## cable•rail <br> by feeney

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


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 Frame Requirements on back page.


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

*Note: Drill hole sizes may differ if using Isolation Bushings. Call to confirm correct drill sizes.


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).



Attach All Thread to All Thread Reciever to create your Threaded Terminal. Apply high strength thread locking compound to the All Thread before spinning all the way into the Receiver.


Insert the Threaded Terminal through the Terminal end post and attach a flat washer and Snug-Grip ${ }^{\circledR}$ Washer-Nut. Spin the nut 2 full turns. Strong resistance will be felt as the SnugGrip® threads engage; so hold the Terminal shaft with pliers.


Use Beveled Washers for stair termination posts with angled holes. Available for Threaded Terminal and QuickConnect ${ }^{\oplus}$ Inset fittings. Always install the Quick-Connect ${ }^{\text { }}$ Inset fittings in the top stair post to prevent rain water from running down the cable into the fittings.


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 terminate or run through corner posts

Terminating


SINGLE WOOD POST
Offset drill holes at least $1 / 2^{\prime \prime}$


DOUBLE WOOD POSTS

Continuous


DOUBLE WOOD POSTS

## Wood 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 $1 / 8^{\prime \prime}, 3 / 16^{\prime \prime}$ or $1 / 4^{\prime \prime}$ cable ( $1 / 4^{\prime \prime}$ cable not recommended for wood frames).


Minimum sizes for all corner and end posts
All other posts should be sized as required for top rail support strength or for code

## 4X4 WOOD

$3-1 / 2^{\prime \prime}$ wide, $3-1 / 2^{\prime \prime}$ thick
Note: Softer woods may require larger post
sizes, especially for 42 " high railings

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

## Posts:

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


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.

## Cable

Spacing:
Maximum 3
inches apart.

Wood Blocking (WOOD FRAMES ONLY):
Underneath the top rail attach minimum 1" $\times 4$ " 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.

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

## 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.

## 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):

When terminating on a single corner post, be sure to offset the drill holes at least $1 / 2^{\prime \prime}$ 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.

