



The Technology of CableRail

One of the most popular architectural products for use in both commercial and residential applications today is CableRail. CableRail consists of a wide range of standard and custom stainless steel cable assemblies that can be used on railings, fences and other applications that are both architectural and decorative!

There are many advantages to using a CableRail assembly within your railing system. It requires little maintenance, it is impervious to mold and insects, and in addition, it is extremely strong. It's modern and sleek design enable a clear view of landscapes and interior arrangements as well since CableRail takes up little surface area.

Standard Cable Assemblies are sold in a wide range of pre-cut lengths for easy ordering. There is no wasted time taking precise railing measurements. Simply select assemblies that are longer than you need and trim any excess in the field. Each assembly includes special Threaded Terminal and automatic-locking Quick-Connect®SS attachment fittings that are sleek, simple to use, and easy to conceal. The result is not only extremely durable and aesthetic but virtually invisible, allowing unimpaired views.

At Sterritt Lumber, we recognize that personal creativity, job site conditions, or a customer's specific desires call for special and unique assemblies of railing and other products.

Projects with special installation conditions or design considerations may require certain styles of cable and fittings not addressed by our CableRail Standard Cable Assemblies. To fulfill those specific design and function needs, we can source a wide assortment of cables, turnbuckles, terminals, adjusters, and fixed ends for custom assemblies. You can either order individual components and build your own assemblies, or let us fabricate them for you, complete and ready to install.

When your professional, creative, or job site conditions call for more design freedom than Standard Cable Assemblies can offer, remember some of these benefits to Custom Assemblies!

Some of CableRail's highlights:

- It is made from high-strength, low-maintenance, weather-resistant, 316-grade stainless steel.
- CableRail is available in 1/8", 3/16", and 1/4" diameter cable to complement any railing design.
- It is sold in a wide range of standard lengths (5 ft to 70 ft in 5-ft increments) that can be trimmed to a finished dimension in the field.
- It is easily installed on new or existing wood or metal railing frames in exterior, interior, residential, and commercial settings.
- The versatility of CableRail shows: railings, trellises, fences, exteriors, interiors, residential, commercial are all easy to attack using a Custom Assembly!
- Complete installation instructions, frame requirements, 3-part specifications, and detail drawings are available, along with toll-free design assistance and technical support.
- This modern product contains recycled materials which ease environmental strains.

Please contact one of our professionals today about this modern and versatile railing assembly system. If you have design questions or inquiries about installation, our sales team at Sterritt Lumber can address your needs today!



Benefits of Standard CableRail Assemblies

There are many advantages to using a Standard CableRail Assemblies within your railing system. This product requires little maintenance, it is impervious to mold and insects, and in addition, it is extremely strong. Its modern and sleek design enable a clear view of landscapes and interior arrangements as well since CableRail takes up little surface area. Each assembly includes special Threaded Terminal and automatic-locking Quick-Connect®SS attachment fittings that are sleek, simple to use, and easy to conceal. The result is not only extremely durable and aesthetic but virtually invisible, allowing beautiful views of the surrounding environment!

Here are some other tremendous benefits associated with this innovative material:

- The nearly invisible appearance will not obstruct views!
- These stainless steel assemblies are available in 1/8", 3/16" and 1/4" cables for residential and larger commercial projects.
- CableRail is made from strong & weather-tough type 316 stainless steel cable and stainless fittings.
- This item can be used on wood or metal railing frames, either new or existing.
- Installation is both cost effective and time saving! Standardized assemblies, Quick-Connect® SS fittings, smaller drill holes and no exact measuring makes ordering and installing a snap.
- There are no special tools required. You won't need anything more sophisticated than an electric drill, wrench and some cable cutters.
- You never have to struggle drilling a big hole to accommodate a bulky end fitting. There aren't any to deal with!
- Special, easy-to-use end fittings can be hidden in the end posts.
- The versatility of CableRail shows: railings, trellises, fences, exteriors, interiors, residential, commercial are all easy to attack using this innovative product!
- These high quality products contain recycled materials!

At Sterritt Lumber, we are committed to being your exclusive supplier of Standard CableRail Assemblies. We can source these innovative products directly from the manufacturer to you. This means that beautiful, unimpaired views surrounding a wide array of applications are just around the corner!

Installing Your Standard CableRail Assembly

We are proud to partner with Feeney Architectural Products to offer Standard CableRail Assemblies, some of the industry's greatest technological advances to date!

Standard CableRail Assemblies are sold in a wide range of pre-cut lengths for easy ordering. There is no wasted time taking exact railing measurements. Just select assemblies that are longer than you need and trim any excess in the field. Each assembly includes special Threaded Terminal and automatic-locking Quick-Connect®SS attachment fittings that are sleek, simple to use, and easy to conceal. The result is not only extremely durable and aesthetic but virtually invisible, allowing clear and unimpaired views.

Quick-Connect® fittings make cable projects quicker and easier than ever!

Each assembly comes with a Threaded Terminal fitting pre-attached to one end and a field installed Quick-Connect®SS fitting for the other end. Simply secure the Threaded Terminal to one end post, lace the free end of the cable through the remaining posts, slip on a Quick-Connect®SS, tension the line, trim the excess, and finish with decorative end caps.

Below are nine easy steps to installing a Standard CableRail Assembly...

- 1.) Measure, mark, and drill all holes in your posts.
- 2.) For wood posts, insert Protector Sleeves, and if you are using metal posts, insert Grommets at appropriate post locations.
- 3.) Insert the Threaded Terminal into one end termination post and secure it with a Snug-Grip Washer Nut.
- 4.) Lace the free end of the cable through the remaining posts and slide on a Quick-Connect SS fitting.
- 5.) Pull the cable through the Quick-Connect SS fitting to remove the excess slack in the cable.
- 6.) Lace the free end of the cable through the intermediate posts. We suggest using a lacing needle for easy threading through post holes.
- 7.) Tighten the Snug-Grip® Washer Nuts to adjust the final tension in the line.
- 8.) Trim the excess threads on the Threaded Terminal and excess cable behind the Quick-Connect®SS.
- 9.) Snap on decorative End Caps over the exposed ends of the Quick-Connect®SS fittings and Snug-Grip® Washer Nuts.

For more detailed instructions with illustrations, please see the pages below.



Installing Custom Cable Assemblies

We are proud to partner with Feeney Architectural Products to offer Custom CableRail Assemblies, a terrific avenue to enable creative design ideas to come to life!

Sterritt Lumber sources a wide assortment of cables, turnbuckles, terminals, adjusters, and fixed ends for custom assemblies. You can either order individual components and build your own assemblies, or let us fabricate them for you, complete and ready to install. The result is not only extremely durable and aesthetic but virtually invisible, allowing clear and unimpaired views of the area surrounding your railing.

Here are just a few basic steps towards creating and installing Custom Cable Assemblies. Railing infill is the most common use of custom cable assemblies, and the installation steps outlined below cater to that application. These basic concepts can also be used for fence and trellis projects as well:

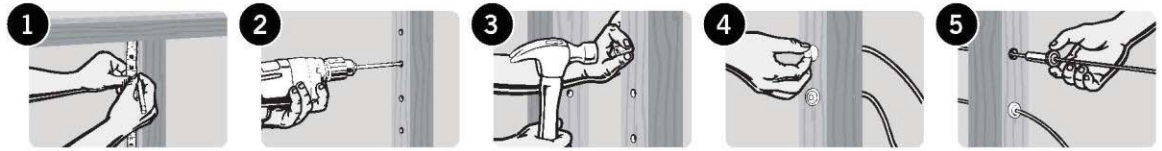
- 1.) Select your cable and fittings, and construct your railing frame accordingly. Determine which posts or walls will be used for terminating the cable assemblies. See railing frame recommendations.
- 2.) Mark and drill holes in all posts. Hole sizes will vary depending on the size and style of your cable fittings.
- 3.) Determine the lengths of your cable assemblies by measuring the distance between the “measure points” on the termination posts. The “measure point” depends on the style of fittings used.
- 4.) Call to ask questions and to order the cable assemblies and accessories you may require: (617) 923-5200.
- 5.) Lace the cables assemblies through your intermediate posts and attach the end fittings to the termination posts.
- 6.) Tighten the cables using the Tension Adjustment Fittings. Depending on the fittings used, you may want to trim any excess material and apply caps to finish the ends.

For maintenance and cleaning of CableRail, its connectors, and its accessories, please see the last page

Step-by-Step Installation

TOOL CHECKLIST

- Safety Glasses
- Work Gloves
- Pencil
- Measuring Tape
- Electric Drill
- Drill Bits
- Hammer
- Cable Cutters
- Vise-Grip Pliers
- 7/16" Wrench
- Electric Grinder with Grinding Disk & Cut-off Disk
- Hacksaw or Electric Reciprocating Saw
- Cable Lacing Needle
- Feeney Tension Gauge



1 Mark drill hole locations on posts.

To minimize cable deflection, space cables no more than 3 inches apart and have a post or vertical spacer at least every 3 feet. Also, straight runs of cable (no turns/dips) should not exceed 70 feet. Runs with corners (2 bends at most) should not exceed 40 feet. See Basic Frame Design on back page.

2 Drill holes in posts. Hole diameter depends on cable size and type of fitting. See chart below.

Cable Size	Threaded Term. Post	Intermediate Posts	Quick-Connect Post
1/8"	5/16"	1/4"	3/8"
3/16"	3/8"	1/4"	9/16"
1/4"	7/16"	5/16"	9/16"

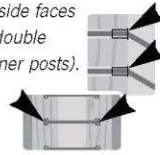
If desired, Quick-Connect[®]SS posts may be through drilled at 1/4" (5/16" if 1/4" cable) and then counter-bored with the recommended Quick-Connect[®] drill to countersink the fitting.



3 (Metal posts only) Insert Isolation Bushings or Grommets (optional), into their corresponding post holes. **Note: call for special drill hole sizes.**

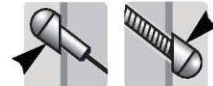
(Wood posts only) Insert Protector Sleeves at necessary locations. Tap in until flush.

Protector Sleeves prevent abrasion at angled transitions on wood posts (e.g. stair transition posts or outside faces of double corner posts).



4 Insert the Threaded Terminal through the Terminal end post and attach a flat washer and Snug-Grip[®] Washer-Nut. Spin the nut 2 full turns. Strong resistance will be felt as the Snug-Grip[®] threads engage; so hold the Terminal shaft with pliers.

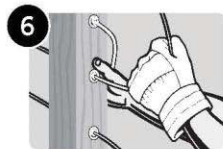
Note: Metal assemblies have Nylon Flat Washers in both white and black. Choose the color that best matches your railing frame.



5 Lace the free end of the cable through the intermediate posts and the Quick-Connect[®]SS end post. Slide-on a flat washer and Quick-Connect[®]SS fitting until they rest against the face of the post.

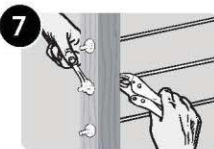
Use a Lacing Needle if snagging becomes a problem.

Use Beveled Washers for stair termination posts with angled holes. Available for Threaded Terminal and Quick-Connect[®]SS fittings. Always install the Quick-Connect[®]SS fittings in the top stair post to prevent rain water from running down the cable into the fittings.

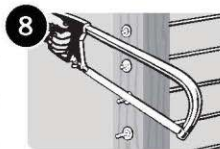


6 Hold the Quick-Connect[®]SS fitting with one hand and pull the cable tight with the other. The fitting automatically locks when you release the cable.

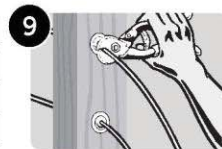
CableRail Tensioning Tool #6005-pkg may be used.



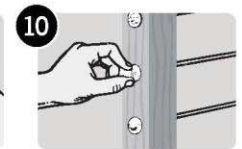
7 Tension the cables by holding the Threaded Terminal shaft with Vise-Grip pliers and spinning the Snug-Grip[®] Washer-Nuts with a wrench. A Feeney Tension Gauge may be used to check uniform tension. See tensioning sequence diagram at left.



8 Use hacksaw, reciprocating saw, or electric grinder with cut-off disk to saw off the excess threads as close to the Snug-Grip[®] Washer-Nut as possible. Touch-up with electric grinder. The special Snug-Grip[®] threads prevent the nut from loosening.



9 Use cable cutters or electric grinder with cut-off disk to trim the excess cable. Grind flush the exposed cable ends with an electric grinder.

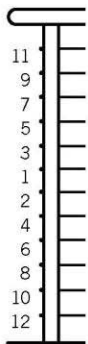


10 Snap on end caps over the exposed Quick-Connect[®]SS fittings and the Snug-Grip[®] Washer-Nuts. You're done.

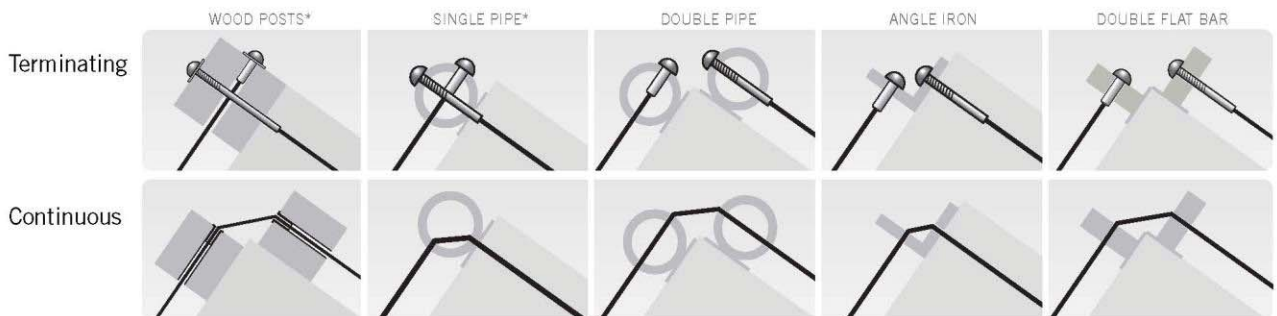
Feeney SteelProtect[™] can be applied for lasting protection of stainless steel cable and parts.

Important Note: If using electric or pneumatic tools to tighten the Washer Nuts, spin the nuts very slowly otherwise they will heat-up causing the threads to seize.

Recommended cable tensioning sequence



Cables can either terminate or run through corner posts



*Offset drill holes at least 1/2" if you choose to have cables terminating at a single wood or pipe post.

Frame Requirements

Railing frames need to be designed and built strong enough to support the tension of properly installed cables, which is a load in excess of 300 lbs for each cable. Here are some basic guidelines to help you properly prepare your railing frames. These guidelines apply whether you are using 1/8", 3/16" or 1/4" cable (1/4" cable not recommended for wood frames).

Minimum sizes for all corner and end posts

All other posts should be sized as required for cap rail support strength or for code



4X4 WOOD

3-1/2" wide, 3-1/2" thick
Note: Softer woods may require larger post sizes, especially for 42" high railings



FLAT BAR

2" wide, 1" thick



ANGLE IRON

2" wide, 1/2" thick



EXTRA STRONG PIPE

1-1/2" ID, 1-7/8" OD



SQUARE TUBE

2" wide, 1/4" wall

The Basic Frame Design

Spacing From Walls:

Set end posts 3 to 4 inches away from the house/wall face to allow access for attaching cable end fittings.

End Posts:

Use minimum end post sizes noted above, and securely bolt or screw to joists or deck surface.

Top Rail:

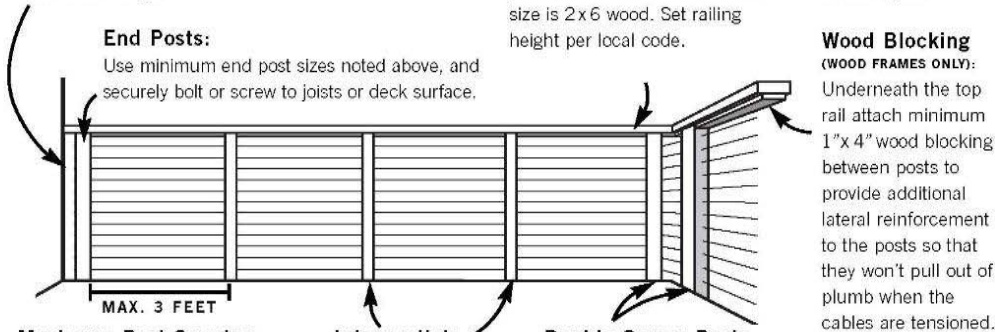
Always include a strong, rigid top rail that is securely fastened to all posts. Minimum recommended size is 2x6 wood. Set railing height per local code.

Cable Spacing:

Maximum 3 inches apart.

Wood Blocking (WOOD FRAMES ONLY):

Underneath the top rail attach minimum 1"x4" wood blocking between posts to provide additional lateral reinforcement to the posts so that they won't pull out of plumb when the cables are tensioned.



Maximum Post Spacing:

Space all posts and vertical spacers (see below) a maximum of 3 feet apart to minimize any deflection that may occur if the cables are ever forced apart.

Intermediate Posts:

Size all intermediate posts as required for top rail support strength or for code.

Double Corner Posts:

If possible use double corner posts to allow the cable to run continuously through the corners without terminating (see single corner post option below). Securely bolt or screw posts to joists or deck surface and use minimum corner post sizes noted above.

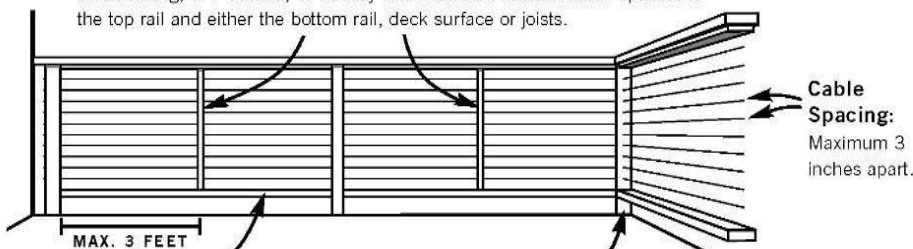
CONSTRUCTION CHECKLIST

- Space cables no more than 3 inches apart
- Space posts/verticals no more than 3 feet apart
- Observe minimum end/corner post sizes shown above
- Securely fasten all posts and top rails
- Carefully plan all termination and corner posts for proper clearance, positioning, and maximum cable run lengths
- Straight runs of cable (no turns/dips) should not exceed 70 feet; runs with corner bends (2 bends at most) should not exceed 40 feet

And Some Other Options

Vertical Spacers (OPTIONAL):

Slender spacers may be used instead of some of the larger intermediate posts to achieve a more open railing design. These are non-structural members and are only intended to maintain cable spacing and minimize deflection. Examples are 2"x2" wood strips, 1" metal tubing, 1/4" flat bar, or Feeney Intermediate Pickets. Attach spacers to the top rail and either the bottom rail, deck surface or joists.



Bottom Rails (OPTIONAL):

Bottom rails should be spaced no more than 4 inches above the deck surface, or as required by local code, and should be sized as needed for support strength and design appearance.

Single Corner Post (OPTIONAL):

In most cases with single corner posts cables must be terminated. Exceptions are angle iron posts or tubular metal posts. When terminating on a single corner post, be sure to offset the drill holes at least 1/2" to allow internal clearance for the cable fittings. Use minimum end post sizes noted above and securely bolt or screw to joists or deck surface.

IMPORTANT NOTE

For railings we recommend spacing the cables no more than 3 inches apart and placing posts or vertical members no more than 3 feet apart.

Please note that since building codes vary by state, county and city, our recommendations may not comply with code requirements in all areas.

Always consult with your local building department before starting your project.



CableRail Stainless Steel Cables & Connectors Care & Maintenance

The protective chromium oxide film on the surface of the CableRail Stainless Steel Cables & Connectors, including all parts and components thereof (collectively, the "Product") give it superior corrosion resistance. Properly maintained, the Product will maintain excellent luster, strength and durability. In most applications, the Product won't rust or stain even after many years of service, but it's NOT rust or stain proof. With proper care and maintenance, the Product can remain beautiful and functional for years to come, even when it is exposed to harsh environments or corrosive elements.

This information is intended as a guide in the proper care and maintenance of the Product.

- ❖ Clean Product when shaded and never in freezing temperatures or when metal temperatures are sufficiently cold enough to cause condensation. Cleaning hot, sun-heated surfaces should be avoided since possible chemical reactions will be highly accelerated and non-uniformity could occur.
- ❖ Use warm water and mild soap when cleaning. Avoid harsh solutions or abrasive cleaning materials, including but not limited to, alkaline or acidic cleaners or solutions containing trisodium phosphate, phosphoric acid, hydrochloric acid, hydrofluoric acid, fluorides or similar compounds.
- ❖ Avoid using power-cleaning tools.
- ❖ Avoid Product coming in contact with chloride salts, sulfides, steel, iron or other rusting metals to avoid discoloration, rust and/or corrosion.
- ❖ Periodically inspect the cable tension for safety; re-tension as necessary.
- ❖ Report any signs of discoloration, rust and/or corrosion to Feeney, Inc. at 800-888-2418 or please visit our website at www.feeneyinc.com.