enEXO RAILING SYSTEMS

INSTALL INSTRUCTIONS

KALLOS FLAT RAIL

Scan to register your product

www.enexorailing.com

enEXO RAILING SYSTEMS

BEFORE YOU BEGIN

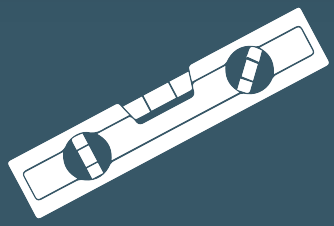
Follow all local building codes and obtain the required building permit. enEXO Aluminum Railing offers instructions as a guideline and shall not be held responsible for improper installations.

PLANNING YOUR INSTALLATION

Our enEXO Kallos Top Rail is available in 8′, 12′, 16′, and 20′ lengths. Choosing one length over the other will impact which type of posts are used (See posts on next page). Posts must be properly blocked during framing to accept 4 structural fasteners regardless of design. Railing panel sections are available in 6′ and 8′ lengths.

SUGGESTED TOOLS

CORDLESS DRILL & IMPACT



LEVEL

CLAMPS

TAPE MEASURE

T-30 TORX BIT,
#2 X6" PHILLIPS IMPACT BIT,
3/16" DRILL BIT, AND EXTENTIONS

SHIMS

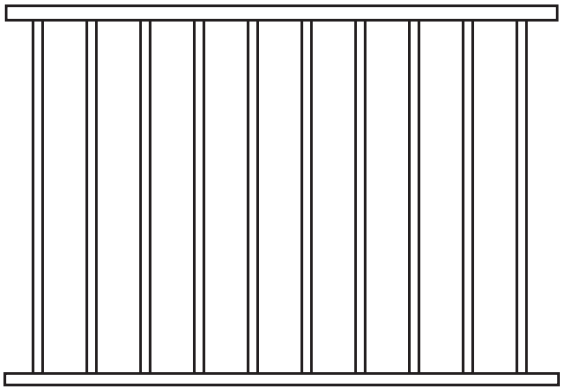
SPEED SQUARE

MITER SAW

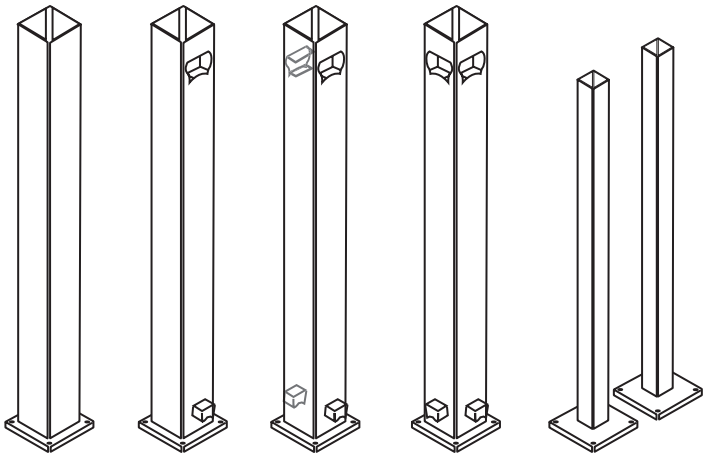
*Suggest right angle drill attachment, and/or flexible attachment

COMPONENTS

Panels

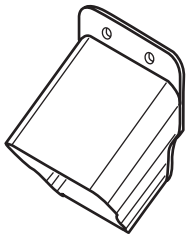


Posts

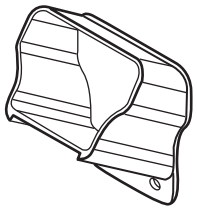


Blank Post (no mounts) | End Post (1 mount) | Thru Post (2 mounts) | 90° Post (2 mounts) | HD Line Post Stair Line Post

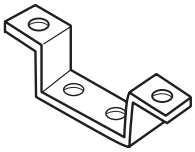
Mounts



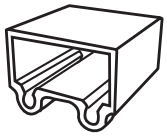
Kallos Top Mount Down (stairs)



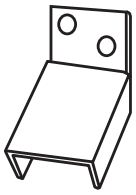
Kallos Top Mount Up (stairs)



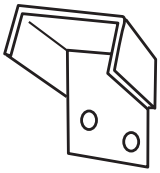
HD Post Mount



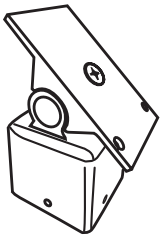
Bottom Rail Mount



Bottom Mount Down (Stairs)

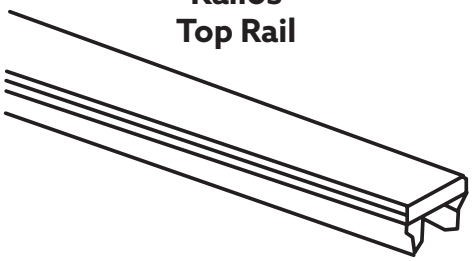


Bottom Mount Up (Stairs)

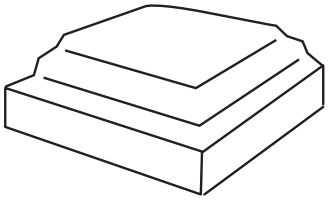


Adjustable Stair Post Mount (Stairs)

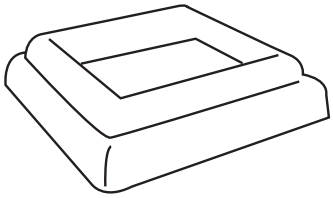
Kallos Top Rail



Post Cap



Base Plate Cover



INSTALLATION

1 SETTING THE POSTS

With framing and decking installed, begin post layout. Start with end post.

***CAUTION!** Structural vertical blocking on the underside of the deck frame must be installed to accommodate 6" structural screws for post installation.*

A. Using a speed square place an end post upright and set away from the house, and back from the edge of the deck to assure you will be above the structural members below the decking.

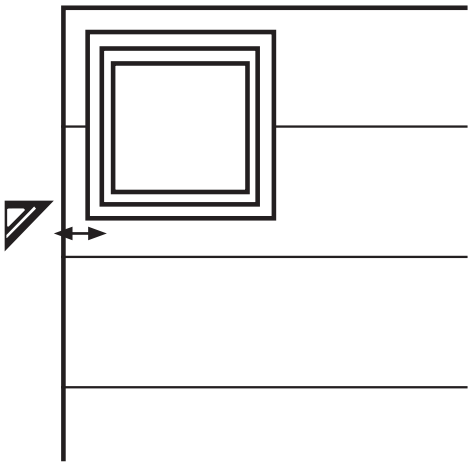
B. Ensure end post is square to the edge of the deck and has equal spacing on both edges. Mark the 4 mounting holes onto the deck floor.

C. Drill the pilot holes using a 3/16 drill bit.

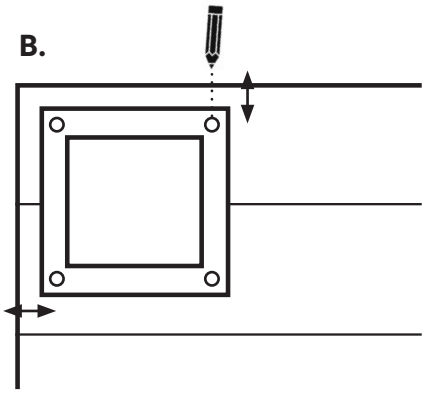
D. Secure post with screws assuring it is level and plumb. Shims may be needed but are not included.

E. Repeat steps A-D for the next steps however only secure posts with one structural screw at first. This will allow greater flexibility to install the top rail. The remaining 3 screws will be installed in a later step.

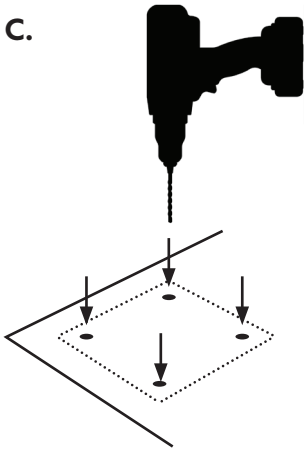
A.



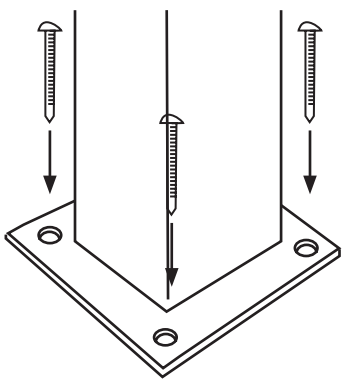
B.



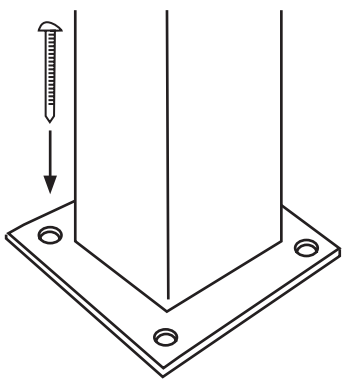
C.



D.



E.



2 INSTALLING ENEXO TOP RAIL

With all remaining deck posts positioned with one screw, measure and cutting top rail begins.

A. At the lowest portion of the post measure from post to post on each section. Cut the top rail 2" longer than this measurment (this will give you 1" per post to secure rail). Install the base plate covers.

B. Insert top rail into opening on the posts.

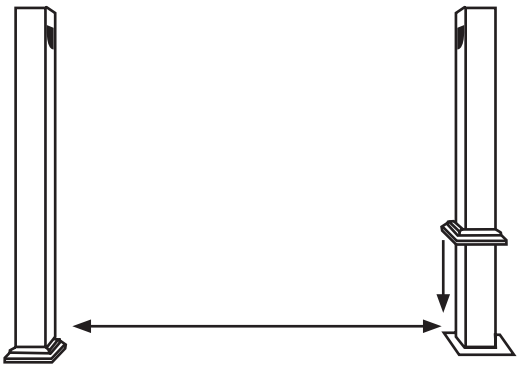
C. (Optional) If using HD support posts, install top post mount into post, then to top rail.

D. Clamp base plate covers towards top of post and out of the way.

E. Install the remaining 3 base plate screws while leveling the posts. Shims may be needed but are not included.

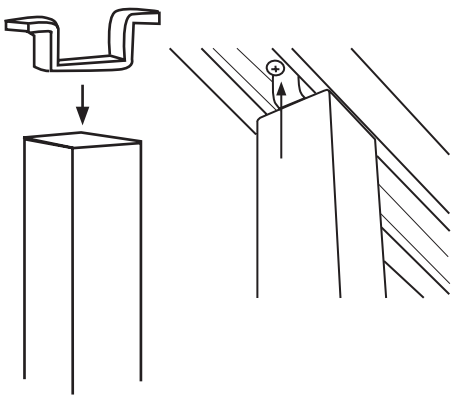
Proceed until all top rails on the deck are installed and all posts are level and plumb.

A.

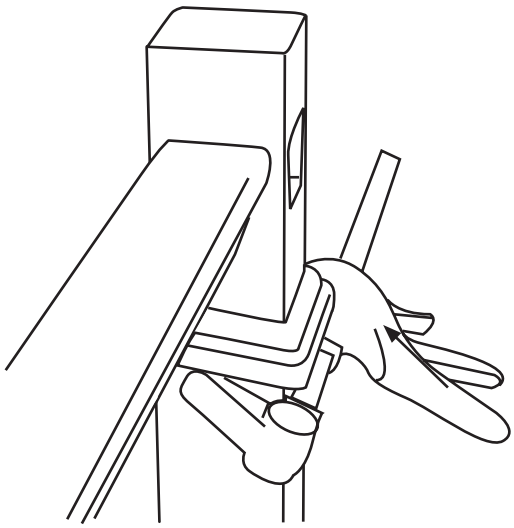


B.

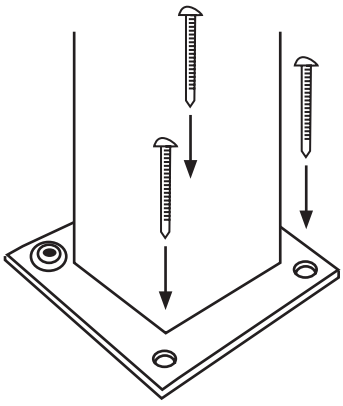
C.



D.



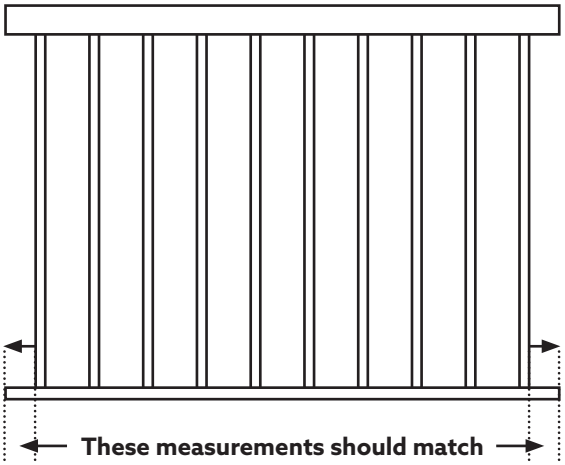
E.



3 CUTTING RAIL PANEL

Measure the spacing between the posts again, subtract ½". Take the measurement (Less the ½") and center that on the panel so that the distance between the last spindle and the cut line are the same at both ends of the panel. Cut using a miter saw with a carbide blade.

NOTE: there is a top and bottom to rail panels. Identify where holes are for the top to connect it to the top rail.



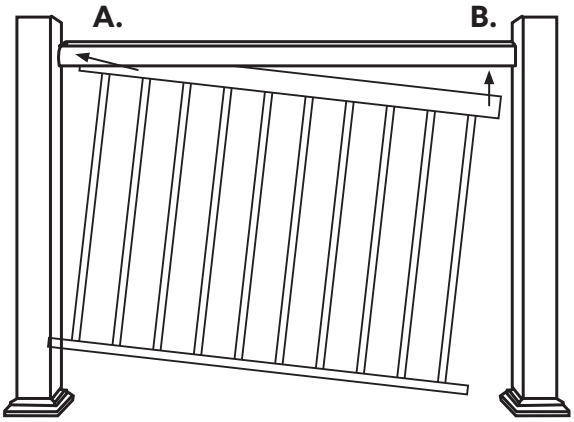
3 INSERT PANEL

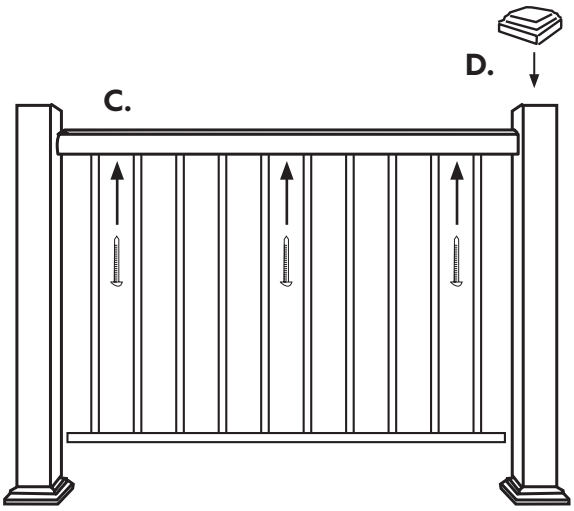
A. Insert one end into the under side of the top rail and slide it into the fitting mounted on the post. Slide the panel in as far as it will go.

B. Insert the other side to the post and squeeze the top of panel into the rail. You may have to slightly spread the top of the posts to get it to insert.

C. After you've inserted the panel, center it between the posts and screw it upwards into the upper rail.

D. Attach post caps.



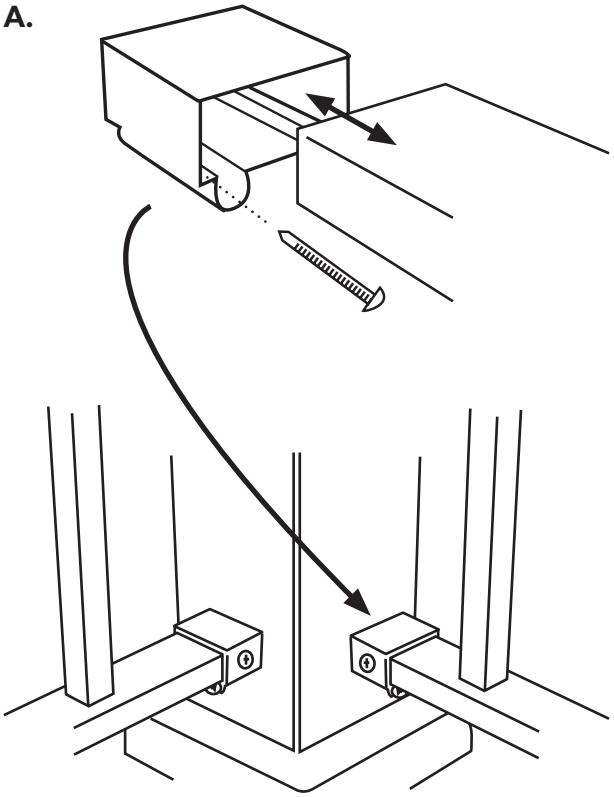


7 SECURE

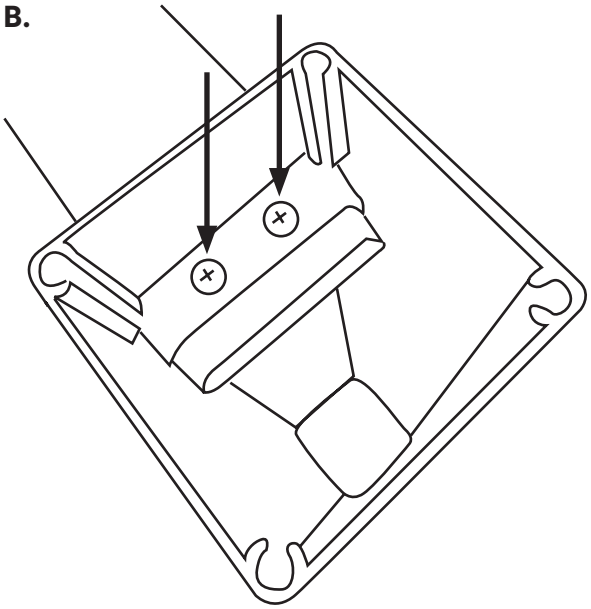
A. Secure the bottom of rail panel to the posts by sliding the bottom fitting over the bottom rail and screw to the post with supplied screws into pre-drilled post holes.

B. Secure top rail to posts with self tapping supplied screws.

A.



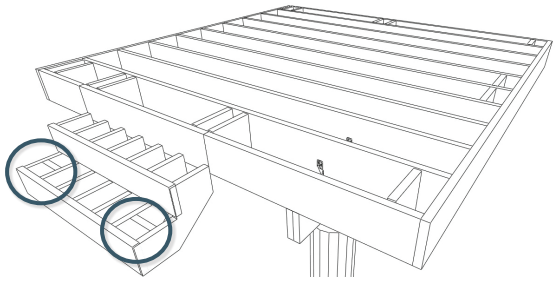
B.



INSTALLATION FOR STAIRS

1 STRUCTURAL MATERIAL

After the deck railing has been completed, you can start on the stairs. It is important to make sure you have structural material at the post locations under the decking. There are various ways to achieve this — the figure here shows one method. Decking must be secured per manufactures recommendations prior to installing stair posts.



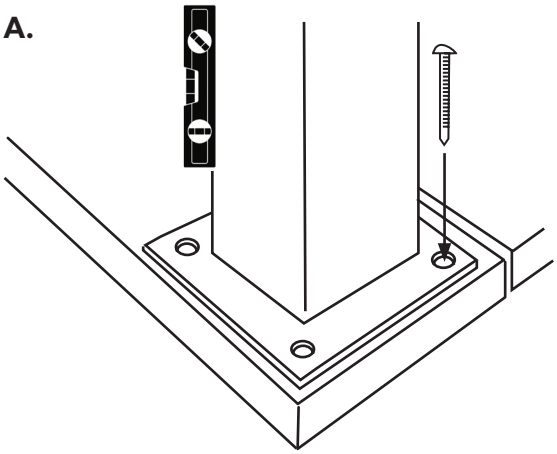
2 INSTALLING BOTTOM POST

Install the bottom posts on the first step, typically within 1-1 ½" from the nosing of the step.

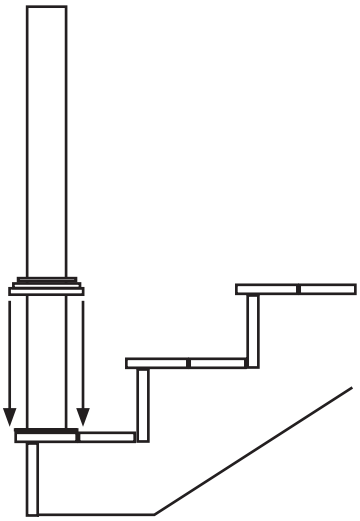
A. Assure that the post is level using your level. Then secure with 6" structural screws.

B. Slide base plate cover over post.

A.



B.



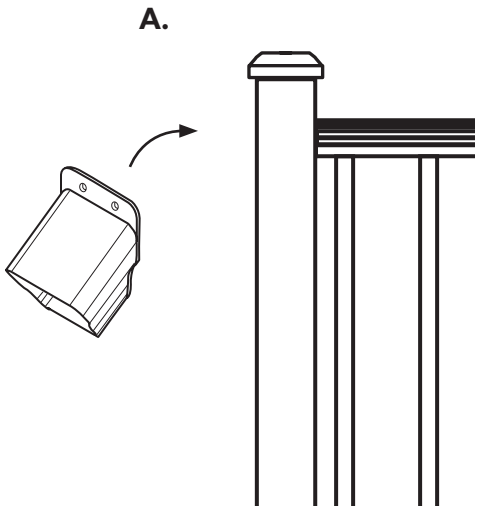
3 INSTALLING TOP RAIL

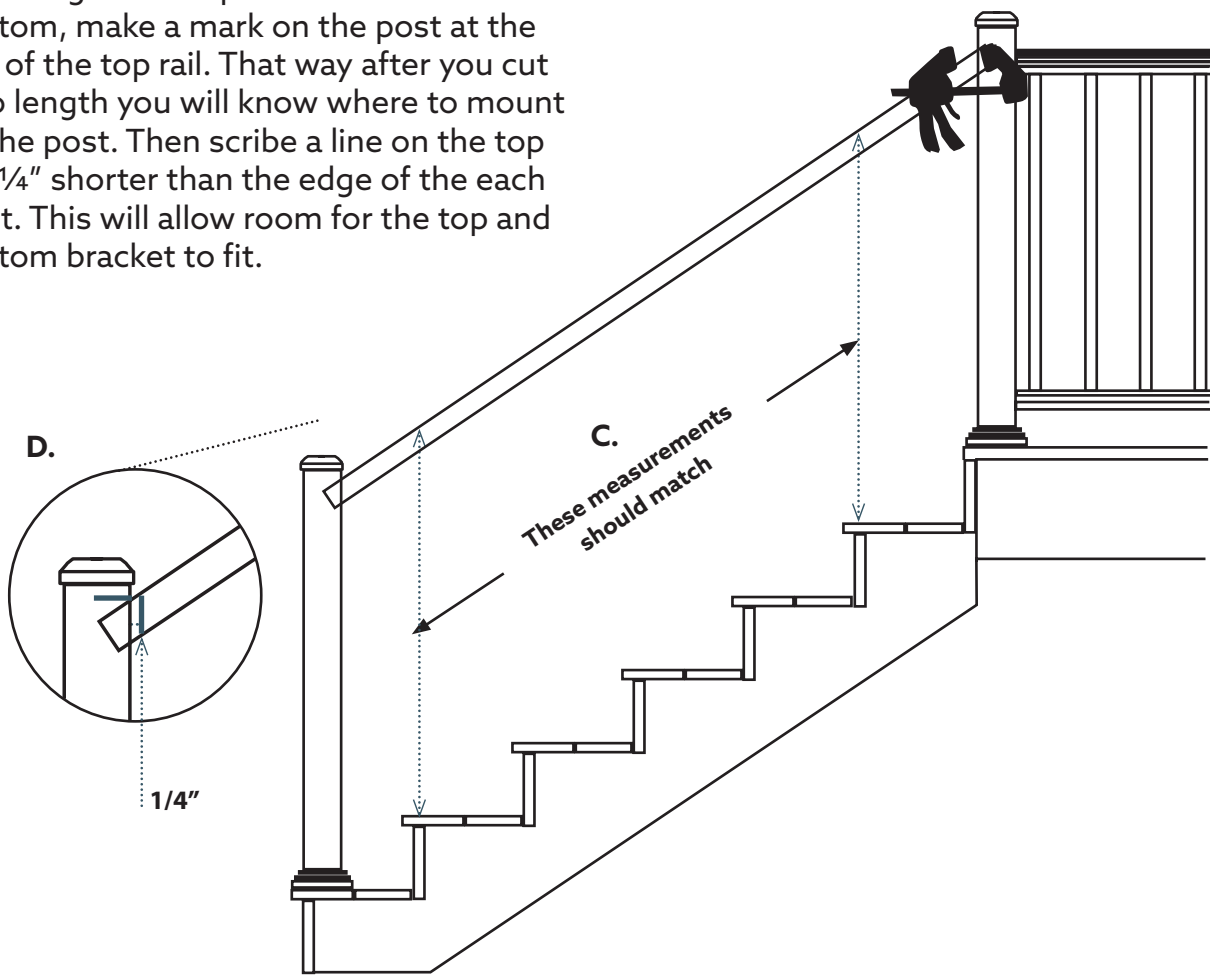
A. On the top post of the stairs after the cap has been installed, place a 35° down mount just under the post cap where it attached to the post (touching the cap).

B. Next, line up the top rail with the 35° mount and clamp to the post, while your assistant holds the the top rail to the bottom post.

C. Raise or lower the top rail at the lower post so that the distance from the nosing of each step is equal at the top and bottom of the stairs.

D. When you have the measurements matching at the top of the stairs and the bottom, make a mark on the post at the top of the top rail. That way after you cut it to length you will know where to mount to the post. Then scribe a line on the top rail ¼" shorter than the edge of the each post. This will allow room for the top and bottom bracket to fit.





4 CUTTING TOP RAIL

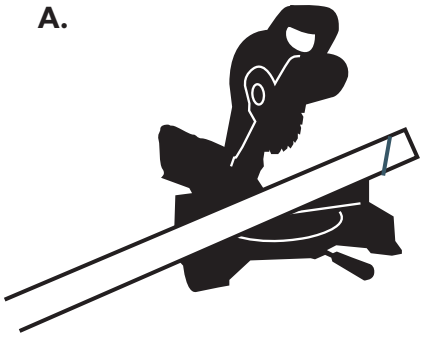
A. Cut the top rail on the marks from step 3.

B. Insert the cut top rail into the top mount.

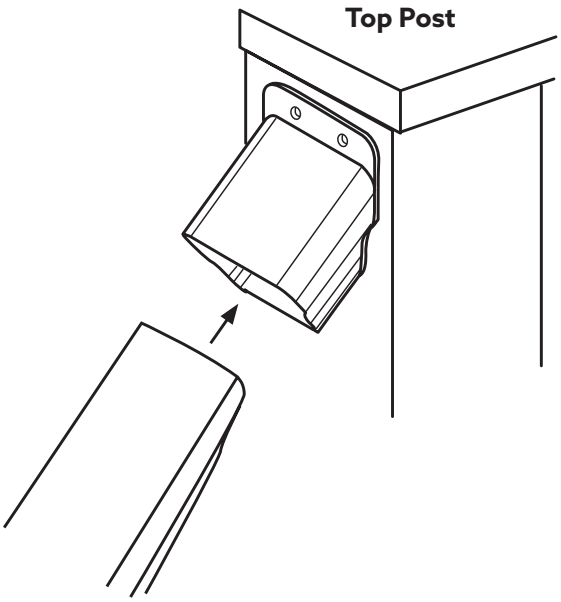
C. Slide the bottom mount over the top rail.

D. Raise up to the mark you made on the post. Install with supplied screws.

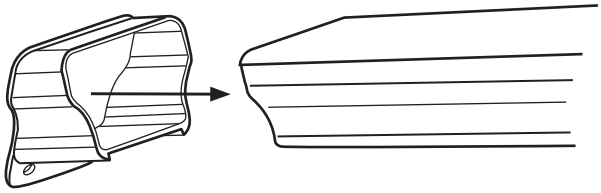
A.



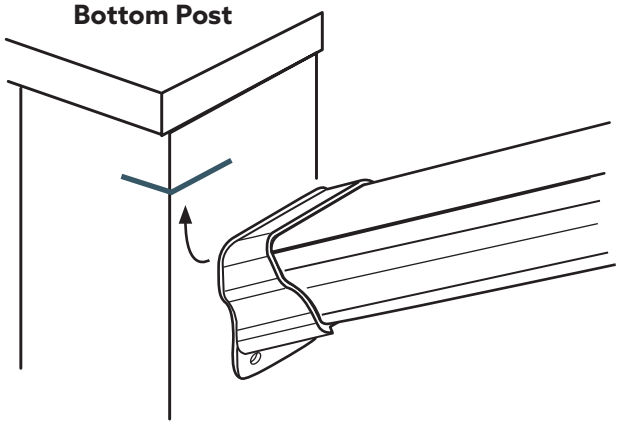
B.



C.



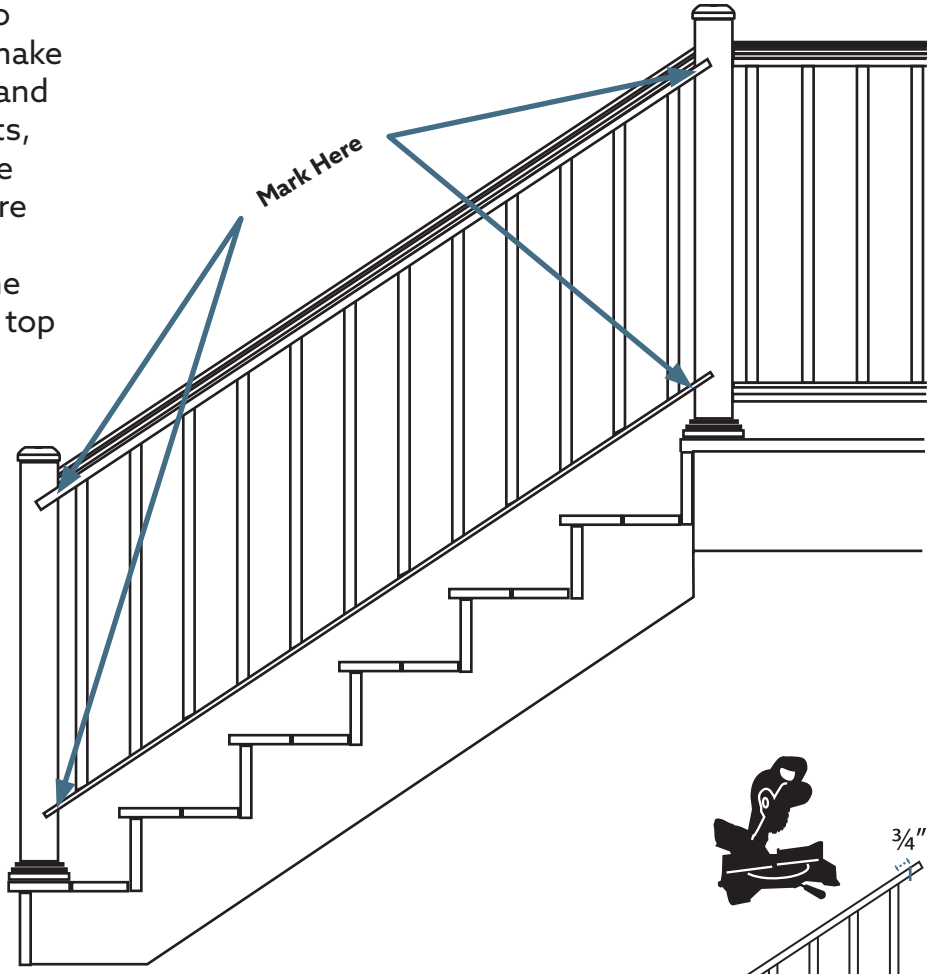
D.



Kallos top rail profile shown as an example. Please use the correct corresponding brackets for your rail profile.

5 MARKING THE PANEL

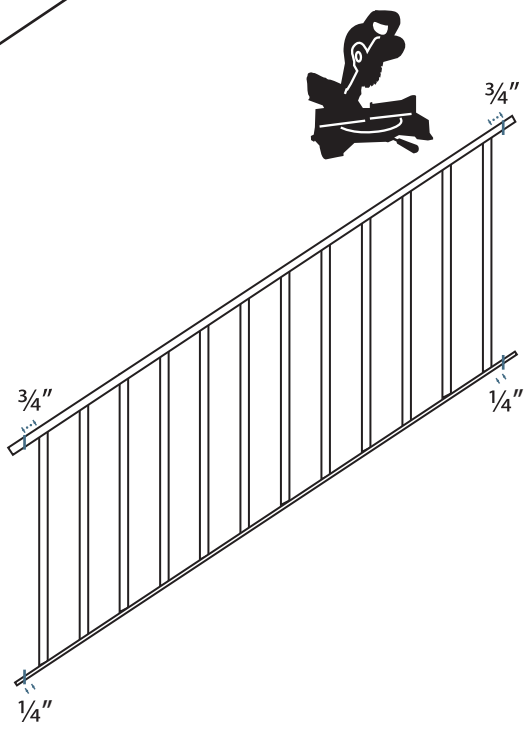
Hold panel on stairs next to posts. Use your level and make sure the spindles are level and centered between the posts, so the spacing between the first spindle and the post are the same at the top of the stairs and the bottom of the stairs. Once level mark the top and bottom.



6 CUTTING THE PANEL

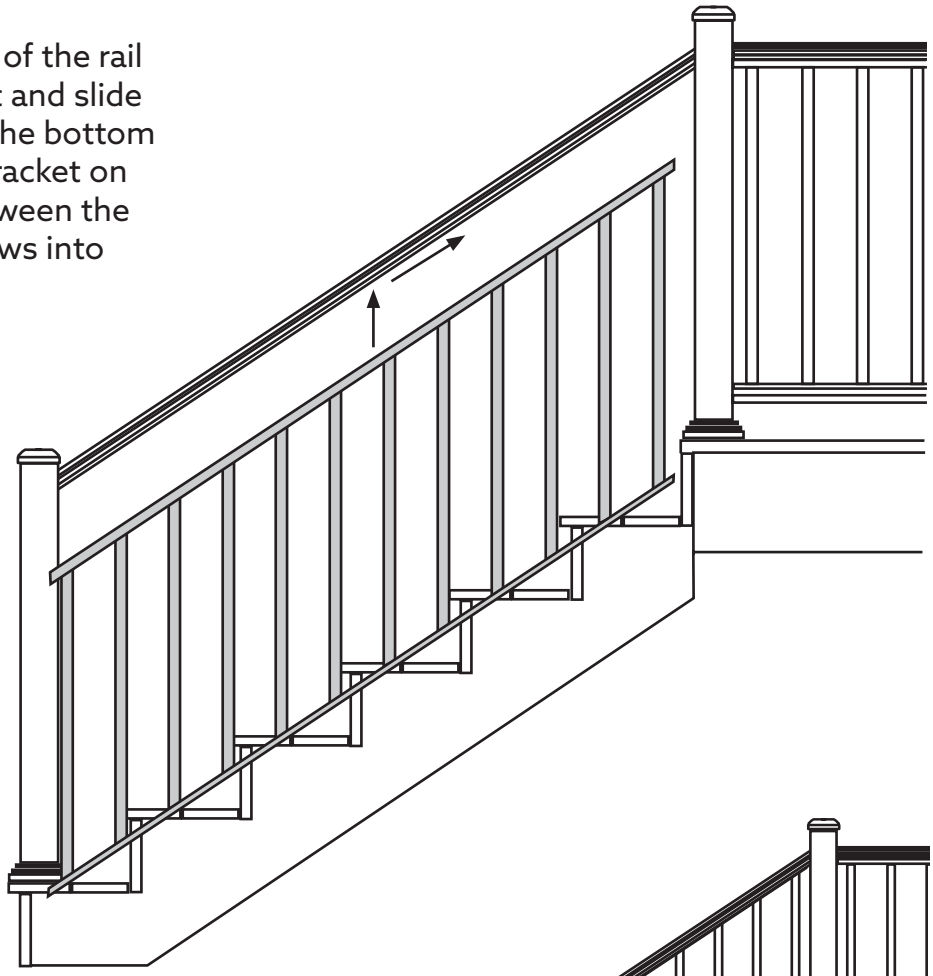
TOP: Cut ¾" smaller than your mark on each end. This will allow enough room to insert into brackets mounted on the posts.

BOTTOM: Cut ¼" smaller than the marking on the rail to allow room for bottom mounts.



7 FITTING THE PANEL

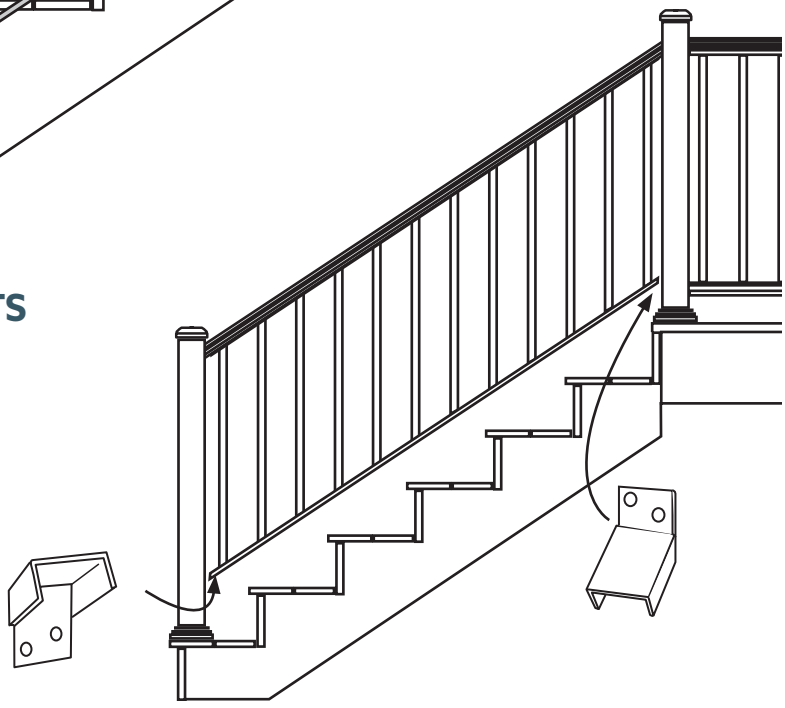
After cutting, slide the top of the rail section into the top mount and slide it uphill far enough to get the bottom of rail into the mounting bracket on the post. Center panel between the posts. Install supplied screws into underside of top rail.



8 INSTALLING BOTTOM MOUNTS

Place bracket over bottom rail and screw to the post using 6" structural screws.

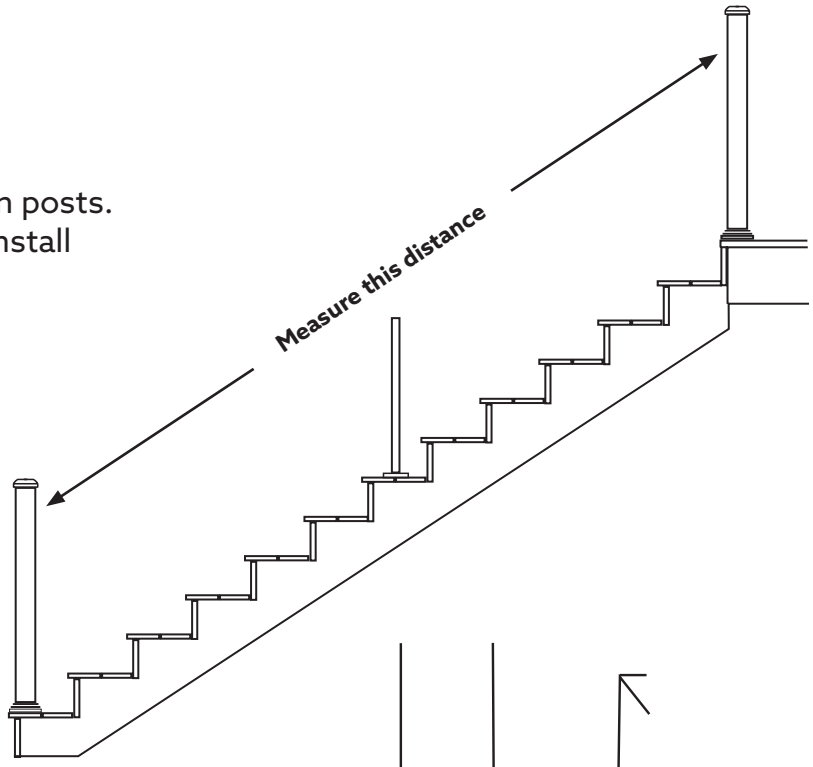
HELPFUL NOTE: This is where the right angle attachments are needed.



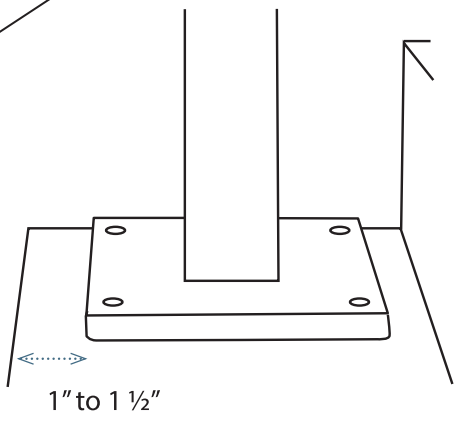
9 LONG RUNS OF STAIRS

Long runs of stairs require mid span posts. Set bottom post as in step 2 then install top rail as in step 3.

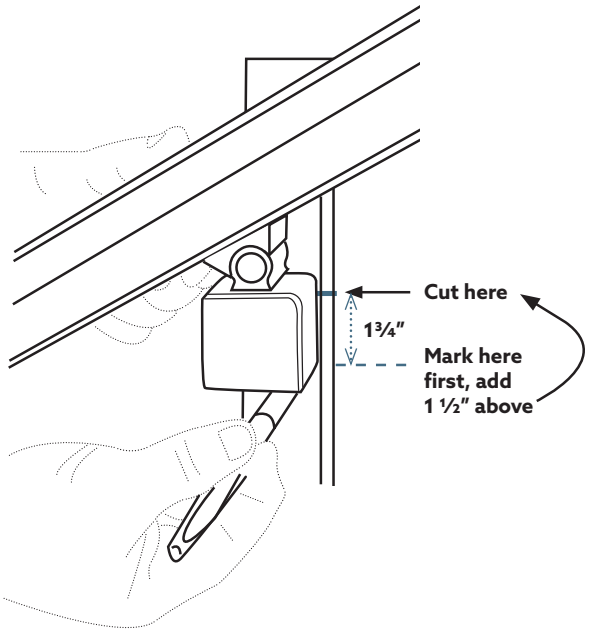
A. Measure the distance between top deck post and bottom post, divide that measurement by 2. This will aid you in determining which tread to put the stair line post on.



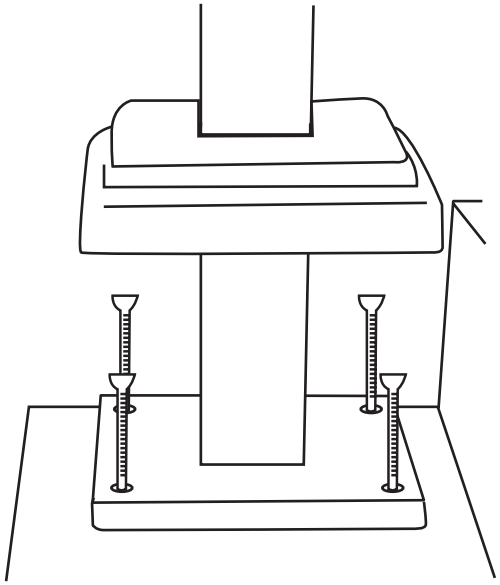
B. Once you have found the correct tread, you'll need to place the post aprox 1" to 1 ½" from the nosing on the tread. This is very important so that you have adequate room to get the right angle drill attachment in for install.



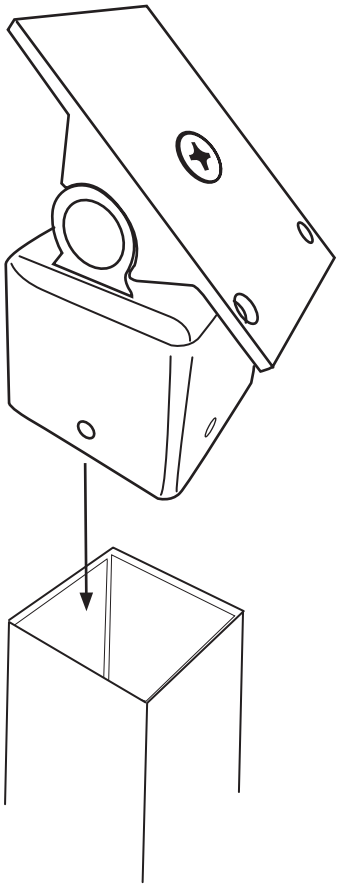
C. To find the proper height of stair line post, while holding the stair line post plumb and the adjustable stair mount under the railing, mark the stair line post at the bottom of the adjustable stair mount and add 1-3/4" to slide into the adjustable stair mount at the correct height.



D. Drill and mount stair line post to the tread using 6″ structural screws. Install base plate cover.



E. Place the adjustable stair post mount onto the top of stair line post. Secure with supplied screws to both post and under the rail.



NOTES

enEXO
RAILING SYSTEMS

www.enexorailing.com

Scan here for
instructional videos