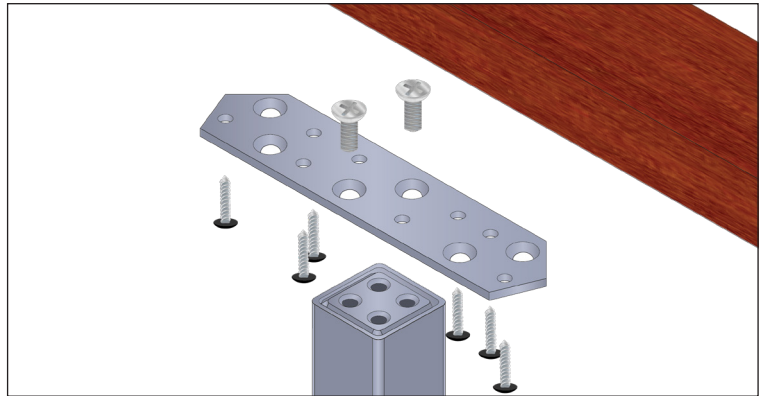

Figure R. Secure wooden top rail using up to six (6) #10 pan head screws.

Installing the Spectrum Surface Mount Stabilizer Kit

The Spectrum Surface Mount Stabilizer Kit comes fully assembled with a 36" stanchion, 2-5/8" hole spacing (standard) or 42" stanchion, 2-11/16" hole spacing (standard) and fasteners. Available in a black, metallic silver finish and uncoated.

FOR USE WITH SPECTRUM SURFACE MOUNT (STRAIGHT SECTIONS) CABLE RAILING SYSTEM ONLY.

Place the surface mount stabilizer assembly at the center position of the mounting surface and mark the screw holes in the upper (underside of railing) and lower (mounting surface) stabilizer base with a pencil (*See Figures S and T*).
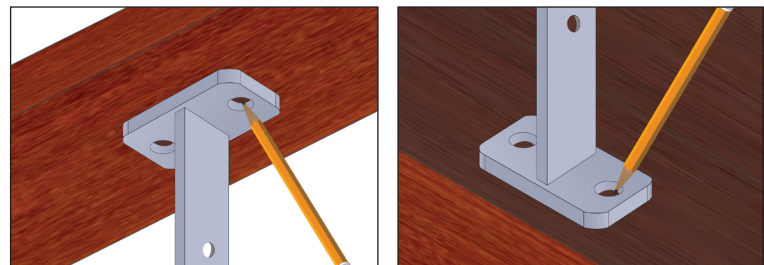

Figure S. **(LEFT)** Mark screw holes in the upper stabilizer base with a pencil.
Figure T. **(RIGHT)** Mark screw holes in the lower stabilizer base with a pencil.

November 2019

Put aside the stabilizer assembly. With a 5/32" drill bit, drill pilot holes at the pencil marks (*See Figures U and V*).

Reposition the cable stabilizer between the bottom of the handrail and the mounting surface; while aligning with the pilot holes. Using a #2 Phillips driver bit and (4) four #10 x 2" Flat Head wood screws install the stabilizer assembly (*See Figures W and X*).
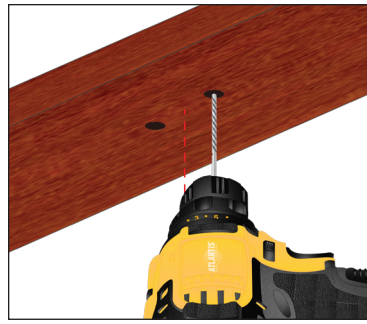
DO NOT INSTALL CABLE BEFORE STABILIZER POSTS.

Figure U. **(LEFT)** Drill pilot holes at the pencil marks in the bottom side of the handrail.
Figure V. **(RIGHT)** Drill pilot holes at the pencil marks in the mounting surface.

Figure W. **(LEFT)** Attach the top of the stabilizer to the mounting surface with (2) two #10 x 2" flat head wood screws.
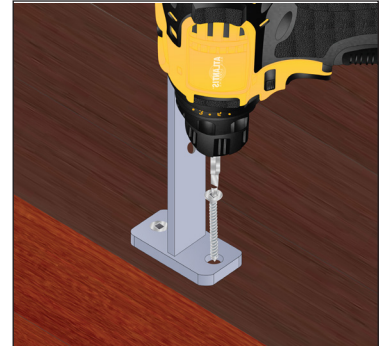***Figure X.*** **(RIGHT)** Attach the bottom of the stabilizer to the mounting surface with (2) two #10 x 2" flat head wood screws.

Installing the HandiSwage Studs & Cable

With the frame securely built according to these installation instructions, it's time to install the cable infill. The Spectrum System is designed to utilize two (2) cable diameter options, 5/32" or 1/8" with HandiSwage Studs (*See Figure Y*). Please consult the hand swaging tool installation instructions. **MAKE SURE THE POSTS AND TOP RAILS ARE INSTALLED IN THEIR ENTIRETY PRIOR TO TENSIONING CABLES!** The posts of the Spectrum System will deflect under load if the guard frame isn't fully assembled.

Figure Y. HandiSwage Standard Stud.

Tensioning the Cable

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. Before tensioning with tools, hold the stud fittings firm and tension the nuts of the system by hand until all cables are snug.

BEFORE TENSIONING ANY OF THE CABLES, IT IS IMPORTANT TO BE SURE THAT THE FRAME FOR THE INFILL IS COMPLETED.

November 2019

General Cable Tensioning

When tensioning cable using a HandiSwage stud, you must hold the stud or cable in a neutral position while turning the nut to apply tension. There are two methods to accomplish this; both requiring a pair of vice grip pliers.

1) You can hold the back of the swage stud with the vice grips which requires at least 1/4" space between the tensioning nut and the end of the stud (*See Figure Z*).

2) You can use a Cable Grip Pad to hold the cable just outside the post while you tension the stud using the tensioning nut (*See Figure AA*).

USING METHOD 2 REQUIRES A HANDISWAGE CABLE GRIP PAD. NEVER CLAMP PLIERS OR VICE GRIPS DIRECTLY ON CABLE. SET YOUR VICE GRIPS WITH 1/8" SPACE TOTAL BETWEEN CABLE AND VICE GRIP JAWS. PLACE PAD ON CABLE AND THEN APPLY THE VICE ACTION TO THE PLIERS.

Atlantis Rail offers a Cable Grip Pad (part # E0114-0000) to aid in your installation process. Ask your Sales Representative for more information.
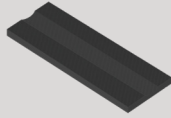
ATLANTIS RAIL RECOMMENDS USING LOCTITE THREADLOCKER BLUE 242 ON THE THREADS OF THE HANDISWAGE STUD. APPLY A DROP TO THE THREADS AS CLOSE TO WHERE THE NUT WILL BE TIGHTENING AGAINST THE WASHER AS POSSIBLE. USE A DAMP CLOTH TO CLEAN UP EXCESS RESIDUE IMMEDIATELY.
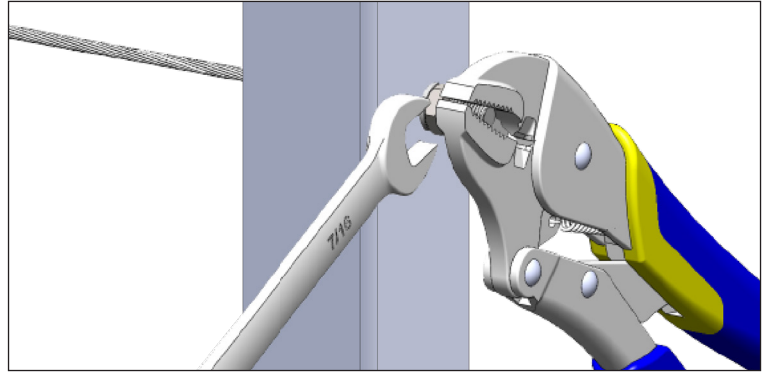

Figure Z. *(*METHOD 1*)* Hold the back of the swage stud with vice grips while tightening the tension nut.
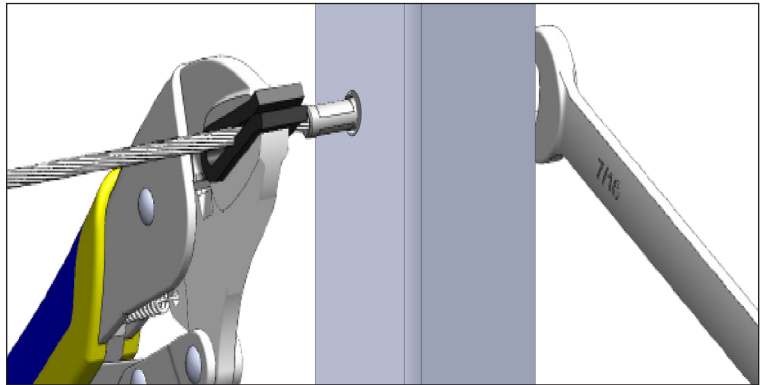

Figure AA. **(METHOD 2)** Using a HandiSwage Cable Grip Pad and vice grips, hold the cable in a fixed position while tightening the tension nut.

Tension the Center Cable

Beginning with the center run of cable, hold the swage terminal firm using one of the methods described above and tighten the tensioning nut with a 7/16" wrench. Tighten the nut three or four full rotations until cable is snug. Don't worry if this cable moves a little, we will come back around to it later.

Tension the Remaining Cables

Alternate tensioning the cables from the center, working above and below the center cable as if tightening the lug nuts on a tire (*See Figure AB*). Again tension the nuts three or four full rotations or until cable is snug. You will notice as you tension, the cables surrounding it will slacken. When this happens, stop tensioning and move onto the next cable.

Make Final Adjustments

Go back to the center cable and re-tighten the cables until all are tight and relatively equal in tension. You may find that you need to do this three or four times getting down to even a quarter turn of the tensioning nut each time. Tension from both sides when necessary.
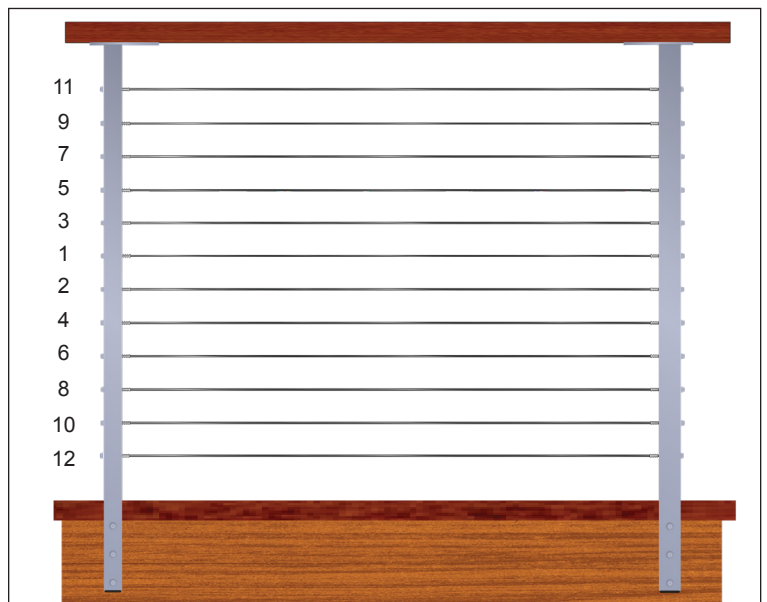

Figure AB. Tensioning Diagram - Begin with the center run of cable and alternate working above and below until cables are tight.

HandiSwage Cover Nut Sets (C0309 Series)

HandiSwage Cover Nut Sets (*See Figure AC*) are designed for use with HandiSwage Studs and are perfect for cable railing systems where "through-post" hardware is desired for minimal obstruction). Affix to end of swage stud for the finished look. The HandiSwage Cover Nut Sets comes with a stainless steel nut and washer in packs of 10 and are available in the following colors: white, light brown, dark brown, metallic silver and black.

Figure AC. HandiSwage Cover Nut Sets.

1) With the cables tensioned, it's time to install the lock nuts and cover nuts. This is accomplished in just three easy steps, and you just did one of them! Using the HandiSwage Combination Wrench (part # C0731-TK01-2) hold in place the nut with the 7/16" end of the wrench and tighten the lock nut with the 3/8" end of the wrench.

Figure AD. The HandiSwage Cover Nut Set installs in just 3 easy steps: tighten, cut and cover.

2) Using a hacksaw, cut the remaining shank off flush with the lock nut.

3) Then place the cover nut over the assembly until it is flush with the post (*See Figure AD*).

In addition to the HandiSwage Cover Nut Sets Atlantis Rail offers an Acorn Nut Set (part # C0308-UF07-2) and Deluxe Cover Nut Set (part # C0307-U007-2). More information is available in the Additional Components section found towards the end of these installation instructions.

Installing Cable Grommets

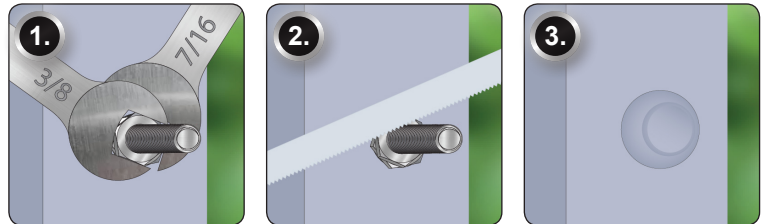Utilizing the grommet install tool (part # E0916-1000) makes installing cable grommets easy.

> **THE GROMMET INSTALL TOOL (part # E0916-1000) ACCOMODATES BOTH 1/8" AND 5/32" CABLE GROMMET SIZES.**

Align the slot of the cable grommet with the slot of the cable grommet install tool (*See Figure AE*).

> **NOT ALIGNING THE SLOTS OF THE CABLE GROMMET AND TOOL WILL NOT ALLOW THE CABLE GROMMET TO BE INSTALLED.**

Figure AE. **(LEFT)** Align the slot of the cable grommet with the slot of the tool.
Figure AF. **(RIGHT)** Insert flange of cable grommet into the tool.

Insert the flange of the cable grommet into the bottom side of the grommet install tool; making sure the slots are still aligned (*See Figure AF*).

Holding the grommet install tool in one hand and placing ones thumb on the top side of the cable grommet, push the cable grommet onto the cable in a downward motion. A little force will need to be applied to fit the cable grommet onto the wire (*See Figure AG*).

> **ALWAYS POINT THE TIP OF THE CABLE GROMMET INWARDS TO THE POST HOLE AND KEEP THE POSITION OF THE SLOT DOWNWARDS TO ALLOW WATER TO DRAIN.**
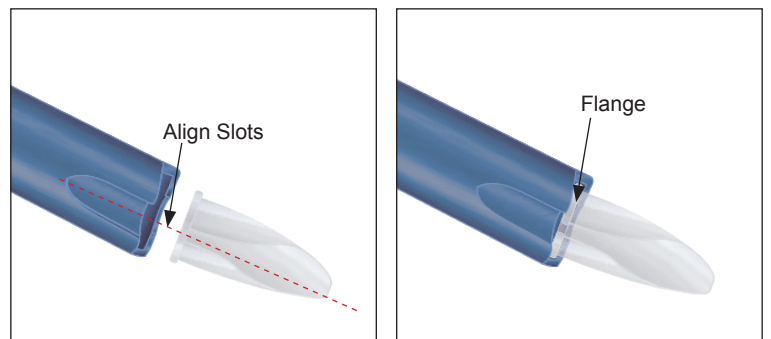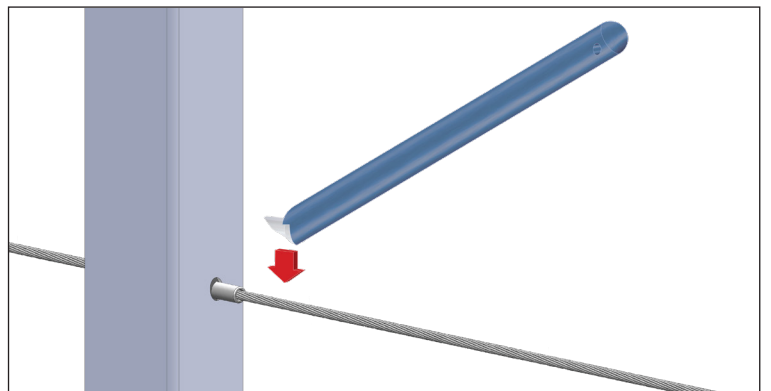

Figure AG. With the grommet install tool, push the cable grommet onto the cable in a downward motion.

November 2019

After the cable grommet is placed onto the cable, remove the grommet install tool from the flange of the cable grommet. Place the grommet install tool on the wire (using the slot in the tool as a guide) push the cable grommet into the cable hole in the post until it fits flush (*See Figure AH*).
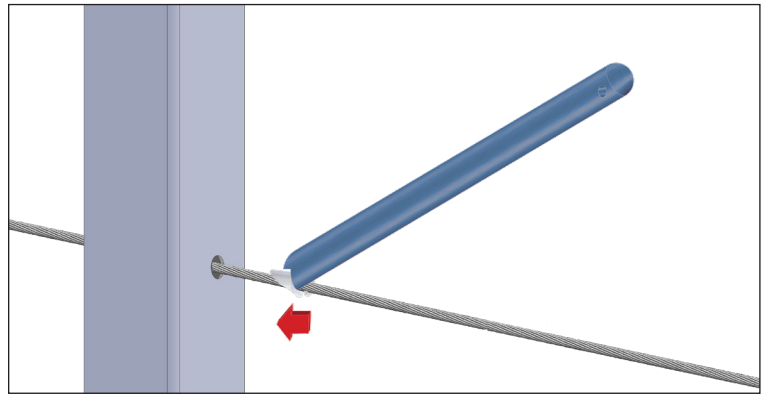

Figure AH. With the grommet install tool, push the cable grommet into the cable hole in the post until it fits flush.

Additional Components

Cable Grommets - C0916-0003-25

Once the cable has been installed and tensioned, it is time to add the cable grommets (part # C0916-0003-25). The Cable Grommets (*See Figure AI)* cable grommets are available at an additional cost. They help prevent movement and deflection of the cable, as well as, reduces dirt and moisture from getting inside the posts. These grommets are They are available for straight mid post sections with 1/8" cable. These grommets are slotted for easy attachment onto the cable. Available in packs of twenty five (25).
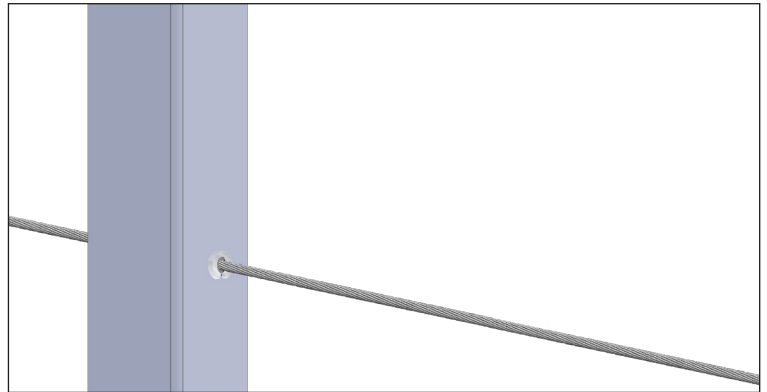

Figure AI. Cable grommets help prevent movement and deflection of the cable.

34 Degree Stair Spacer - C0841-0034-2

When installing cable infill on Spectrum stair posts, a 34 Degree Stair Spacer (part # C0841-0034-2) is used to achieve the angled cable run. Place the stair space on the threaded end before attaching the desired cover nut set (*See Figure AJ*).

> *30° (PART # C0841-0030-2) & 38° (PART # C0841-0038-2) SPACERS ARE ALSO AVAILABLE. ALL STAIR SPACES ARE AVAILABLE IN 2 PACKS.*
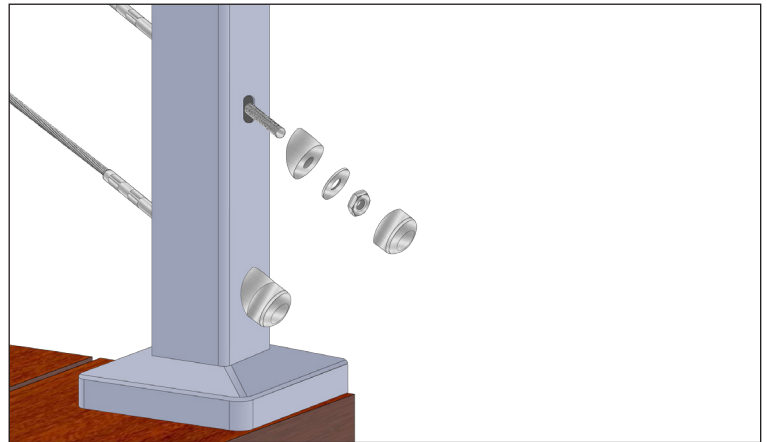
Figure AJ. Place the 34 Degree Stair Spacer on the threaded end before attaching the cover nut set to achieve the angled cable run.

Wide Mounting Plate - S0904-XX53

The Wide Mounting Plate (part # S0904-XX53) is twice the width of the standard mounting plate and is used in applications where a wider top rail is desired.

Secure the plate to the post using two (2) 1/4" -20 RH screws. For mid posts, use the hole pattern in the center of the plate (*See Figure AK*). For end posts use the side hole patterns.

Figure AK. Use when a wider top rail is desired. For mid posts, use the hole pattern in the center of the plate and secure using two (2) 1/4"-20 RH screws.

November 2019

ADA Mounting Clamp - S0904-XX60

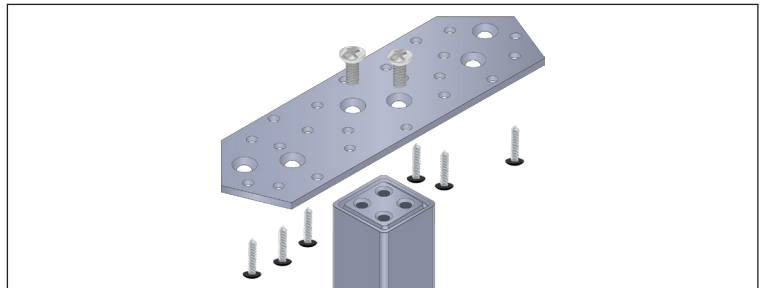The ADA Mounting Clamp (part # S0904-XX60) fits snugly on the Spectrum post. To attach, insert the U-shape piece of the clamp onto the post making sure the pads stay intact (*See Figure AL*).

Figure AL. Insert the u-shape piece onto the post making sure the pads stay intact. Attach the back piece and tighten screws alternately until fully tightened.

Attach the back piece and insert the screws. Using a 5/32" (or 4mm) Allen wrench, tighten the screws alternately a half turn at a time until the screws are fully tightened.

Reinforcing Channel - S0904-XX54

This channel (part number S0904-XX54) is used in applications where the handrail needs additional reinforcement. The 36" surface mount Spectrum post requires a spacing block (part number S0904-XX58) for installation. If a spacing block is required (*See Figure AM*), attach it to the post before attaching the top mounting plate.

Figure AM. Attach the spacing block to the post before attaching the top mounting plate.

The reinforcing channel is 48" in length and is ideal for 4' post spacing. It can be cut to size if shorter spans are needed. Place the channel in the center of the post on top of the top mounting plate (*See Figure AN*). Place the customer supplied top rail on top of the reinforcing channel. Use the supplied #10 wood screws to attach the channel and top mounting plate to the top rail (*See Figure AO*). Using two (2) screws at either end of all exposed slots, fasten the channel to the top rail. Also, be sure to fasten through the top mounting plate where slots offer exposed top rail access.

Figure AN. (LEFT) Place the reinforcing channel in the center of the post on atop the top mounting plate.
Figure AO. (RIGHT *Use the supplied fasteners to attach the channel and top mounting plate to the top rail.*

Spectrum Surface Mount Stabilizer Kit - S0905-XX45

This stabilizer kit (part number S0905-XX45) may be used with sections up to 6 feet (between posts) if all other Spectrum specifications are properly implemented (*See Figure AP*).

Atlantis Rail Cable Stabilizers are purposed for use in maintaining code compliant cable spacing between post and rail sections with spacing greater than 4 feet between posts and not exceeding 6 feet.

Availble in black, metallic silver and uncoated.

Figure AP. The stabilizer kit may be used with sections up to 6 feet (between posts).

November 2019

Acorn Nut Set - C0308-UF07-2

Designed for use with HandiSwage Studs. This set is perfect for cable railing systems where "through post" hardware is desired for minimal obstruction. Affix the stainless steel acorn nut set to the end of a swage stud for a finished look (*See Figure AQ*). Finish: Polished Stainless Steel. Available in 2 packs.

Figure AQ Acorn Nut Set Assembly Diagram - 1) Stainless Steel Washer, 2) Stainless Steel Nut & 3) Stainless Steel Acorn Nut. HandiSwage Stud not included.

Deluxe Cover Nut Set - C0307-U007-2

Designed for use with the HandiSwage Studs. The Cover Nut Set is perfect for cable railing systems where "through-post" hardware is desired for minimal obstruction. Affix to the end of the stud for a finished look (*See Figure AR*). Finish: Polished Stainless Steel. Available in 2 packs.
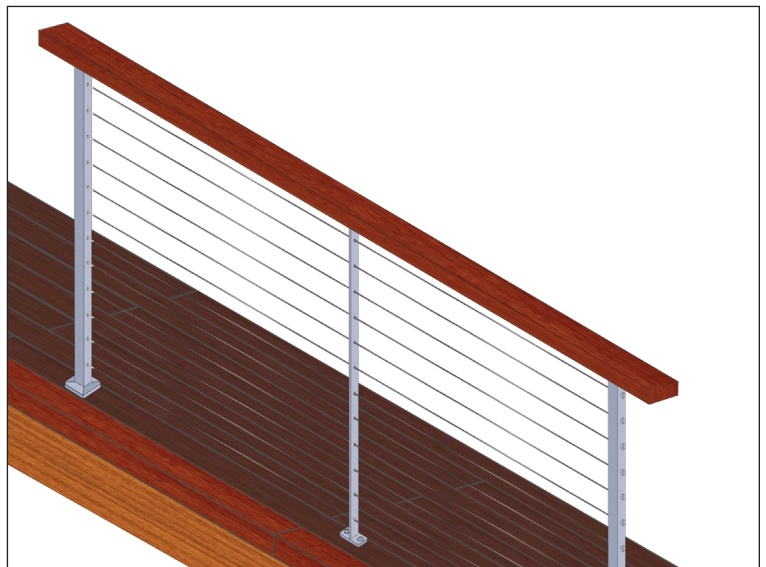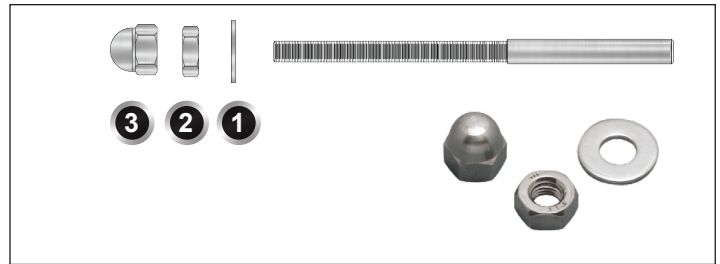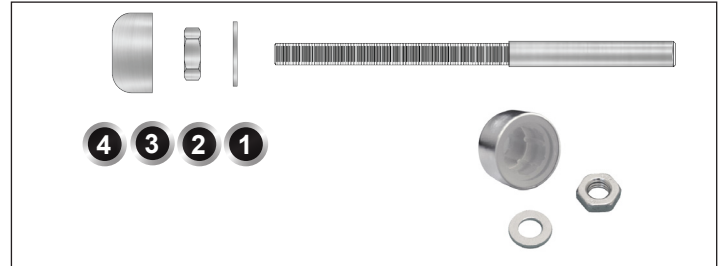

Figure AR. Deluxe Cover Nut Set Assembly Diagram - 1) Stainless Steel Washer, 2) Stainless Steel Nut 3) Stainless Steel Lock Nut & 4) Stainless Steel Deluxe Cover. HandiSwage Stud not included.

HandiSwage Cover Nut Set - C0309 Series

Designed for use with HandiSwage Studs. Cover Nut Sets are perfect for cable railing systems where "through-post" hardware is desired for minimal obstruction. Affix to end of swage stud for a finished look (*See Figure AS*). Finishes: White, Light Brown, Dark Brown, Metallic Silver and Black. Available in 10 packs.
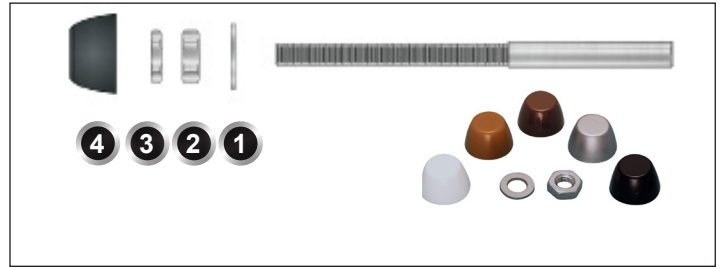
Figure AS. HandiSwage Nut Set Assembly Diagram - 1) Stainless Steel Washer 2) Stainless Steel Nut 3) Stainless Steel Lock Nut & 4) HandiSwage Cover. HandiSwage Stud not included.

Spectrum System Specifications

The Spectrum System uses stainless steel square posts and fittings with horizontal cable infill. Customers must provide their own hard wood top rail. It is advised to observe that tension must be applied to fittings and cable. Posts should be fascia or surface mounted securely enough to resist detachment and hold under tension.

Straight Sections
The Spectrum System is offered in post heights of 36" or 42" for straight sections. It consists of square posts fascia mounted, customer supplied top rail and 12 to 14 runs of cable.

Stair Sections
Rail height for stair sections is available in 36" or 42".

RAILING HEIGHTS ARE OFFERED IN THESE DIMENSIONS DUE TO NATIONWIDE BUILDING CODES. HOWEVER, ATLANTIS RAIL CAN SUPPLY CUSTOM HEIGHTS/LENGTHS UPON REQUEST.

Between Post Lengths
Atlantis Rail recommends staying within 4' section lengths to maintain structural integrity.

Railing Finish
The Spectrum System is offered in standard and special order colors to fit any application.

Cable Infill
The HandiSwage™ cable infill option features a line of stainless steel hand swage fittings and 1/8" or 5/32" cable.

Cable Spacing

Cable spacing varies depending on post kit model. Consult Post Kit Cable Spacing & Height Chart below.

Spectrum Post Kits, Cable Spacing & Heights

Part Number	Post Description	Cable Spacing	Actual Post Height	Rendered Rail Height	Height From Surface
S0904-XX36*	36" Fascia Mount Post Kit	2.625"	42"	36"	34.375" +/-
S0904-XX38-ST*	38" Fascia Mount Stair Post Kit	2.629" - 2.756"**	45.75"	34" - 36"	39.625" +/-
S0904-XX42*	42" Fascia Mount Post Kit	2.688"	48"	42"	40.375" +/-
S0905-XX36*	36" Surface Mount Post Kit	2.625"	34.50"	36"	34.50"
S0905-XX38-ST*	Surface Mount Universal Post Kit	2.629" - 2.756"**	38.125"	34" - 36"	38.125"
S0905-XX42*	42" Surface Mount Post Kit	2.688"	40.50"	42"	40.50"
S0904-XX45*	36" Fascia Mount Post Kit	2.63"	34.50"	36"	34.50"
S0904-XX46*	42" Fascia Mount Post Kit	2.69"	40.50"	42"	40.50"

* "XX" in the part number is the color designation. Replace with "BK" for black, "MT" for metallic silver or "SP" for one of the special colors.

**Cable spacing on stair post kits vary due to the angle of the stairs. These variations are based on stair angles between 32˚ and 36˚ (aligned dimensions).

Spectrum System Product Specifications

Components

Product	Description	Dimensions	Fasteners	Notes
S0905-XX36*	36" Surface Mount Post Kit	36" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0905-XX38-ST	Surface Mount Universal Post Kit	36" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0905-XX42	42" Surface Mount Post Kit	42" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0904-XX36	36" Fascia Mount Post Kit	36" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0904-XX38-ST	38" Fascia Mount Stair Post Kit	38" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0904-XX42*	42" Fascia Mount Post Kit	32" 316 stainless steel	Hex Lag Screws	Fasteners not included
S0701-0003-01	HandiSwage 1/8" Cable, 100ft. Spool	1/8" 1x19 316 stainless steel cable	--	--
S0701-0003-02	HandiSwage 1/8" Cable, 250ft. Spool	1/8" 1x19 316 stainless steel cable	--	--
C0978-4025	RailEasy 5/32" Cable, 25ft. Spool	5/32" 1x19 316 stainless steel cable	--	--
C0978-4100	RailEasy 5/32" Cable, 100ft. Spool	5/32" 1x19 316 stainless steel cable	--	--
C0978-4500	RailEasy 5/32" Cable, 500ft. Spool	5/32" 1x19 316 stainless steel cable	--	--
C0731-H0703 -2	HandiSwage Standard Stud (2 Pack)	1/8" 3.620" length 1/4"-28	RH thread UNF	Hand swage use only
C0731-H0703 -10	HandiSwage Standard Stud (10 Pack)	1/8" 3.620" length 1/4"-28	RH thread UNF	Hand swage use only
C0731-H0704 -2	HandiSwage Standard Stud (2 Pack)	5/32" 3.620" length 1/4"-28	RH thread UNF	Hand swage use only
C0731-H0704 -10	HandiSwage Standard Stud (10 Pack)	5/32" 3.620" length 1/4"-28	RH thread UNF	Hand swage use only
C0916-0003-25	Cable Grommets (25 Pack)	--	--	--
C0841-0030-2	Stair Spacer (2 Pack)	1/4" 30° .500" Length .750" OD	--	--
C0841-0034-2	Stair Spacer (2 Pack)	1/4" 34° .500" Length .750" OD	--	--
C0841-0038-2	Stair Spacer (2 Pack)	1/4" 38° .590" Length .750" OD	--	--
S0904-XX53	Wide Mounting Plate	316 stainless steel	--	1/4"-20 RH thread UNF
S0904-XX60	ADA Mounting Clamp	316 stainless steel	--	--
S0904-XX54	Reinforcing Channel	316 stainless steel	#10 wood screws	--
S0905-XX45	Spectrum Surface Mount Stabilizer Kit	36" 316 stainless steel	--	Powder coated black, metallic silver or uncoated
C0308-UF07-2	Acorn Nut Set (2 Pack)	.674" complete assembly	--	1/4"-28 RH thread UNF
C0307-U007-2	Deluxe Cover Nut Set (2 Pack)	.400" length .750" OD	--	1/4"-28 RH thread UNF
C0309-WH02-10	HandiSwage Cover Nut Set (10 Pack)	.420" length .690" OD (White)	--	1/4"-28 RH thread UNF
C0309-LB02-10	HandiSwage Cover Nut Set (10 Pack)	.420" length .690" OD (Light Brown)	--	1/4"-28 RH thread UNF
C0309-BR02-10	HandiSwage Cover Nut Set (10 Pack)	.420" length .690" OD (Dark Brown)	--	1/4"-28 RH thread UNF
C0309-BK02-10	HandiSwage Cover Nut Set (10 Pack)	.420" length .690" OD (Black)	--	1/4"-28 RH thread UNF
C0309-MT02-10	HandiSwage Cover Nut Set (10 Pack)	.420" length .690" OD (Metallic Silver)	--	1/4"-28 RH thread UNF
E0113-H600	HandiSwage Hand Swager	--	--	--
E0113-HG00	After Swage Gauge	--	--	--
C0989-00HD	RailEasy Cable Cutter	--	--	--
E0114-0000	Cable Grip Pad (3 Pack)	--	--	--
E0916-1000	Grommet Install Tool	--	--	--
C0731-TK01-2	HandiSwage Combination Wrench	--	--	3/8" & 7/16" (2 Pack)

November 2019