



ADVANTAGE RAIL

HORIZONTAL CABLE RAIL INSTALLATION GUIDE

RECOMMENDED TOOLS

- | | |
|-------------------------|------------------------|
| Safety Glasses | Power Drill |
| Tape Measure and Pencil | w/#2 Square Bit Driver |
| Saw w/Carbide Tip Blade | Hammer Drill |
| Rubber Mallet | (if concrete install) |
| Level | 1/2" Wrench or Socket |

OTHER SPECIALTY TOOLS AVAILABLE FROM JAM SYSTEMS

- Tension Gauge
- Cable Cutter
- Cable Gripping Pliers
- 3/16" Allen Wrench
- Threading Needle –Straight
- Threading Needle –Curved

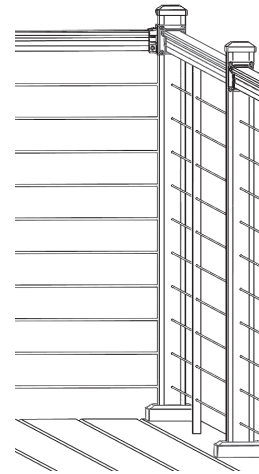
Cutting Tip

Be sure to use a carbide tip blade approved for cutting aluminum and rest rails on a piece of non-abrasive material to protect from scratches.

INSTRUCTIONS

Post Installation

- Determine post layout. Pay attention to placement of end, line and corner posts. For stair posts, lay a straight edge on the nose of the stair treads and measure to the bottom cable hole on the posts to determine how close the post needs to be to the nose of the stairs. Holes should be lined up so the cables run parallel to the stair nose. Space posts according to application and section length.
- Place leveling plate between post and mounting surface.
- Attach to structural surface using bolts or lags (not included).
- Partially tighten prior to leveling.
- Using a 1/2" wrench or socket, turn leveling bolts to level posts.



- Then fully tighten lags/bolts.

7. **Important: Install post trim now.**

- Install post caps.

**Check your local building codes to determine structural mounting requirements for posts.*

Rail installation

- Measure and cut top rails to be snug between the posts.
- Install picket mount at maximum 36" space on rail. Space evenly on rail. There is 1 cable support picket in a 6' section and 2 cable support pickets in an 8' section.
- Align picket mount on floor and install.
- Slide brackets on ends of rail. Being careful to not scratch the posts, set rail between posts. Make sure rail is set tight down on any cable support pickets. Fasten the brackets to the post using the self drilling screws provided.

OVER

Stair Rail Installation

1. Measure from inside edge of posts and cut rail ends at the angle of the stairs. It is sometimes easier to lay the rail on the noses of the stair treads and mark rails at the posts to determine cuts.
2. Cut the ends of the cable support picket so the cables will run straight from post to post. The top end needs to be cut at the angle to match the angle of the top rail.
3. Install the picket mounts so the cable support picket will be vertical and line up with the posts. Use the round ball picket mount on the stair top rail and the stair tread.

When installing stair sections, mount them as shown below:



Correct



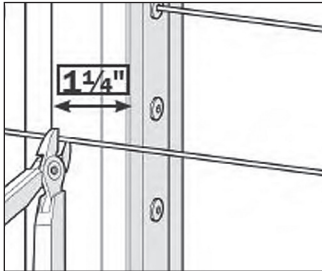
Incorrect

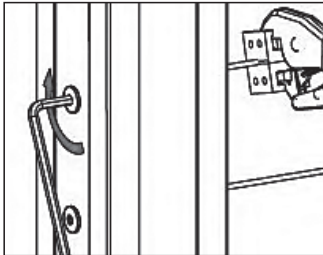
Cable Installation

1. Thread the cable through all the posts and support pickets starting at one end post to the next end post.

Threading Tip

This is made much easier by using the threading needles. When using the curved threading needle it helps to feed the needle through the two holes in the posts then insert the cable into the end of the needle.

2. To prevent possible damage to the cable and the paint on the post, pull the slack of the cable through one corner post at a time.
 3. Following instructions on the *Cable Tensioner Fitting Assembly Guide* install the tensioner fitting on one end of the posts. If you have stair posts, it is recommended to install this fitting first.
 4. At opposite end of cable from the first tensioner, pull the cable tight taking all the slack out. Cut cable 1 1/4" past the inside face of the post.
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5. Install the cable tensioner fitting to this end of the cable.
 6. Repeat for all 10 cables.

7. If this is a stair application, install the grommet around the cable into the hole in the post. Before tensioning, make sure the open side of the grommet is to the side, not the top or bottom of the cable hole.
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8. Grip the cable with the cable gripping pliers to prevent it from spinning, then use a 3/16" allen wrench to turn the tensioner.
 9. Start by tightening a middle cable and alternate up and down tighten cable from the middle towards the top and bottom of the post.
 10. Use a tension gauge to tighten cable to desired tension. Recommend tension between 100 and 200 lbs. **Do not exceed 200 lbs.**
 11. Install grommets on level end posts.
- These directions are only a guide and may not address every situation.
 - Always wear proper safety equipment while assembling and installing.
 - The installer should obtain all required building permits and follow all installation procedures in accordance with applicable building code requirements.
 - JAM Systems shall not be held liable for improper or unsafe installations.
 - Applying paint, other than JAM Systems touch up paint, will void your warranty.

