

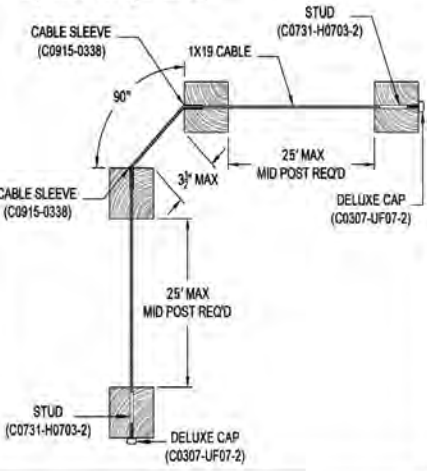
DESIGN CONSIDERATIONS

HandiSwage™ Cable Railing is designed to be used with existing or new wood posts, as well as our Spectrum System which utilizes metal posts. Make sure that all post material and attachments (rails) are constructed of approved materials per your local building code. Most building departments have a simple set of deck building criteria that are easy to follow. For commercial projects, the requirements may be different and the building department should be consulted.

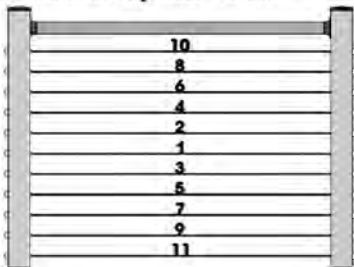
Always use the HandiSwage™ Swage Tool for hand swaging the end fittings onto cable. This tool is designed specifically for the HandiSwage™ cable railing components and will ensure optimal results.



For cable sections using the HandiSwage™ Cable Sleeve to accommodate a corner, the specifications are as follows (mid post required as specified).



Follow the recommended tensioning sequence below to ensure proper installation and to achieve optimal results.



CODE COMPLIANCY

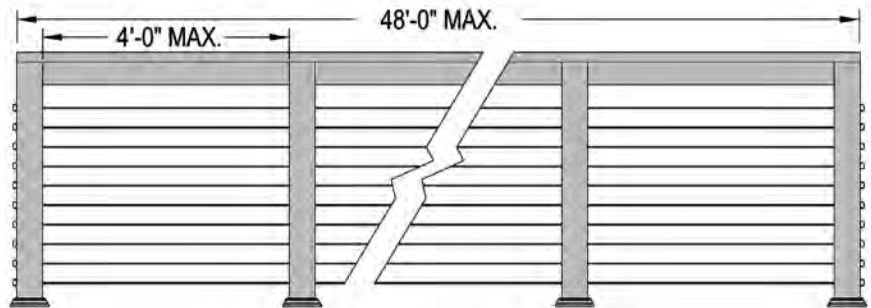
Questions are often raised regarding horizontal railings and their use in residential applications. In 2001, the ICC removed the "ladder effect" restriction on horizontal railings and the questions of safety were revisited in a three year study, concluded in 2008. The ICC concluded that the most current documentation shows no indication that a problem exists with climbable guard rails and that there has not been sufficient justification established to mandate a higher level of climbability restriction on guard rails than what is currently required in the 2006 ICC codes. In summary, the current ICC developed codes (the International Building Codes) does not prohibit climbable or horizontal railings.

ALWAYS REFER TO YOUR LOCAL BUILDING CODE OFFICIAL 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.

POST CONSTRUCTION & CONFIGURATION

End Posts and Corner Posts

A key factor in any successful deck rail application is always the attachment of the post to the decking. Municipal building departments usually provide specific drawings and examples of preferred post attachment methods. Substantial end and corner posts are always necessary to prevent the posts from bending under the cable tension. If post material is not strong enough to withstand tension, it may cause the post to bow and the cables to sag. A minimum 4x4 (3-1/2" square) post is required. Cable components are required on each end of a cable run.



For straight cable sections using the HandiSwage™ Stud at each end, you may run cable up to 48 feet in total length (mid post required as specified).

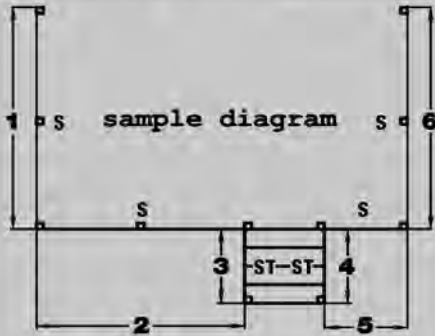
Mid Posts

Mid posts should be placed at intervals between end or corner posts as frequently as necessary to meet building code requirements. We recommend intermediate posts be placed every 4 feet to maintain cable spans with minimum deflection. If you wish to maintain 3" spacing for cable sections that span over 4 feet, we offer a Cable Stabilizer Kit made from 1" stainless steel tubing. The stabilizer bar is mounted with simple brackets and will minimize cable deflection.

Rails

A top rail is always necessary when building a wood railing with cable railing infill. The top rail should always be installed to absorb and deflect the pressure applied when cable is tensioned. It is highly recommended to secure the top rails between the post rather than simply placing the rail on top of the posts. The addition of bottom rails will provide more support to any railing system and they allow for a foot rest when leaning on the railing.

GETTING STARTED



Sketch your project

Sketch your project to aid in the process of ordering your cable railing system. Indicate the location of the rails and the posts on the deck and any stairs. Number each cable section on your project sketch.

Note:
A "cable section" is the total length between the back side of the end posts and corner posts.

ALWAYS CONSULT YOUR LOCAL BUILDING CODE

STEP-BY-STEP ORDERING

STEP 1 - Determine the type of cable section

A "cable section" is the total length between the back side of the end posts and corner posts. Using this key, label the sections accordingly in the "Step 1" column of the chart below.

- S = Straight
- C = Greater than 45 degree angle
- CA = Less than 45 degree angle
- ST = Stairway

STEP 2 - Measure your cable sections

Record each cable section length in the "Step 2" column of the Easy Ordering Chart below.
Maximum length for a section is 48 FEET.
Sections over 48 FEET must be split.

STEP 3 - Determine the number of cable rows and components needed

Measure the distance from the top of your bottom rail or deck to the bottom of your top rail in inches. Divide that measurement by 3, round down to the nearest whole number and subtract 1.

Example: A 36" high railing with 34" between deck and bottom of top rail.
 $34 \text{ divided by } 3 = 11.33$, round to $11 - 1 = 10$ rows

STEP 3 - Continued

Record railing height and the number of rows in the first two fields on the Easy Ordering Chart. Based on the notation below, determine which components are fit for your job and record them in "Step 3" of the chart.

SELECTING CABLE COMPONENTS

Swage Stud - Swage studs are the primary hardware used in the HandiSwage™ System. Studs are offered in 4-1/4" (standard) and 8" (long) sizes. The 8" studs should only be used for stairways, angles or thick posts. Note the need for long studs below in the "Note" section.

Cover Nut Set - For every swage stud used, you will need an equal amount of cover nut sets. Note the style of cover nut you want in the "Note" section below.

Flush Fitting - The flush fitting will take the place of one swage stud and cover nut set.

Cable Sleeve - Stainless cable sleeves are used to accommodate cable sections with mid posts angled less than 90 degrees. Stair railing may use a sleeve at the top post when there is a straight transition from a straight section into a stair section.

EASY ORDERING CHART

Railing Height			# of Rows				
	STEP 1	STEP 2	STEP 3 Components				
Cable Sections	Type	Cable Length	Swage Stud	Cover Nut Set	Flush Fitting	Cable Sleeve	
Cable Section 1							
Cable Section 2							
Cable Section 3							
Cable Section 4							
Cable Section 5							
Cable Section 6							
Cable Section 7							
Cable Section 8							
Cable Section 9							
Cable Section 10							
Cable Section 11							
Cable Section 12							
Totals							
Total Cable Length x # of Rows							
Hardware Components	2 Packs						
	10 Packs						
Cable Rolls	250 Feet						
	100 Feet						

NOTE special conditions or alternate components here: