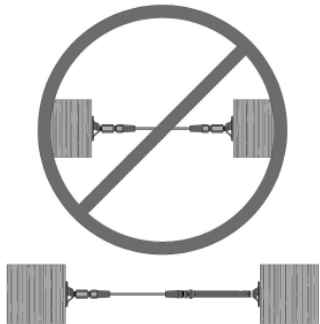


RAILEASY™ Cable Railing Guide

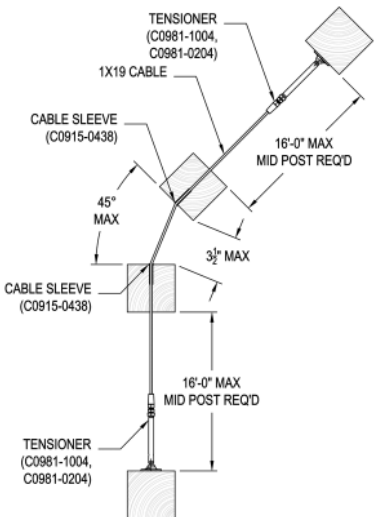
DESIGN CONSIDERATIONS

The patented RailEasy™ Cable Railing system is designed to be used with existing or new wood (or in some cases, 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.

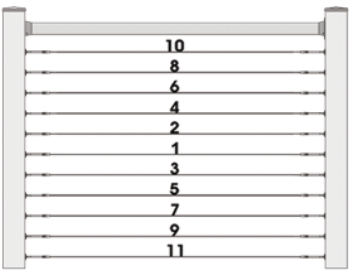
For cable sections using the RailEasy™ Swivel End, there must be a tensioner on one end and the total cable span may not exceed 25 feet (mid post required as specified).



For cable sections using the RailEasy™ 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.



ATLANTIS
RAIL SYSTEMS

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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. [*The complete ICC report is available at: <http://www.iccsafe.org/cs/cc/cts/climbable.html>*]

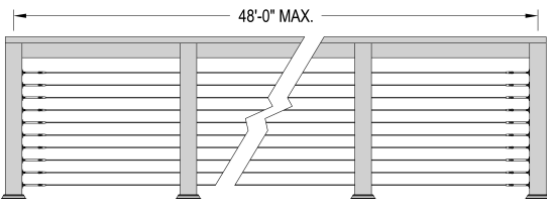
ALWAYS CONSULT YOUR LOCAL BUILDING CODE

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 or corner post and may consist of the RailEasy™ Tensioner, RailEasy™ Swivel End or RailEasy™ Cable Sleeve (see “Tensioner Selection” below).

For straight cable sections using the RailEasy™ Tensioner 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. Never exceed a spacing of 72” between posts. For each foot over 5 feet that you run cable, you must move your cable 1/4” closer together. For example, the cable spacing would be 2-3/4” for a cable span of 6 feet.

With cable spaced vertically 3” on-center, we recommend that the cable be supported in some manner no more than every 48” along its run. The support can be provided by an intermediate post or something thinner, such as a 2x4. We also offer a RailEasy™ Cable Stabilizer Bar made from 1” stainless steel tubing, which is mounted with simple brackets to the deck and railing.

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.

Tensioner Selection

Besides the RailEasy™ Tensioner, we offer additional tensioning and attachment designs. These alternative cable components can be used for a variety of applications to provide endless design opportunities. The listings below will help you choose the right components for your application.



RAILEASY™ TENSIONER - FLAT C0981-0204 (2 PK), C0981-1004 (10 PK)

Straight sections greater than 25 feet require tensioners at both ends. Straight sections less than 25 feet use a tensioner at one end with a swivel end at the other. Slotted base allows for angles up to 45 degrees, making it perfect for stair applications. Compression fitting allows for tensioning with simple hand tools. Tensioners are surface mounted with three #8, 1-1/2” stainless steel screws.



RAILEASY™ SWIVEL END - FLAT C0981-S024 (2 PK), C0981-S104 (10 PK)

Swivel end is designed for use in short runs and straight sections less than 25 feet with a RailEasy™ Tensioner at the other end. Do not use swivel ends at each end of a cable section. Compression fitting holds cable with the use of simple hand tools. Slotted base allows for angles up to 45 degrees, making it perfect for stair applications. Swivel ends are surface mounted with three #8, 1-1/2” stainless steel screws.



RAILEASY™ CABLE SLEEVE C0915-0438 (10 PK)

Stainless cable sleeves are used to accommodate cable sections with mid posts angled less than 45 degrees. Stair railings may use a sleeve at the top post when there is a straight transition from a straight section into a stair section. They are designed to prevent “tear-out” or damage to mid posts due to the pressure exerted by the tensioned cable. To install, drill through-holes, set sleeve into holes and run cable.

RAIL EASY™ Project Planner

Flat Base Detail

Each base is slotted to allow tensioner to achieve angles up to 45 degrees on stair rails and angled sections.

RailEasy™ Tensioner Components

1. Flat base

2. Tensioner body

3. Lock nut

4. Threaded stud

5. Brass spacer

6. Aluminum wedge

7. Receiver cone

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 end posts and corner posts, as well as, the total length between top and bottom stair 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 end posts and corner posts, as well as, the total length between top and bottom stair posts (refer to sample diagram). 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 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.

Note: Straight sections over 25 feet require RailEasy™ Tensioners at both ends. Straight sections less than 25 feet may use a RailEasy™ Swivel fitting at one end. Stairway railings should use a RailEasy™ Swivel fitting or RailEasy™ Cable Sleeve at top post. (Refer to front page for detailed information on these components)

STEP 4 - Stainless steel rails

To figure out the number of stock length top and bottom rails needed, determine the spacing between each post (never exceed 72” and keep in mind that rail lengths over 60” require cable spacing of 2-3/4”). Record the quantity needed for each stock length in “Step 4” of the ordering chart.

STEP 5 - Rail mounting brackets

For straight sections, multiply the total number of straight section railings by 2. For adjustable sections, multiply the total number of adjustable (stairs and angles) section railings by 2. Enter the quantities of each in “Step 5” of the chart.

EASY ORDERING CHART							
Railing Height			# of Rows				
	STEP 1	STEP 2	STEP 3 Components			STEPS 4 & 5	
Cable Sections	Type	Cable Length	Tensioner	Swivel	Sleeves	Top & Bottom Rails	
Cable Section 1						48 Inch	
Cable Section 2						60 Inch	
Cable Section 3						72 Inch	
Cable Section 4						Rail Mounting Hardware	
Cable Section 5						Straight	
Cable Section 6						Adjustable	
Cable Section 7						NOTES:	
Cable Section 8							
Cable Section 9							
Cable Section 10							
Cable Section 11							
Cable Section 12							
Totals							
Total Cable Length x # of Rows							
Hardware Components		10 Packs					
		2 Packs					
Cable Roles		500 Feet					
		100 Feet					
		25 Feet					