



# 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").



## Tools

### Required & Recommended



## 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

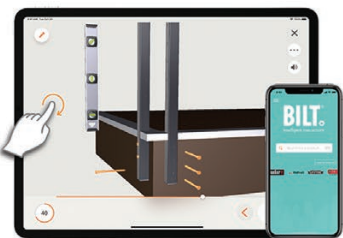
(508) 732-9798

www.atlantisrail.com

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## Before you begin



3D-GUIDED INTERACTIVE ASSEMBLY INSTRUCTIONS CAN BE FOUND IN BILT®  
**DOWNLOAD THE FREE APP**



## 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.



*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 powder coated 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.**

## HandiSwage™ Components

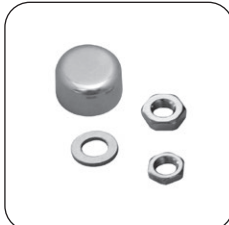


- C0731-H0703-2 HandiSwage™ Standard Stud 1/8" - 2 Pack
- C0731-H0703-10 HandiSwage™ Standard Stud 1/8" - 10 Pack
- C0731-H0704-2 HandiSwage™ Standard Stud 5/32" - 2 Pack
- C0731-H0704-10 HandiSwage™ Standard Stud 5/32" - 10 Pack

## Additional Components



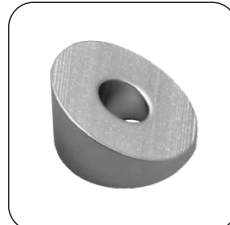
Acorn Nut Set



Deluxe Cover Nut Set



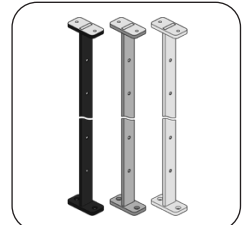
Cable Grommets



30°, 34° & 38°  
Stair Spacer



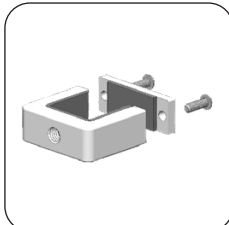
HandiSwage™  
Cover Nut Sets



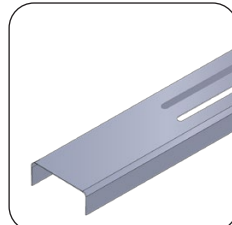
Spectrum Surface  
Mount Stabilizer Kit



Wide Mounting Plate



ADA Mounting Clamp

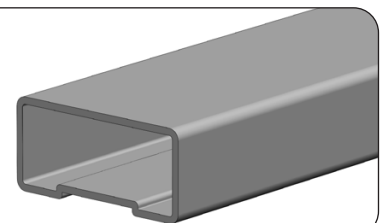


Reinforcing Channel

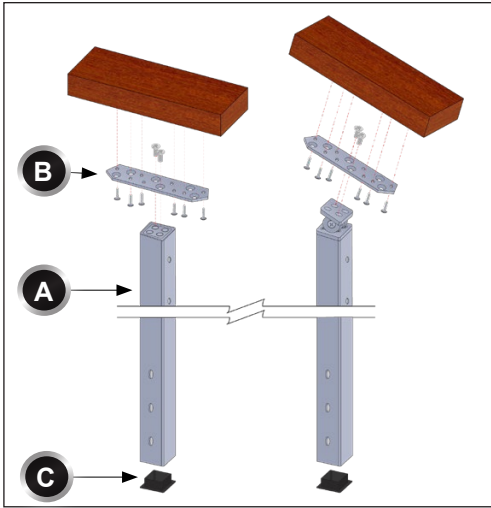


### Using the Spectrum Top Rail (S0904-AR Series)?

Refer to the [Spectrum Top Rail Installation Instructions](#) for guidance on how to install the Spectrum posts and top rail system.



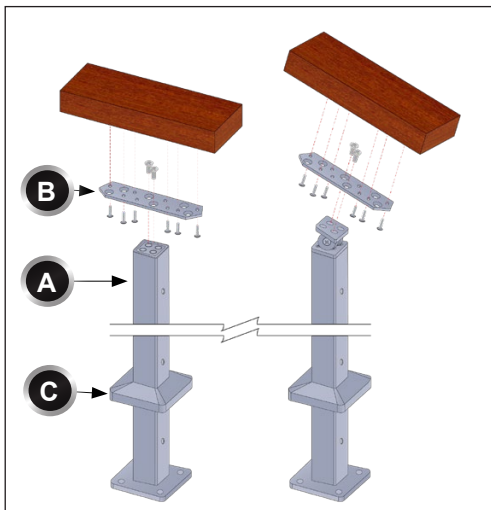
## Mounting Options



### 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

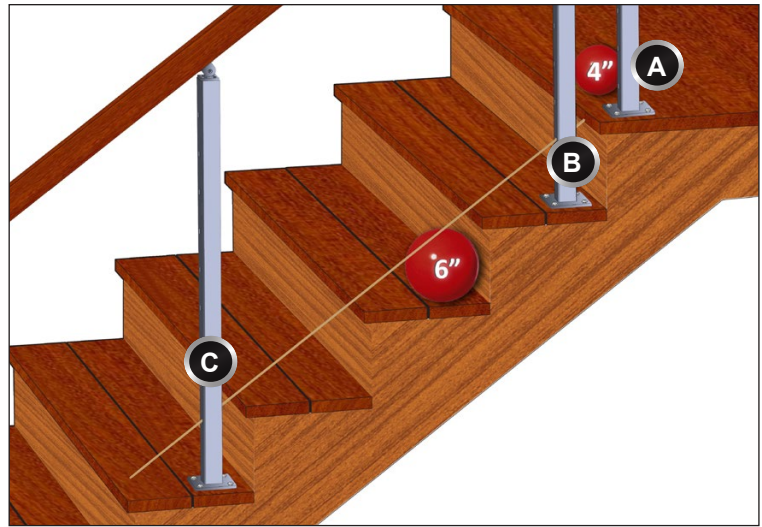
stair and deck posts is less than 4" (See *Figure A*). At the same time, make sure the deck post (post A) is aligned with the stair post (post B).

### 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. Lower posts are placed toward the back of the stair treads allowing the bottom row of cable to be as close to the nosing as possible. 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



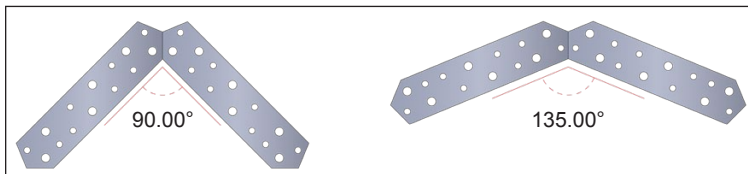
**PREPARE PROPER BLOCKING PER LOCAL BUILDING CODE TO ENSURE SAFE AND CODE COMPLIANT INSTALLATION.**

### 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.

### Assemble the Corner Brackets

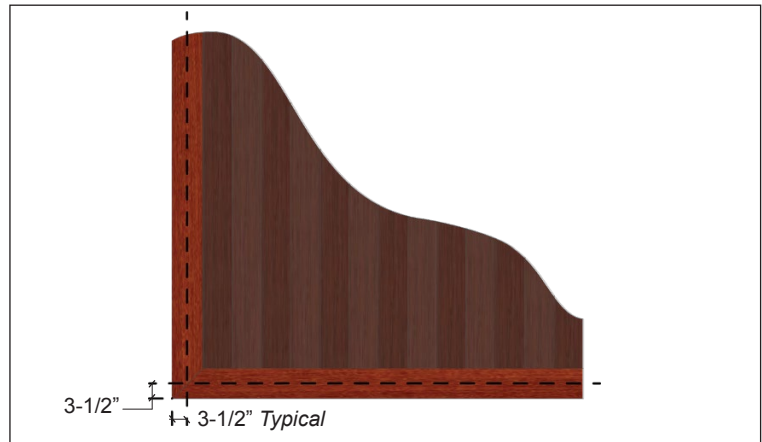
Assemble the top mounting plates in the necessary corner configuration. Use the corner mending plate and four (4) 1/4" screws to rigidly hold the assembly (See *Figure C*). The top mounting plates assemble into 90° or 135° corner brackets by using different edges of the corner bracket and a different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



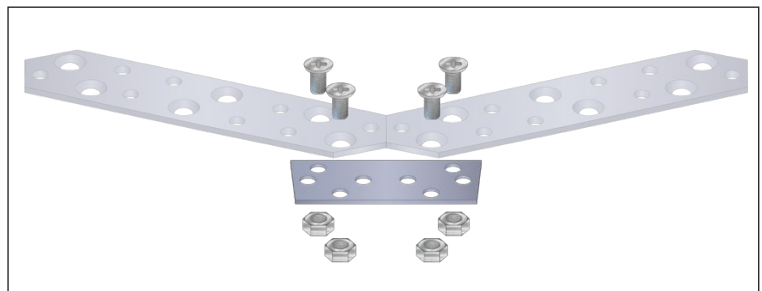
**Figure D.** The top mounting plates can be assembled into 90° and 135° corner brackets.

### Assemble the Corner Posts

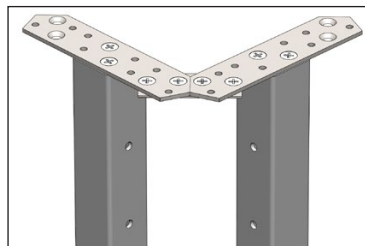
With the corner bracket fully assembled, attach it to the posts using two (2) 1/4" screws for each mounting plate. USE THE CENTER HOLE PATTERN. Corners require two (2) posts. Make sure that the post holes for the cable are running parallel with the long side of the plate on both sides (See *Figure E*).



**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.



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



**Figure E.** Attach a post to each plate using the center hole pattern.

## 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 F). 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, check for plumb using a 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 G). Slide the base cover onto the base BEFORE installing the cable (See Figure H).

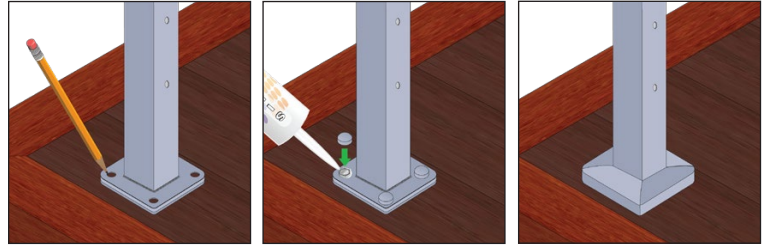
Repeat the steps above to install the end posts.

### Install the Mid Posts

When you have the end and corner posts installed, measure the distance of the section in between the end and corner posts. The recommended post spacing is 4 feet on-center. Divide the section evenly to get desired post spacing. 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 for sections greater than 4 feet (up to 6 feet). More information available on pages 7 and 11 of these installation instructions.



**Figure F. (Left)** Use the base as a template and mark the four (4) holes for the screws.

**Figure G. (Center)** Apply silicone to the hex lag screws once installed and secure the hex lag screw caps.

**Figure H. (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

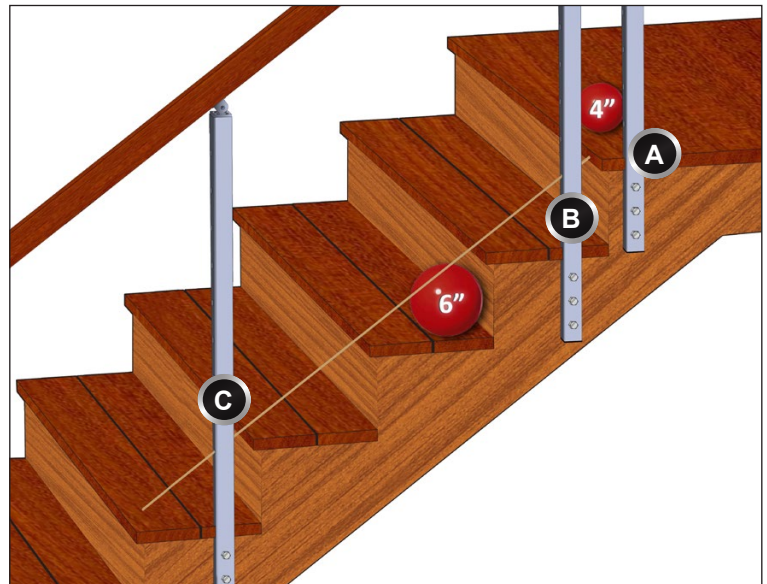
Begin at the top of the stairs. Mark the location of the deck post (post A) adjacent to the top stair post (post B). Place your top stair post (post B) and position it so the space between the stair and deck posts is less than 4" (See Figure I). At the same time, make sure the deck post (post A) is aligned 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. Lower posts are placed toward the back of the stair treads allowing the bottom row of cable to be as close to the nosing as possible. 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 I). 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 I).



**Figure I.** 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 on 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

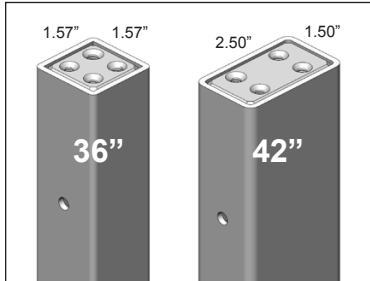
## Identify the End/Corner Posts You'll be Using

36" Fascia mount systems use universal posts (1.57"x1.57") on ends and corners.

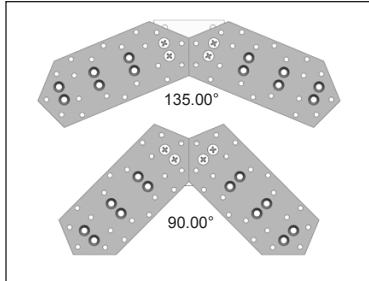
42" Fascia mount systems use more substantial posts (1.5" x 2.5") on ends and corners (See Figure J).

## Assemble the Corner Brackets

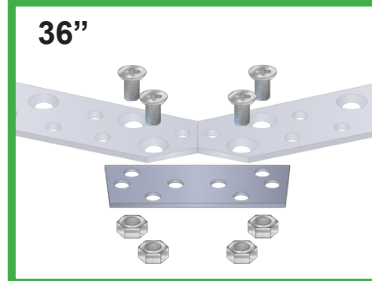
The top mounting plates assemble into 90° or 135° corner brackets by using different angled edges on the end of the mounting plates and a different hole pattern on the mending plate (See Figure K). Start by arranging the top mounting plates in the necessary corner configuration. Use the corner mending plate and four (4) 1/4" screws to build the assembly (See Figure L or M).



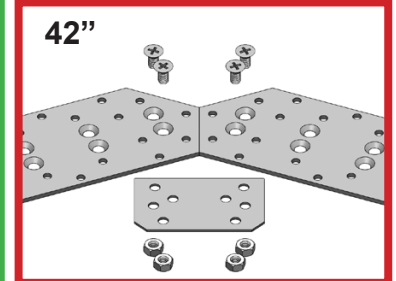
**Fig J.** End/Corner Post Comparison. 36" Fascia Mount vs. 42" Fascia Mount



**Fig K.** Assemble top mounting plates into 90° or 135° corner brackets



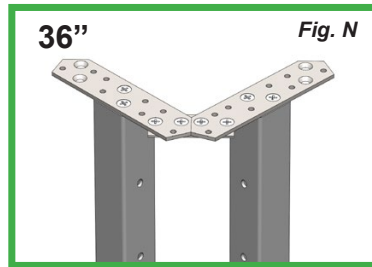
**Fig L.** Standard Mending Plate Set. Use for 36" Fascia Mount System



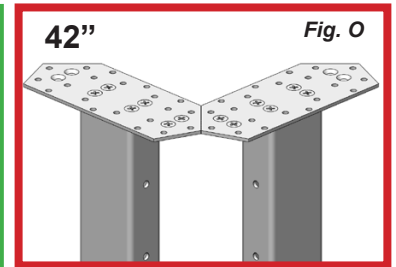
**Fig M.** Special Mending Plate Set for S0904-XX42-EC Fascia Mount Posts

## Assemble the Corner Posts

With the corner bracket fully assembled, attach it to the posts using the supplied 1/4" machine screws. USE THE CENTER HOLE PATTERN. 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 N or O).



**Fig N.** 36"

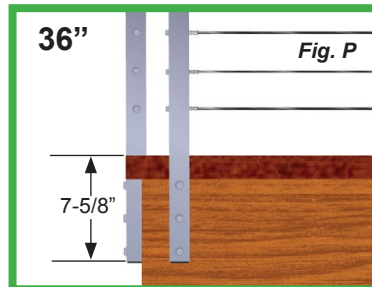


**Fig O.** 42"

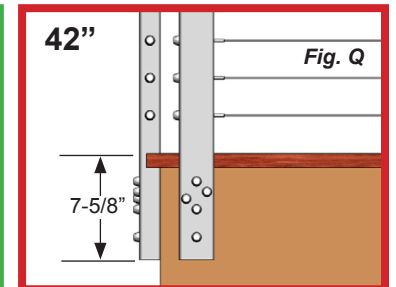
Attach a post to each plate using the center hole pattern.

## 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 P or Q).



**Fig. P.** 36"



**Fig. Q.** 42"

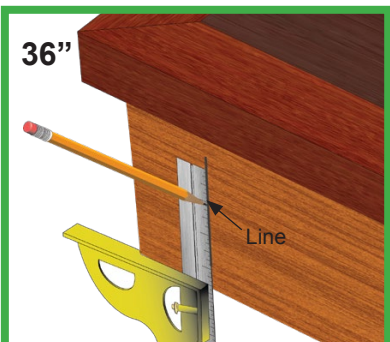
Determine the length below the top of the deck surface by adding 6-1/8" to the thickness of the top rail (1-1/2" thick top rail in these examples).

## Block Out or Notch the Deck

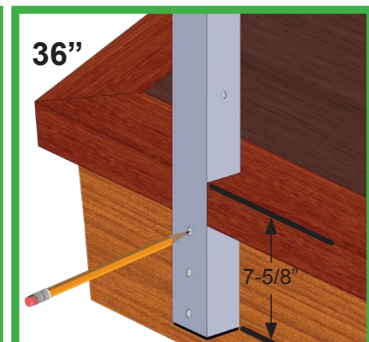
You'll need to account for any overhang of trim your deck may have. This can be accomplished one of two ways, by either notching out the trim piece or by blocking out underneath the overhang.

## Mark the Locations of Mounting Holes

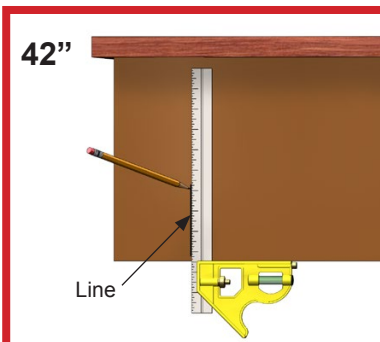
Using the completed corner assembly as a guide, mark the side of the corner posts on either side of the fascia. Use a carpenter's square to draw a vertical line on the fascia board (See Figure R or T). Measure down to the height as determined in the previous step (in our example 7-5/8") and draw a mark on the vertical line. Hold the post plumb on the vertical line at the height mark you just made and carefully mark the centers of the mounting holes (See Figure S or U).



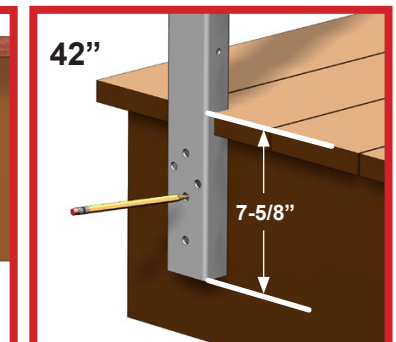
**Figure R.** (Left) Use a carpenter's square to draw a vertical reference line.



**Figure S.** (Right) With the post held in place, mark the mounting holes.



**Figure T.** (Left) Use a carpenter's square to draw a vertical reference line.



**Figure U.** (Right) With the post held in place, mark the mounting holes.

## Installing the Fascia Mount Posts

### Pre-Drill the Fascia

Using a 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.

- If installing 5/16" lag screws, pre-drill with a 7/32" drill bit.
- If installing 3/8" lag screws, pre-drill with a 1/4" drill bit.

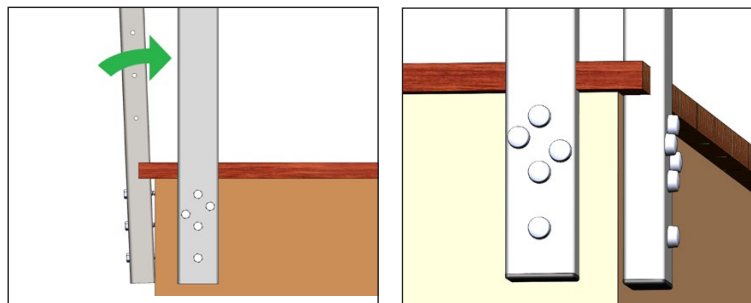
Make sure the holes are drilled straight into the structure.

### Install the End/Corner Posts using the Hex Lag Bolts

With the holes drilled in the fascia, install the post with the hex lag screws using a socket and ratchet set. When installing the posts, check for plumb using a level. Over tightening the hex lag screws may cause the post to pitch forward (See Figure V). If this happens, simply loosen the offending lag screw slightly until the post comes back to plumb and shim as needed to keep the post plumb. Once the post is installed, press on the supplied hex lag screw caps for a finished look (See Figure W).

### Repeat Process to Install Mid Posts

When you have the end and corner posts installed, measure the distance of the section in between the end and corner posts. The recommended post spacing is 4 feet on-center. Divide the section evenly to get desired post spacing. Repeat the above steps to install the mid posts.



**Figure V. (Left)** Check the post for plumb as you tighten the hex lag screws. Adjust the tightness of the bolts and shim (if necessary) to ensure that the post is plumb front to back and side to side.

**Figure W. (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.**



**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.**

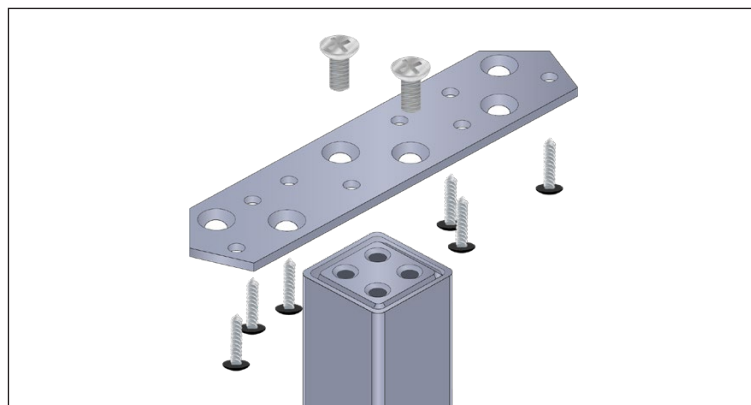
## Installing the Top Rail

### Install the Top Plates

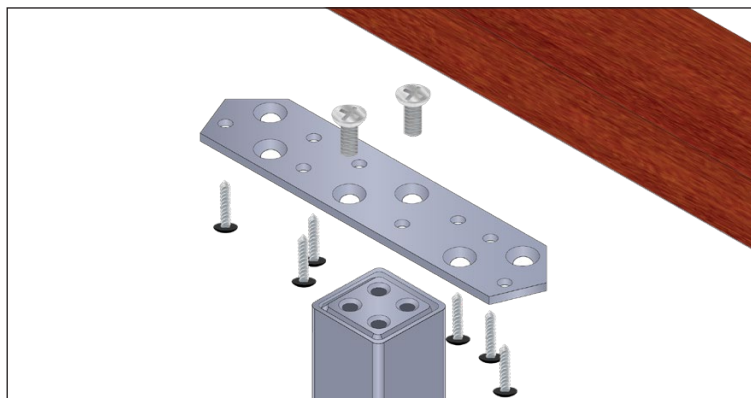
Secure the top plates to each of the posts using two (2) 1/4" -20 RH screws. For mid posts, use the hole pattern in the center of the plate (See Figure X). For end posts use the side hole patterns. Be sure to have the corner plates pre-assembled for ease of installation.

### 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, use a 5/32" drill bit to 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 Y).



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



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

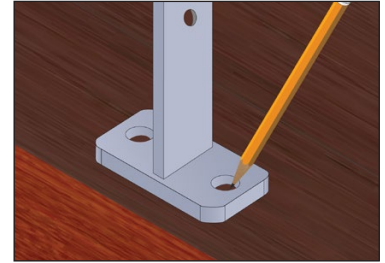
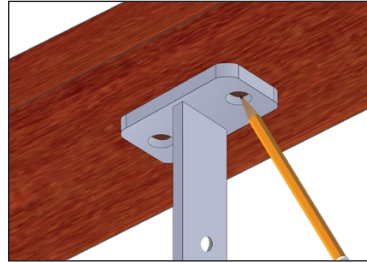
## Installing the Spectrum Surface Mount Stabilizer Kit

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.



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

Center the stabilizer in between posts. Use the hole pattern on the top and bottom of the stabilizer to mark the location of screw holes onto the underside of the top rail and on the deck surface using a pencil (See Figures Z and AA).



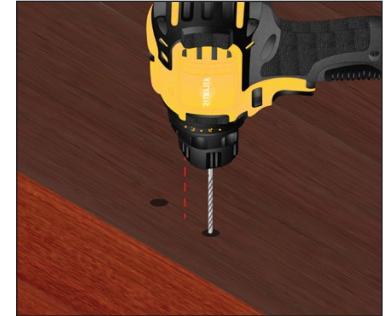
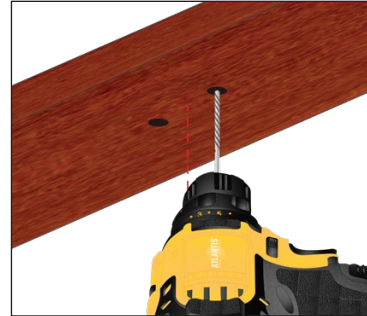
**Figure Z. (LEFT)** Mark screw holes in the upper stabilizer base with a pencil.  
**Figure AA. (RIGHT)** Mark screw holes in the lower stabilizer base with a pencil.

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



**TO DETERMINE THE TOP AND BOTTOM OF THE CABLE STABILIZER REFER TO THE FOLLOWING MEASUREMENTS. TOP OR BOTTOM MOUNTING PLATE TO THE FIRST CABLE HOLE.**

36"	TOP: 2.75"	BOTTOM: 2.875"
42"	TOP: 2.813"	BOTTOM: 2.75"

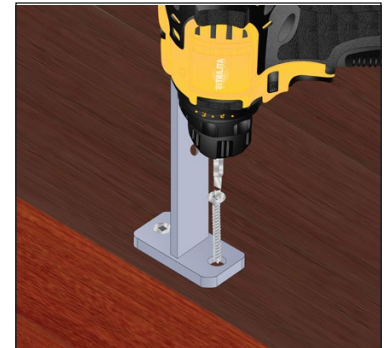
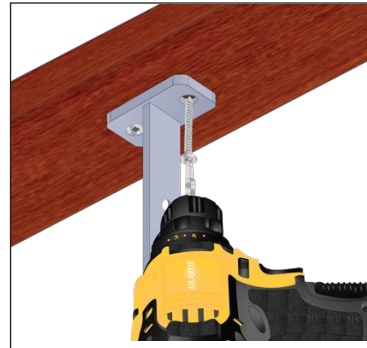


**Figure AB. (LEFT)** Drill pilot holes at the pencil marks in the bottom side of the handrail.  
**Figure AC. (RIGHT)** Drill pilot holes at the pencil marks in the mounting surface.

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 1-1/2" Flat Head wood screws install the stabilizer assembly (See Figures AD and AE).



**DO NOT INSTALL CABLE BEFORE CABLE STABILIZERS! STABILIZER IS FOR SECTIONS OVER 4 FEET, BUT NO GREATER THAN 6 FEET IN LENGTH.**



**Figure AD. (LEFT)** Attach the top of the stabilizer to the mounting surface with (2) two #10 x 1-1/2" flat head wood screws.  
**Figure AE. (RIGHT)** Attach the bottom of the stabilizer to the mounting surface with (2) two #10 x 1-1/2" flat head wood screws.

## Installing the HandiSwage™ Studs & Cable

With the railing framework 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, 1/8" or 5/32" with HandiSwage™ Studs (See Figure AF). 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 railing framework isn't fully assembled.



**Figure AF.** HandiSwage™ Standard Stud.

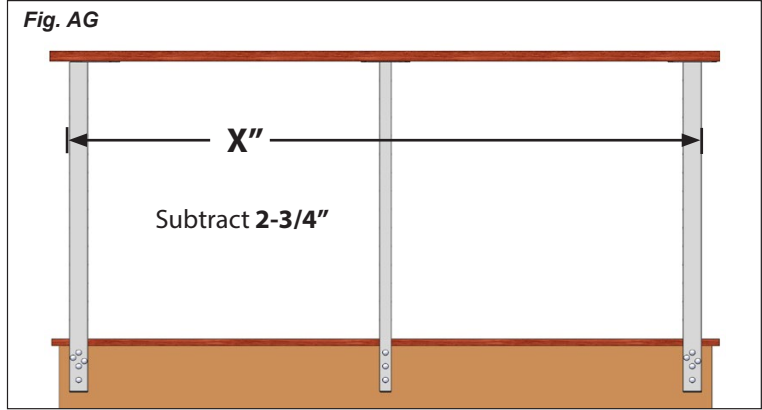


### Determining the Proper Length of Cable for Each Section

For cable run sections where HandiSwage™ Studs will be used on both ends of cable (See Figure AG).

- 1) Measure from “outside to outside” of the outer posts for each cable run section.
- 2) Subtract 2-3/4” from your measurements for each section. This is the “cut to” length.

It is recommended to cut and install the bottom cable run in each section before cutting the remaining cables. Do this to insure the measurements are accurate.



## Tensioning the Cable

### Before You Tension

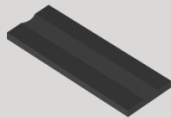
Make sure the posts are installed securely and in accordance with the manufacturers' recommended installation procedures. Install all top and intermediate rails. The posts will deflect beyond allowable limits if you attempt to tension the cables on an incomplete guard frame.

### General Cable Tensioning

When tensioning cable using HandiSwage™ studs, you must hold the stud (attached to cable) in a neutral position while turning the tensioning nut to apply tension to the cable assembly. Hand tighten tensioning nuts onto studs before using wrenches to fully tension.

Use a Cable Grip Pad to hold the cable just outside the post while rotating the tensioning nut with a 7/16” wrench until cable is snug (See Figure AH).

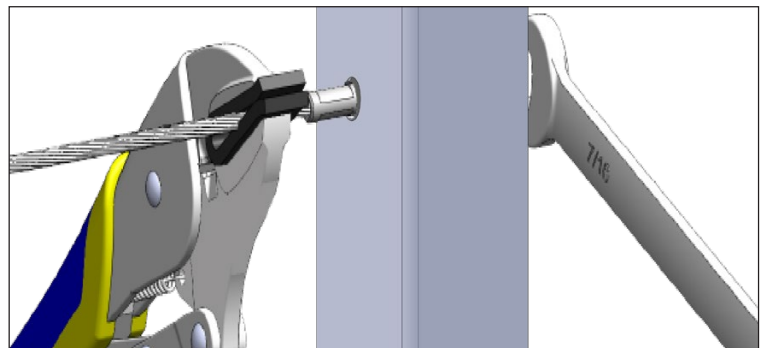
Atlantis Rail offers a Cable Grip Pad (part # E0114-0000) to aid in your installation process. Ask your Sales Representative for more information.



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



**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.**



**Figure AH.** 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

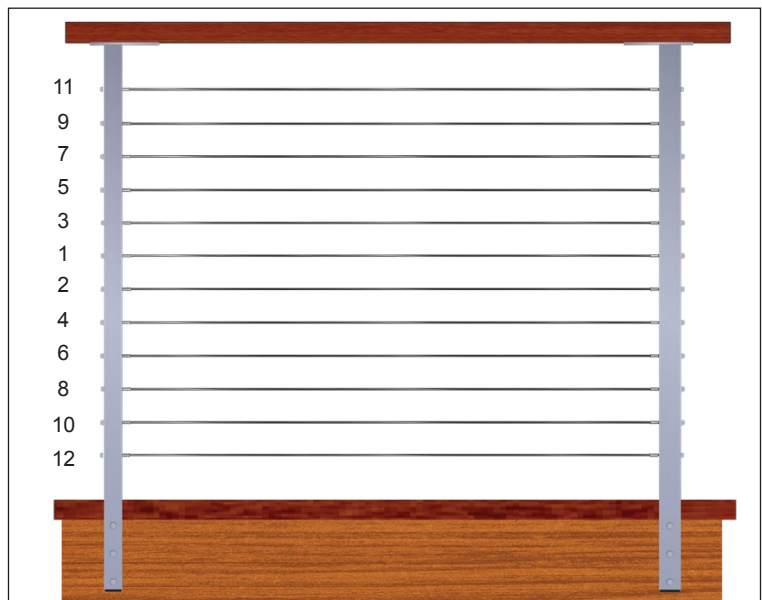
Beginning with the center run of cable, hold the swage stud in a fixed position while tightening the tensioning nut with a 7/16” wrench. Tighten the nut three or four full rotations until cable is snug. Don't worry if this cable moves a little, we will come back around to it later.

### 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 AI). 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 AI.** Tensioning Diagram - Begin with the center run of cable and alternate working above and below until cables are tight.

## Installing Cover Nuts

### HandiSwage™ Cover Nut Sets (C0309 Series)

HandiSwage™ Cover Nut Sets 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 a finished look. The HandiSwage™ Cover Nut Set includes a stainless washer, tensioning nut, lock nut and cover nut (See Figure AJ). Sold in packs of 10 and available in the following colors: White, Light Brown, Dark Brown, Metallic Silver and Black.

- 1) With all the cables tensioned properly, hand tighten the Lock Nuts onto the stud ends. Using the HandiSwage™ Combination Wrench Set (part #C0731-TK01-2), hold the tensioning nut in place with the 7/16” wrench while tightening the lock nut fully with the 3/8” wrench.
- 2) Using a hacksaw or cut-off wheel, 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 AK).

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 on page 13 of these installation instructions.



Figure AJ. HandiSwage™ Cover Nut Sets.

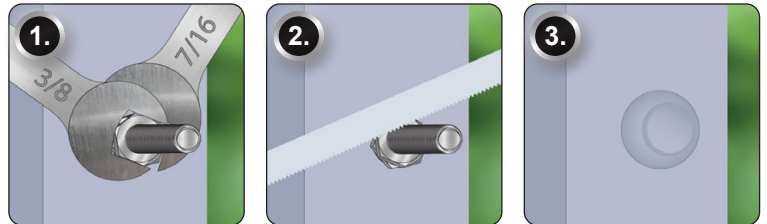


Figure AK. The HandiSwage™ Cover Nut Set installs in just 3 easy steps: lock, cut and cover.



**HARDWARE CAN BECOME EXTREMELY HOT DURING CUTTING PROCESS. MAKE SURE THE NUTS AND STUD ARE COOL BEFORE INSTALLING COVER NUT.**

## 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 AL).



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

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 AM).

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 AN).



**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.**

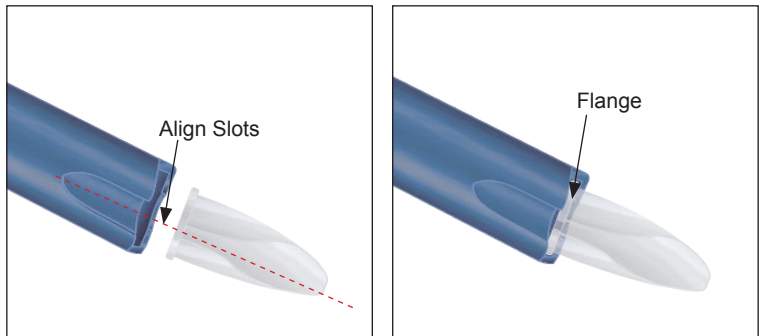


Figure AL. (LEFT) Align the slot of the cable grommet with the slot of the tool. Figure AM. (RIGHT) Insert flange of cable grommet into the tool.

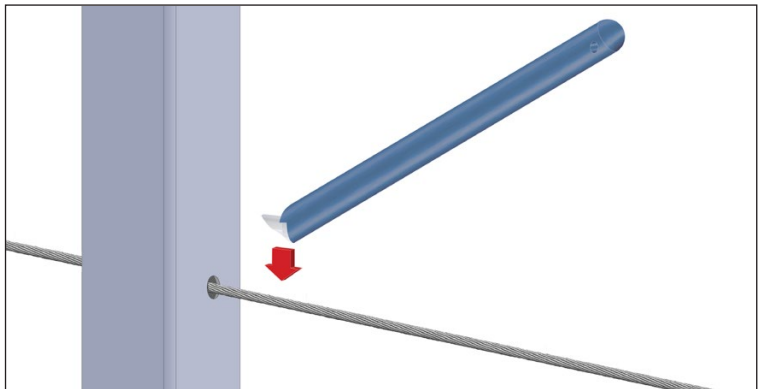
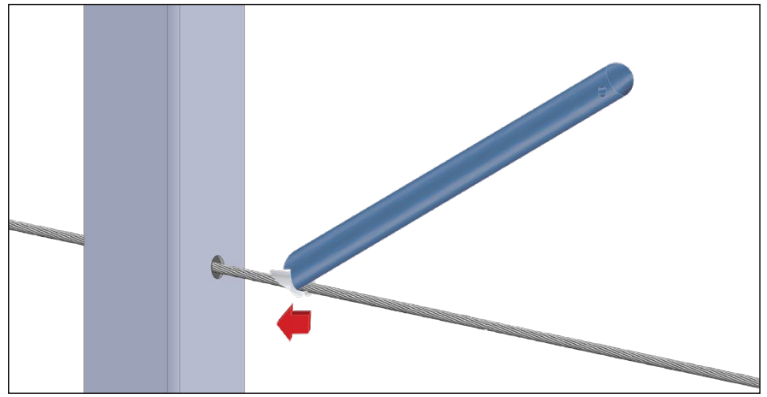


Figure AN. With the grommet install tool, push the cable grommet onto the cable in a downward motion.

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 AO).

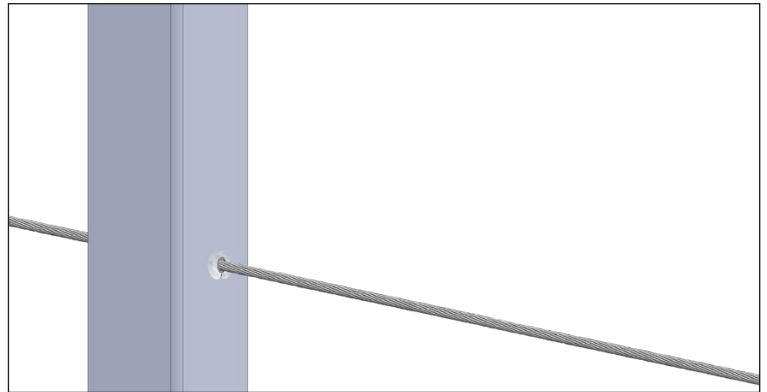


**Figure AO.** With the grommet install tool, push the cable grommet into the cable hole in the post until it fits flush.

## 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). These cable grommets (See Figure AP) 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 available for straight mid post sections with 1/8" cable. They are slotted for easy attachment onto the cable and are available in packs of twenty five (25).



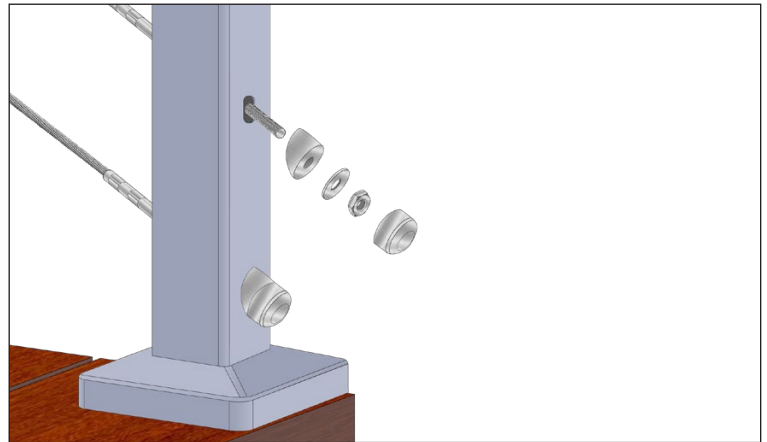
**Figure AP.** Cable grommets help prevent movement and deflection of the cable.

### 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 spacer on the threaded end before attaching the desired cover nut set (See Figure AQ).



**30° (PART # C0841-0030-2) & 38° (PART # C0841-0038-2) SPACERS ARE ALSO AVAILABLE. ALL STAIR SPACES ARE AVAILABLE IN 2 PACKS.**

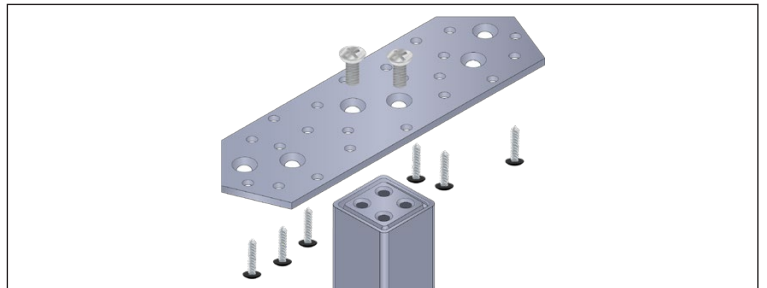


**Figure AQ.** Place the 34 Degree Stair Spacer on the threaded end before attaching the cover nut set to achieve the angled cable run.

### 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 AR). For end posts use the side hole patterns.



**Figure AR.** 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.

### 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 AS).



**BEFORE INSERTING THE U-SHAPE PIECE ONTO THE POST, MOISTEN THE PADS. THIS WILL ENABLE IT TO GLIDE EASIER OVER THE POST WHILE KEEPING THE PADS IN PLACE.**

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 a thinner handrail needs additional reinforcement. The 36" surface mount Spectrum post requires a Spacing Block (part number S0904-XX58) for installation to bring the thinner handrail to proper height. If a spacing block is required (See Figure AT), attach it to the post before attaching the top mounting plate.



**ATLANTIS RAIL DOES NOT RECOMMEND THE USE OF ARTIFICIAL LUMBER AS A TOP RAIL. USE AT THE INSTALLER/END USER'S OWN RISK.**

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 AU). 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 AV). 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.

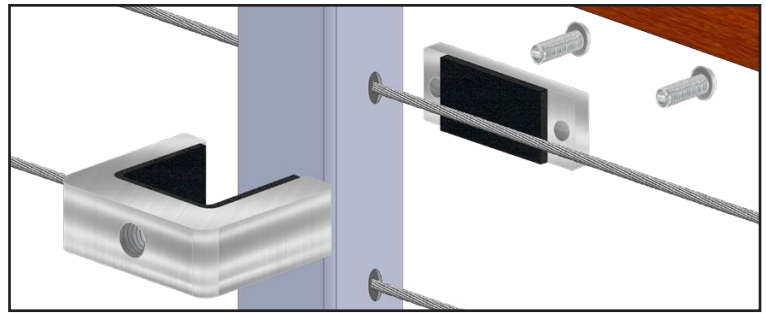
### Spectrum Surface Mount Stabilizer Kit - S0905-XX45

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 AW).

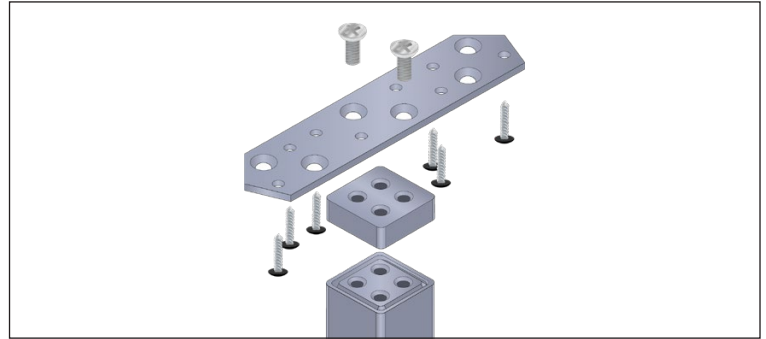
Atlantis Rail Cable Stabilizers are purposed for use in maintaining code compliant cable spacing between post and rail sections with spacing greater than 4 feet between posts and not exceeding 6 feet.



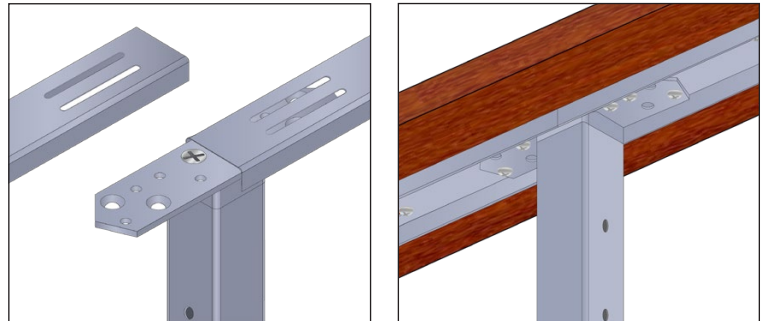
**THE CABLE STABILIZER IS NOT A STRUCTURAL COMPONENT AND IS NOT A SUBSTITUTE FOR A POST!**



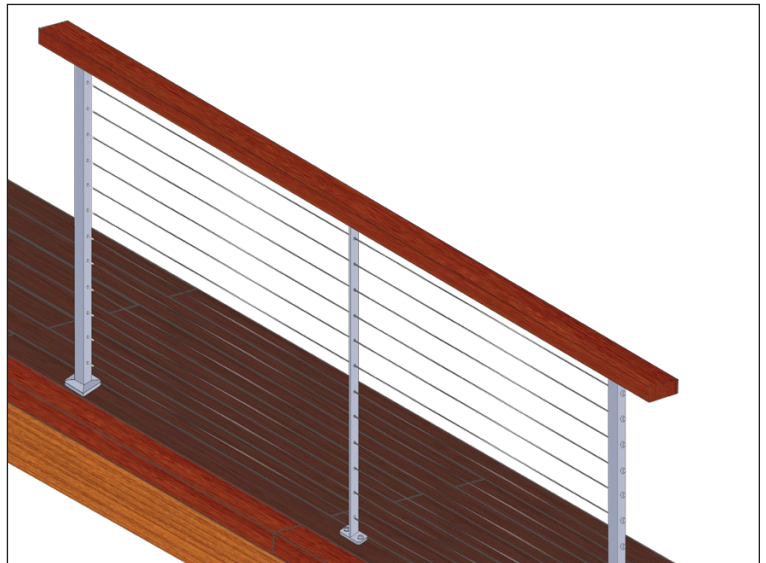
**Figure AS.** Insert the u-shape piece onto the post making sure the pads stay intact. Attach the back piece and tighten screws alternately until fully tightened.



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



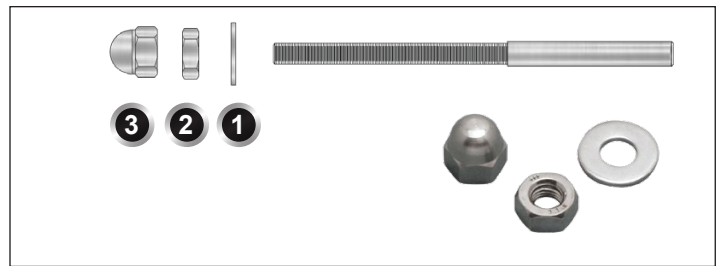
**Figure AU. (LEFT)** Place the reinforcing channel in the center of the post on atop the top mounting plate.  
**Figure AV. (RIGHT)** Use the supplied fasteners to attach the channel and top mounting plate to the top rail.



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

### Acorn Nut Set - C0308-UF07-2

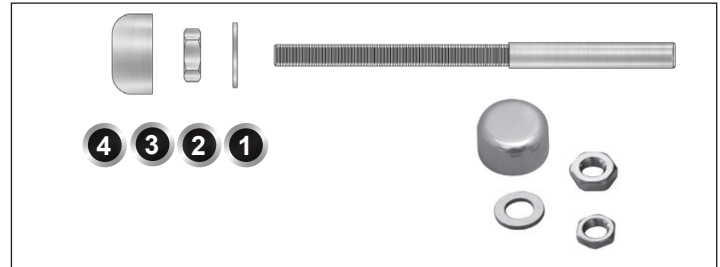
Designed for use with HandiSwage™ Studs. This set is perfect for cable railing systems where “through post” hardware is desired for minimal obstruction. Affix the stainless steel acorn nut set to the end of a swage stud for a finished look (See *Figure AX*). Finish: Polished Stainless Steel. Available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



**Figure AX.** 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

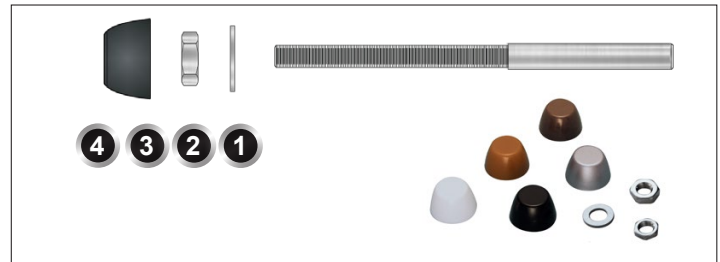
Designed for use with the HandiSwage™ Studs. The Cover Nut Set is perfect for cable railing systems where “through-post” hardware is desired for minimal obstruction. Affix to the end of the stud for a finished look (See *Figure AY*). Finish: Polished Stainless Steel. Available in 2 packs.



**Figure AY.** 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 AZ*). Finishes: White, Light Brown, Dark Brown, Metallic Silver and Black. Available in 10 packs.



**Figure AZ.** 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 or surface mounted) with a customer supplied top rail and 12 to 14 runs of cable.

### Stair Sections

Rail height for stair sections is available in 36”.



**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. Visit our website for more details.

### 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 “Spectrum Post Kit Cable Spacing & Heights” chart on the next page.

## Spectrum Post Kit 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	2.63"	42"	36"	34.50" +/-
S0904-XX38-ST*	38" Fascia Mount Stair Post Kit	2.63" - 2.75"***	45.75"	34" - 36"	38.13" +/-
S0904-XX42*	42" Fascia Mount Post Kit	2.69"	48"	42"	40.50" +/-
S0904-XX42-EC*	42" Fascia Mount End/Corner Post Kit	2.69"	48"	42"	40.50" +/-
S0905-XX36*	36" Surface Mount Post Kit	2.63"	34.38"	36"	34.50"
S0905-XX38-ST*	38" Surface Mount Stair Post Kit	2.63" - 2.75"***	38.13"	34" - 36"	38.13"
S0905-XX42*	42" Surface Mount Post Kit	2.69"	40.38"	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 38° (aligned dimensions).

## Spectrum System Product Specifications

## COMPONENTS

Product	Description	Dimensions	Fasteners	Notes
S0904-XX36	36" Fascia Mount Post Kit	1.57" x 1.57" x 42"	5/16" Hex Lag Screws	Fasteners not included
S0904-XX38-ST	38" Fascia Mount Stair Post Kit	1.57" x 1.57" x 45.75"	5/16" Hex Lag Screws	Fasteners not included
S0904-XX42	42" Fascia Mount Post Kit	1.57" x 1.57" x 48"	5/16" Hex Lag Screws	Fasteners not included
S0904-XX42-EC	42" Fascia Mount End/Corner Post Kit	1.50" x 2.50" x 48"	5/16" Hex Lag Screws	Fasteners not included
S0905-XX36	36" Surface Mount Post Kit	1.57" x 1.57" x 34.38"	5/16" Hex Lag Screws	Fasteners not included
S0905-XX38-ST	38" Surface Mount Stair Post Kit	1.57" x 1.57" x 38.13"	5/16" Hex Lag Screws	Fasteners not included
S0905-XX42	42" Surface Mount Post Kit	1.57" x 1.57" x 40.38"	5/16" Hex Lag Screws	Fasteners not included
S0904-HD03-XX	Fascia Mount Hardware Kit	5/16" x 4.50"	(3) 5/16" Lag Screws	Includes Caps
S0904-HD05-XX	42" Fascia End/Corner Post Hardware Kit	3/8" x 5.00"	(5) 3/8" Lag Screws	Includes Caps
S0905-HD04	Surface Mount Hardware Kit	5/16" x 4.50"	(4) 5/16" Lag Screws	Includes Caps
S0905-XX45	36" Surface Mount Stabilizer Kit	0.25" thick x 34.50" height	#10 Wood Screws	Fasteners included
S0905-XX46	42" Surface Mount Stabilizer Kit	0.25" thick x 40.50" height	#10 Wood Screws	Fasteners 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)	--	--	For use in Mid Posts
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	--	--
S0904-XX60	ADA Mounting Clamp	316 stainless steel	--	--
S0904-XX54	Reinforcing Channel	316 stainless steel	#10 Wood Screws	--
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	24" length, swages 1/8", 5/32" & 3/16"	--	--
E0113-HG00	After Swage Gauge	Measures 1/8", 5/32" & 3/16" swages	--	Included w/ Hand Swager
C0989-00HD	RailEasy™ Cable Cutter	Cuts up to 5/32" cable	--	--
E0114-0000	Cable Grip Pad (3 Pack)	0.13" x 0.75" x 2.00"	--	Neoprene Rubber
E0916-1000	Grommet Install Tool	Fits Atlantis Cable Grommet Series	--	--
C0731-TK01-2	HandiSwage™ Combo Wrench (2 Pack)	3/8" & 7/16"	--	For tensioning Studs