CABLE RAILING "HOW TO"

CABLE RAILING THE RAILEASY™ WAY!

This page will guide you through the proper design and installation of the RailEasy™ Cable Railing System. You will require only a few parts and simple hand tools to complete a beautiful cable railing project.

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.
CABLE RAILING SPACING

Our standard cable spacing is 3" on-center running the length of each post. Cable railing requires support (mid posts) 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 (max. 7 feet), we offer cable stabilizer kits. Atlantis Rail has independent test results showing that the RailEasy™ Cable Railing System meets and exceeds the requirements of the International Building Code and International Residential Code at post spacing up to 4 feet. Any variance from our recommendations should be discussed with your building inspector before proceeding with a project. Post spacing over 4 feet is done at your own risk.

To calculate your cable requirement you must measure from the top of your deck or bottom rail to the bottom of your top rail, then divide that number by the cable spacing (3") and subtract 1. Example: 30 inches between deck and top rail: 30 / 3 = 10 and 10-1= 9. The requirement is 9 runs of cable.

CABLE RAILING SPECIFICATIONS

We recommend and sell only 1x19 construction, and only type 316L (marine grade) stainless
CABLE RAILING POST PLANNING AND INSTALLATION

You will be working with three types of posts; end posts, used at each starting or ending point, corner posts, used at every change of direction, and mid posts, used to support rails and cable between end and corner posts.

CABLE RAILING END POSTS AND CORNER POSTS

The attachment of the post to the decking is extremely important. Check local code requirements. Most municipal building departments provide specific drawings and examples of preferred post attachment methods. Substantial end and corner post 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 RAILING MID POST

Cable railing requires support (mid posts) 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 (max. 7 feet), we offer cable stabilizer kits. Atlantis Rail has independent test results showing that the RailEasy™ Cable Railing System meets and exceeds the requirements of the International Building Code and International Residential Code at post spacing up to 4 feet. Any variance from our recommendations should be discussed with your building inspector before proceeding with a project. Post spacing over 4 feet is done at your own risk.
Cable between posts. The Cable Stabilizer Kits are available for straight or stair sections. Stainless steel versions are 42” long, 1” round stainless steel tube and pre-drilled at 3” intervals for cable to pass through. The stair stabilizer is slotted to work with stair angles between 32 and 38 degrees. Budget stabilizers are available in Aluminum coated black or white, but may not be used within 2 miles of salt water, and they require grommets. In most cases, the stabilizers must be field cut at both ends for an accurate fit into your system. If you are using the cable stabilizer to run longer than recommended lengths you must be sure to discuss this with your building inspector before proceeding. The Cable Stabilizer Kits cannot be used to replace the use of substantial mid posts and should never be used in spans over 7 feet.
A top rail is always necessary when building a cable railing system. The top rail should always be installed in a way that allows the top rail to absorb and deflect the pressure applied when cable is tensioned. It is a best practice to secure the top rail between the posts rather than simply placing the rail on top of the posts.

Bottom rails add support to any railing system and it allows for a foot rest when leaning on the railing.

CABLE RAILING HARDWARE SELECTION

Our cable railing hardware is designed to be used with only 5/32”, 1x19 cable. All of our cable railing attachments use the same patented RailEasy™ mechanical crimping technology to securely fasten the cable. The RailEasy™ cable attachment utilizes an wedge that slides through the hole in the tensioner cone and crimps the cable in place.

RAILEASY™ TENSIONER

The RailEasy™ Tensioner is our primary cable railing tensioning/fastening device. It features mechanical swaging capabilities that allow installers to cut cable on-site, removing the hassle of pre-measuring and the cost of miscalculating dimensions. Each tensioner is made up of durable, corrosion resistant marine grade stainless steel.

Once the complete RailEasy™ Tensioner is mounted on your post, the cable is inserted inside the Receiver Cone (7) and Wedge (6) approximately 1/8” past the bottom edge of the wedge to accommodate the Spacer (5). The cone is tightened onto the Threaded Stud which forces the wedge to push through the cone and bite into the cable as it is tightened.
RAILEASY™ SWIVEL END (NON-TENSIONING, REQUIRES A RAILEASY™ TENSIONER AT THE OPPOSITE END)

The RailEasy™ Swivel End is designed for use in short runs less than 25 feet. It must always be used with a RailEasy™ Tensioner at the opposite end of the cable run for tensioning capabilities. The compression fitting holds the cable using simple hand tools and the slotted base allows for angles up to 45 degrees, making it ideal for stair applications. The swivel ends are surface mounted with three #8 1-1/2" stainless steel screws.
RAILEASY™ LAG STUD (NON-TENSIONING, REQUIRES A RAILEASY™ TENSIONER AT THE OPPOSITE END)

The RailEasy™ Lag Stud is designed for use in short runs and must always be used with a RailEasy™ Tensioner at the opposite end of a cable run for tensioning capabilities. These fittings are made from marine grade stainless steel and are available with a right and left hand thread. The compression fitting holds the cable using simple hand tools. Holes must be pre-drilled before installing RailEasy™ Lag Studs.

RAILEASY™ STUD ASSEMBLY

The RailEasy™ Stud Assembly is used for cable railing applications where a "through-post" look is desired. It is made from marine grade stainless steel for maximum durability and corrosion resistance and has a compression fitting for quick and easy installation. The assembly is used on straight and angled (30 degree stair spacer is available for angles) runs by drilling through the post and fixing it to the