



## Express System Installation Instructions



### Installation Kit Contents

Express System Drill Guide  
Express System Fill Guide Shim  
Post Level  
Mounting Screws

### Other Items You'll Need

Measuring Tape  
Drill  
3/16" Drill Bit  
Pencil  
Chop Saw  
Dead Blow Hammer / Rubber Mallet  
Clamps

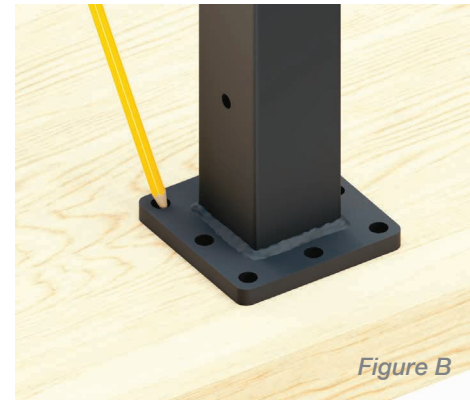
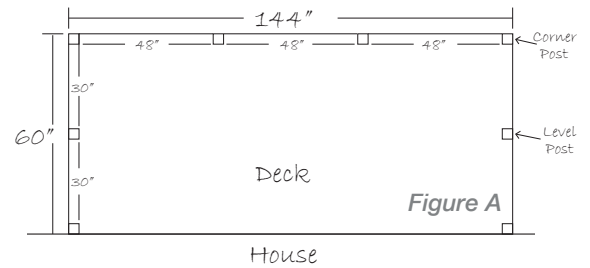
### Before You Begin

Make sure you have all of the posts, brackets, screws, cable and components needed for your installation.



## Mounting Your Posts

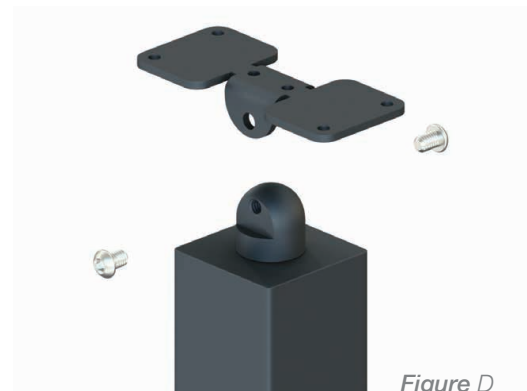
1. Draw your railing layout. Viewrail recommends a maximum of 48" between each post in your cable run.
2. Place each post on your mounting surface according to the drawing you've created.  
**Note:** Each corner post will have 5/16" holes on three sides of the post and 1/2" holes on the fourth side. When laying out the corner posts, be sure the posts are oriented in such a way that each straight run will have only one end with 1/2" holes (*fig. A*)
3. Mark all post mounting holes. (*fig. B*)
4. Use a 3/16" drill bit to pre-drill the post mounting holes. (*fig. C*)
5. Replace post and populate your pre-drilled holes with the provided screws.
6. Using the provided post level, ensure that your post is level. If the post is not level, back out the mounting screws, apply shims as needed, and re-insert the screws.
7. Slide the foot cover over the top of each post foot.
8. Repeat steps 5-6 until all posts have been mounted.
9. Position the handrail bracket on top of your level posts and attach using the provided screws.



**Note:** When orienting the handrail brackets for your corner posts, ensure that the 90° angle of the bracket faces the center of your project.

## For Angled Runs:

1. Place each post toward the front edge of your tread, staying behind the nosing on the tread far enough so the cable does not hit the tread (typically about an inch). Ensure that the pre-drilled holes in your angled posts are pointed toward the top of your stairs.
2. Run a string through the bottom hole of all the posts to ensure that the lowest cable in your run will not run into your tread nosing.
3. Follow steps 3-8 under "Mounting Your Posts" to properly mount your angled posts.
4. Position the handrail bracket on the top of the dome and insert a hex screw into each side of the bracket. (*fig D*)
5. Use the hex screws to secure the handrail bracket at the appropriate angle.





## Mounting Your Handrail

1. Measure the length of your run.
2. Cover the area of your handrail you will be cutting with painter's tape, and mark on the tape where you will cut the handrail.
3. Use a chop saw to cut the handrail at the mark you made. Remove the tape from the end of your handrail.
4. Position the end cap over the open end of the handrail and gently tap it into place using a dead blow hammer or rubber mallet.
5. Center the handrail on top of the handrail brackets.
6. Clamp the handrail to the first and last handrail brackets in a run. This will keep the handrail in place while you drill into the handrail. *(fig. E)*
7. Pre-drill and populate the holes of the clamped brackets using a 9/64" or #29 drill bit and the provided mounting screws. *(fig E)*
8. Move the clamps to the same position on the next brackets toward the middle of the run, pre-drill and populate. *(fig. F)*
9. Repeat step 8 until **one side** of **each** handrail bracket has been attached to the handrail.
10. Remove the clamps. Pre-drill and populate the remaining handrail bracket holes, working from the outside to inside of your run.
11. Repeat steps 1-10 for all handrail runs.



Figure E

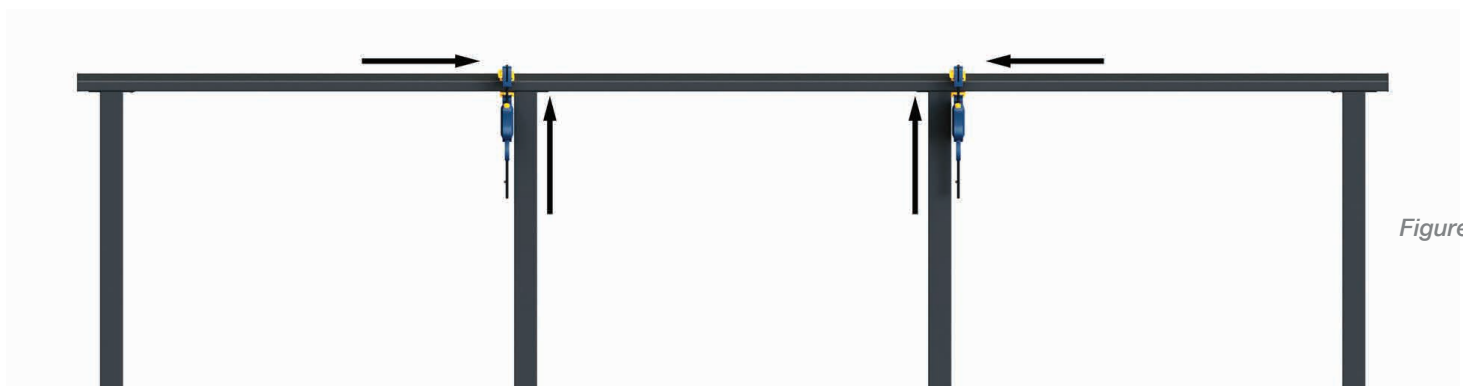


Figure F



## Running Your Cable

**Note:** Do **NOT** install the cable infill until your handrail has been installed.

### Level Run with No Corner Posts

1. Leaving the cable on the spool, run the loose end of the cable through the same hole on all of the posts of a tensioned run.
2. Once the loose end of the cable passes through the final post in the run, crimp a threaded crimp fitting to the end of the cable.
3. Thread the tension receiver onto the threaded crimp fitting and tighten 4 turns.
4. Seat the tension receiver against the post.
5. On the spool end of the cable, bring it to the outside edge of the post. (fig. G) Mark and cut the cable 1 ¼" from the outside edge of the post.
6. Repeat steps 1-5 until all cable has been run.
7. Crimp a threaded crimp fitting in place on the newly cut cable by crimping the fitting twice and re-feed it through the post.
8. Thread a tension receiver onto the threaded crimp fitting and tighten 4 turns.
9. Tension the cables in your run following the tensioning sequence. (fig. H)



Figure G

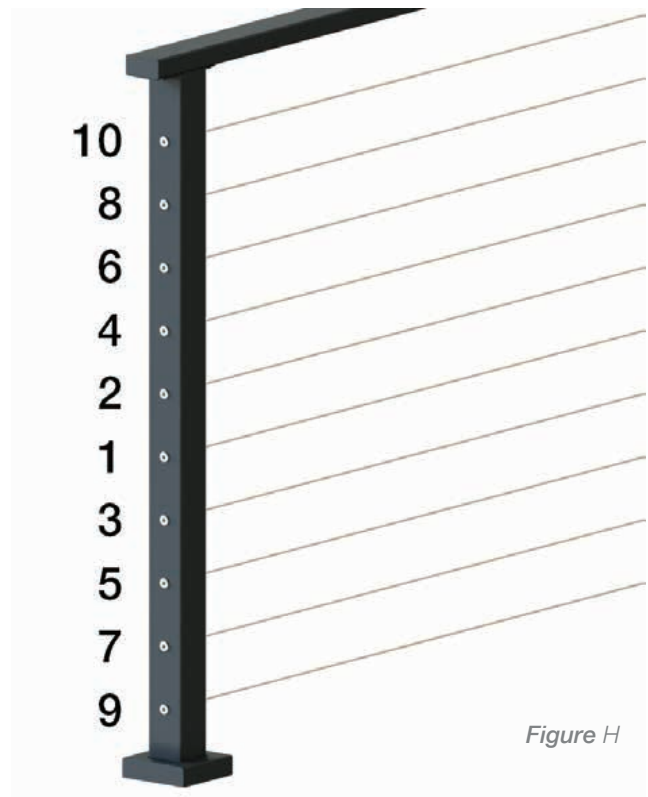
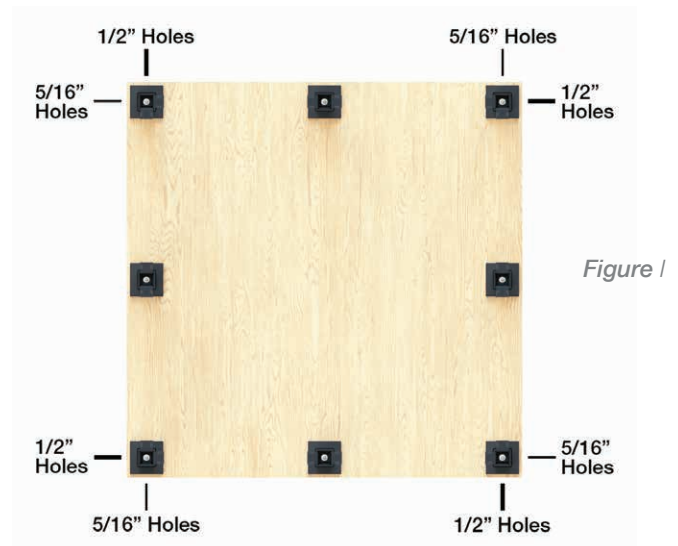


Figure H



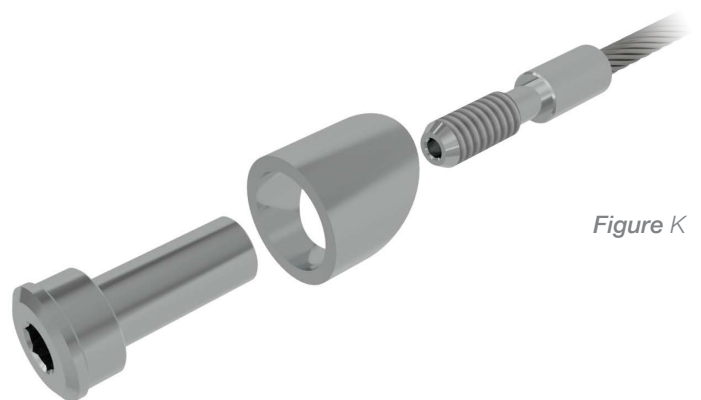
## Level Runs with a Corner Post

1. Leaving the cable on the spool, run the loose end of the cable through the same hole on all of the posts of a tensioned run. (*fig. I*)
2. Pull the cable through the terminating corner post so that there is roughly 24" excess past the post.
3. Crimp a keymount fitting onto the loose end of the cable (*fig J*)
4. Pull the cable back so the keymount fitting is seated against the inner wall of the post.
5. Pull the cable taught from the spooled end of the run and cut so there is 6" excess past the post.
6. Repeat steps 1-5 until all cable has been run.
7. Follow steps 7-11 under "Level Run with No Corner Posts" to finish installing and tensioning your cable for this run.



## Angled Runs

1. Leaving the spool at the bottom of the stairs, thread the cable through each of your angled posts.
2. Follow steps 2 - 11 under "Level Runs With No Corner Posts" to finish installing your cable. See figure K for Angle Tension Cable Receiver assembly.



## Congratulations, Your Install is Done

We'd love to see how your project turned out! Take some pics and send them to [pictures@viewrail.com](mailto:pictures@viewrail.com).