

Framework You Will Need for Cable Railing

End Post Construction

Since hundreds of pounds of tension is being applied to end posts using cable railing, those posts must be substantial enough to handle that tension.

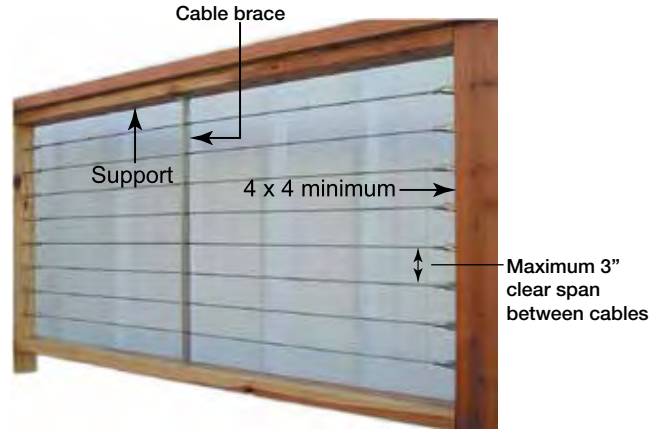
For wood posts a minimum 4x4 (3-1/2" square) post is required to keep the post from bending when the cables are tensioned. You will need a top rail, and we recommend that it be reinforced with a support such as a 2x4 on end under the top rail (see illustration at right). End posts must be securely mounted to the deck to prevent the post from coming loose when the cables are tensioned. A bottom rail helps distribute the force away from the bottom of the post, but is not required.

For steel posts, kits are designed for use with 1-1/2"x1-1/2" square and 2"x2" square tube. End posts will need to be a minimum 1/4" wall to handle the load when the cables are tensioned; intermediates can be 1/8". As with wood posts, you will need a top rail, but that is sufficient for structural integrity. For aluminum, your end posts should be reinforced and you may want to consider a bottom rail to help prevent post-bowing (see illustration below).

Of course, secure mounting of the posts to the deck is just as important with metal posts as wood, and as important with end posts as intermediates.

Intermediate posts between end and corner posts

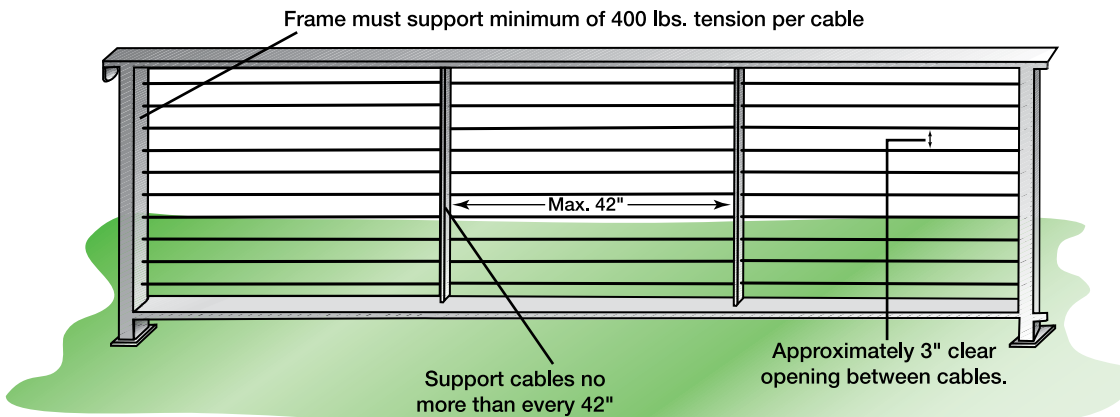
To keep the cable from spreading beyond standard code requirements, we recommend that the cable



be supported in some manner no more than every 42" along its run. Intermediate posts, through which the cable is strung, act as supports for the cable. To avoid having to use more intermediate posts than is structurally necessary, a thin metal cable brace with holes for the cables to pass through can be used to support the cables (see illustrations). A typical cable brace is 1/4" thick by 1" wide and made of steel (which is then painted) or stainless steel and can be ordered separately.

Cable spacing on your posts

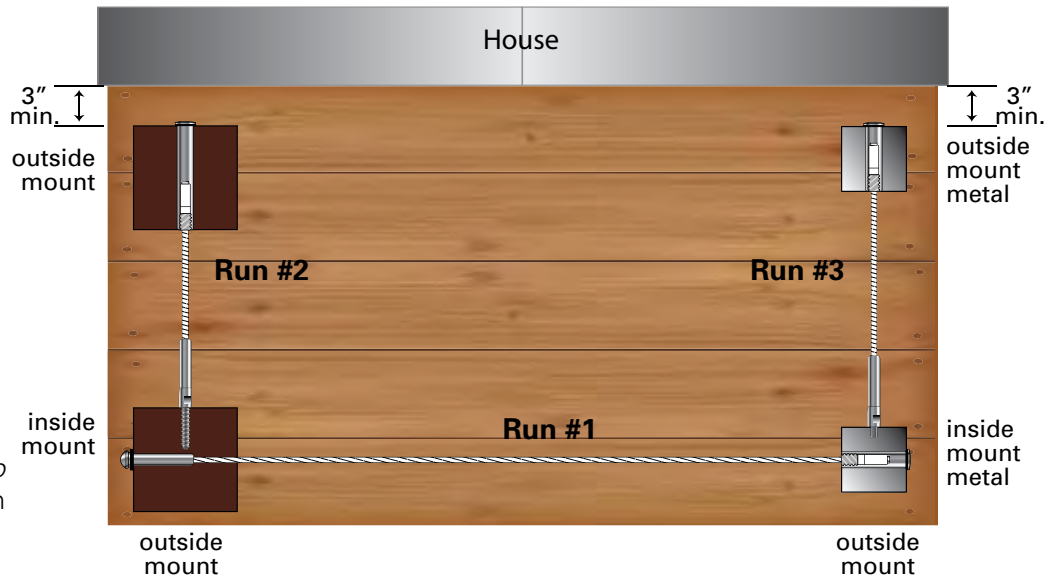
We recommend that you space the cables with no more than a 3" clear span between the cables (see illustrations). For example, if you are using 3/16" diameter cable, you would drill your holes on center no more than 3-3/16" apart.



Deck 4

On Deck 4, there are still single posts at the corners. Run #1 is still outside to outside, so it will take the same configuration as on Deck 1. Runs #2 and #3 will need to connect to the *inside* of the corner post going back toward the house to keep the cables on the same plane, and since there is room behind the post next to the house, you can go *through* that post.

Options for *outside-of-post* to *inside-of-post* configuration in Runs #2 and #3:



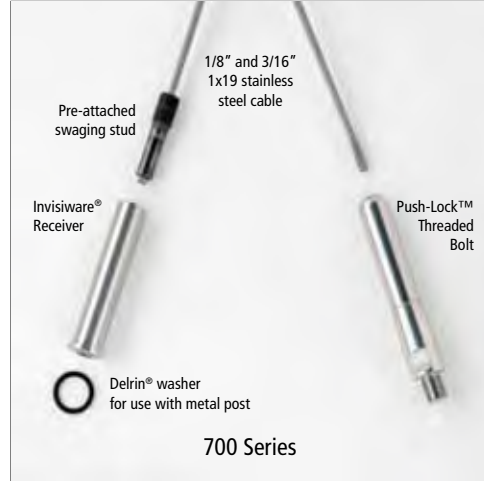
If wood posts, use the 601 series.

The tensioning device is a 3½"-long Invisiware Receiver, which installs flush through the wood post on one end. A Push-Lock Lag is lagged into the other end.



If 2" metal posts, use the 702 series; if 1½", use the 703 series.

The tensioning device is a 2"- (or 1½"-) long Invisiware Receiver, which installs flush through the metal post on one end. A Push-Lock Threaded Bolt is threaded into the other end.



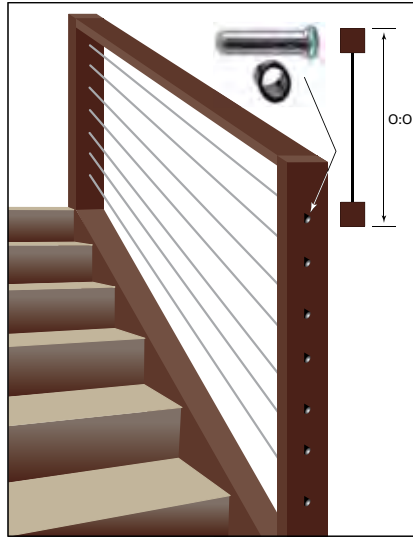
Railing Kits for Deck 4

Cable Length	1/8" cable			3/16" cable		
	wood post	2" metal post	1½" metal post	wood post	2" metal post	1½" metal post
	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.	PART NO.
5'	60105	70205	70305	60105-6	70205-6	70305-6
10'	60110	70210	70310	60110-6	70210-6	70310-6
15'	60115	70215	70315	60115-6	70215-6	70315-6
20'	60120	70220	70320	60120-6	70220-6	70320-6
25'	60125	70225	70325	60125-6	70225-6	70325-6

Stair Runs

Stair 1

The most economical approach is to go *through* both top and bottom end posts. The holes in the end posts, and any intermediate posts, must be drilled on the angle of the stairs. Selection for *outside-of-post to outside-of-post* configuration in Stair Run 1, with wood or metal posts:



Use the 200 series (appropriate to post material) with beveled washers.



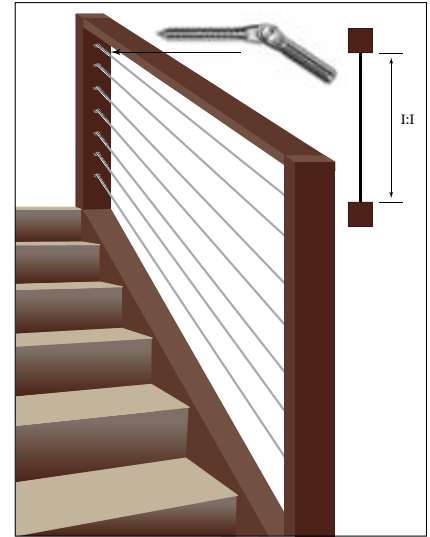
Railing Kits for Stair 1

Add 2 Beveled Washers per kit;
see "Accessories and Equipment" on page 11 for different pitch washers.

Cable Length	1/8" cable			3/16" cable		
	wood post PART NO.	2" metal post PART NO.	1 1/2" metal post PART NO.	wood post PART NO.	2" metal post PART NO.	1 1/2" metal post PART NO.
5'	26205	23205	21205	26205-6	23205-6	21205-6
10'	26210	23210	21210	26210-6	23210-6	21210-6
15'	26215	23215	21215	26215-6	23215-6	21215-6
20'	26220	23220	21220	26220-6	23220-6	21220-6
25'	26225	23225	21225	26225-6	23225-6	21225-6

Stair 2

Top posts are often corner posts, which may require the stair run to connect to the *inside* of the post. The top and bottom of the cable run would be connected perpendicular to those posts, and only the intermediate posts would be drilled on the angle for the cable to run through.



Selection for *inside-of-post to inside-of-post* configuration in Stair Run 2:

Use the 500 series, with LE-6 lag eye for wood posts or TT-6B threaded tab for metal posts.

The tensioning device is an Adjust-a-Body with Threaded Eye, which attaches via mounting screw to the lag eye or threaded tab. A Push-Lock with Threaded Eye attaches the same way to the other end.



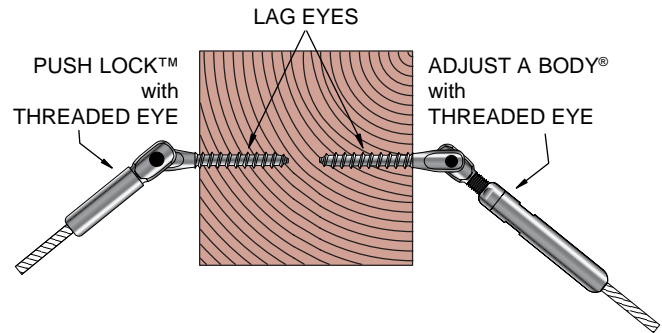
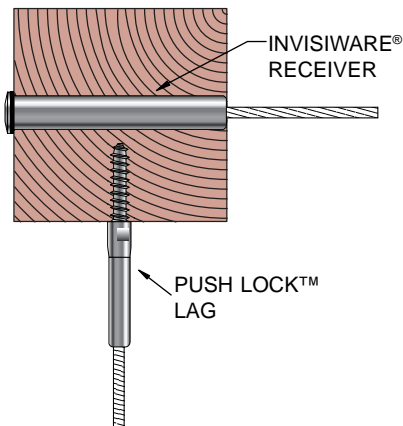
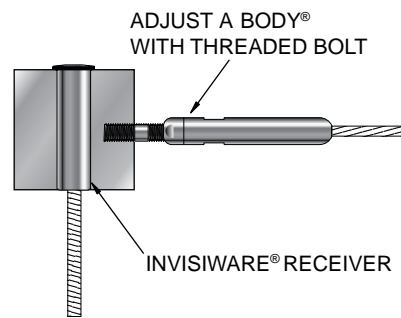
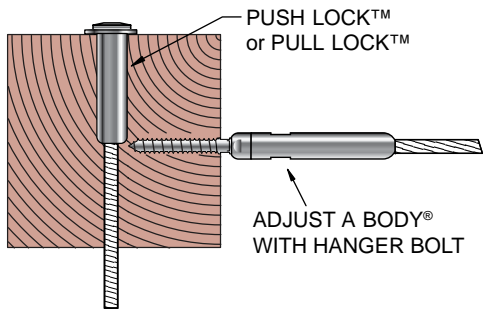
Railing Kits for Stair 2

Cable Length	1/8" cable	3/16" cable	wood post add:	metal post add:
	any type post PART NO.	any type post PART NO.		
5'	50005	50005-6	2 LE-6 Lag Eyes per kit.	2 TT-6B Threaded Tabs per kit.
10'	50010	50010-6		
15'	50015	50015-6		
20'	50020	50020-6		
25'	50025	50025-6		

A Closer Look at Corner Posts Where Two Cable Runs Intersect

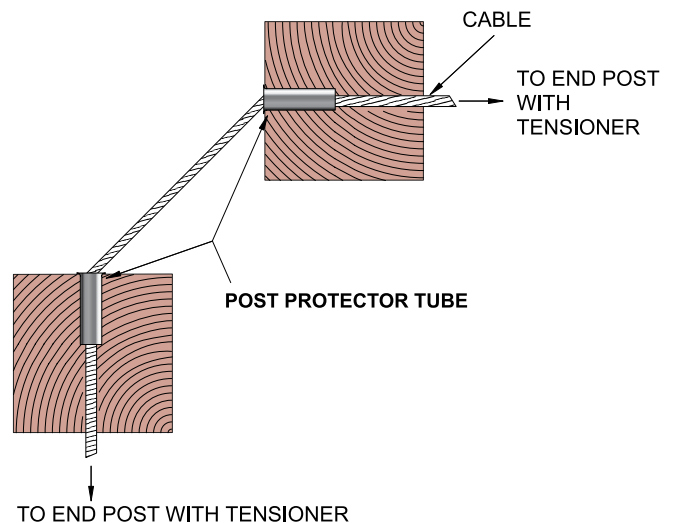
While you can offset cables on intersecting runs to use less expensive fittings, most people want all their cables to exist on the same plane, to give the impression that cables are continuous.

Ultra-tec fittings are designed to be able to reside within the same post in many configurations. Below are some examples of how your kit components work together.



Going Around Corners

Yes, you can go around corners, and yes, you can use cable for runs in excess of 25 feet, but it's best not to try to do it with one of these kits. For projects with these kinds of runs, contact us and we'll map out the railings for you as they'll best, and most economically, work.



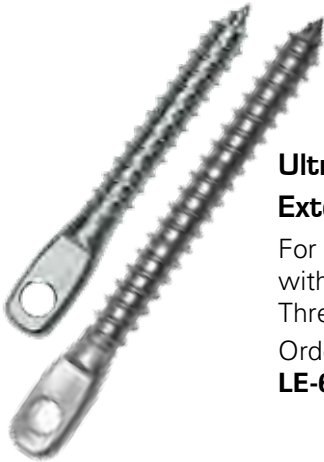
Accessories and Equipment



Threaded Tab

For mounting an Adjust-A-Body with Threaded Eye or Push-Lock Threaded Eye to a metal post.

Order **TT-6B**



Ultra-tec Lag Eye and Extended Length Lag Eye

For attaching an Adjust-A-Body with Threaded Eye or Push-Lock Threaded Eye to a wood post.

Order **LE-6** or **LE-6L** for extended length



Beveled Washers

Made of stainless steel for use on stairways or slopes where you need to drill your end post holes at an angle.

Order Part No.	Use with Cable Dia.	Stair/Slope Pitch
BW32-6	1/8" or 3/16"	30° - 33°
BW35-6	1/8" or 3/16"	34° - 36°
BW38-6	1/8" or 3/16"	37° - 39°



1/2"
drive

Hanger Bolt Driver

Use to install Adjust-A-Body with Hanger Bolt tensioners. Makes driving hanger bolts fast and easy.

Order **DRIVER HB-6N** for 1/8" and 3/16" dia. cable

Cable Tension Gauges

Check the tension on your cables with these easy-to-use gauges.

Order **PT-CR** for cable diameter of 1/8", 3/16" and 1/4"



Cable Release

For 1/8" Push-Lock and Pull-Locks only.

Releases cable from Push-Lock and Pull-Lock type fittings before cables are tensioned.

Order **PL-KEY**



Cut-off Tool

Used to cut cable flush with the end of Pull-Lock fittings, and to cut excess threads off stud-type tensioners. Includes mandrel and two cut-off wheels.

Order **CUT-OFF KIT**



Cable Cutter

For burr-free cutting of cable

Order **C-7HIT** for light-duty use to cut 1/8" dia. cable



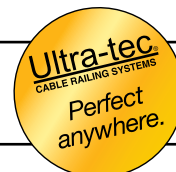
Stainless Steel Cleaner and Protectant

Dissolve minor corrosion, then leave a protective coating that lasts for months. Includes an 8-oz. spray-on rust and stain remover and a 4-oz. bottle of protectant.

Order **E-Z Clean**



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Ultra-tec
CABLE RAILING SYSTEMS