

Exotics™ Railing System by Monarch™

Prior to Installation



1 Picking the right railing kit and accessories for your application

Exotics™ railing kits

36" H X 72" L

36" H X 96" L

Exotics™ rail kit systems by Monarch™ come in matching colors to the Exotics™ deck boards.

Note: Choose post sleeves, post caps and post skirt bases in any of the Exotics™ colors to create your own design.

2 Post sleeve kits and accessories sold separately. Exotics™ railing systems, accessories can be mixed and matched to achieve desired designer looks.

Exotics composite post sleeves come two, 4' units per kit. Assorted Exotics cap toppers and post skirt bases are sold separately (see your local dealer for selection).

3 Exotics™ railing kit by Monarch™

Review all contents of your Exotics railing kit prior to starting your railing project—if missing any pieces—please contact Monarch at 1-877-666-2742

- 1 Exotics top rail
- 1 Bottom rail
- 1 Pre-drilled retainer
- 1 Support block
- 1 Support block retainer
- 2 Pre-drilled balusters
- 15 Balusters (6' kit)
- 20 Balusters (8' kit)
- 1 Hardware kit (see below)

Hardware kit contents:

- (6) 3" - #8 wood screws for attaching end balusters to post
- (8) 1" - #8 wood screws for attaching top retainer, support retainer and support block
- (31) 1 3/4" - #8 wood screws for attaching balusters to top retainer and bottom rail



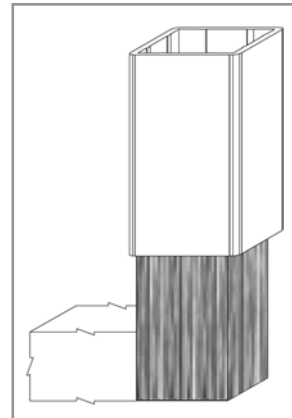
PRIOR TO INSTALLATION

4 Take measurements to assure proper post heights

Prior to installing the post sleeves, confirm the height needed for your 4" X 4" pressure-treated post, based on your desired overall rail height. Remember to include the post cap, and post skirt base as part of the equation for post heights.



Note: To ensure proper cap attachment, make sure pressure treated 4" X 4" post is at least 1" below top of the sleeve.



5 Cutting rails to length: Take time to measure and avoid ruining handrail material

TAKE YOUR TIME, and plan your cuts. Use a pencil to mark the cuts on the horizontal railing parts. Make marks on masking tape if you prefer, because composite doesn't mark easily. Set the end balusters in place and test to be sure the mounting brackets will fit in the remaining space.

For example: suppose you needed to cut 7" from a section of handrail. You could just cut $3\frac{1}{2}$ " from each end of the retainer and the bottom rail. But that would leave only a half inch of rail between the last baluster and the end of the rails. That does not leave enough room to attach the mounting bracket. The solution is to shorten the handrail by a full baluster interval, (or just a bit less) and then trim an equal amount from each end.

The **right way** to shorten a section of railing by 7" would be to first cut one full baluster interval from the retainer and bottom rail (that's $5\frac{1}{4}$ "), and then remove the remaining amount ($1\frac{3}{4}$ ") by cutting half that length ($\frac{7}{8}$ ") from each end. That would leave $3\frac{1}{8}$ " of open space at each end of the railing section... well within the code-required maximum of 4" and still big enough to look similar to spacing between balusters.

To be sure there is enough room to attach the brackets, leave at least two inches from the end of the rail to the side of the baluster. Since each baluster is about $1\frac{1}{4}$ " wide, that's a **minimum of $2\frac{5}{8}$ "** from the end of the rail to the center of the baluster screw hole. **Be careful and check your measurements and calculations several times if necessary. With handrails it's easy to make mistakes.**



Important Safety Note: The 4" maximum between balusters is determined by building codes, and is meant to prevent little children from getting their heads stuck between balusters.

Exotics™ Railing System by Monarch™ Installation Guide

Exotics™ Railing Components

See "Prior to Installation" Information for Measuring tips and to Review Kit Contents



1 Installing the post sleeves

Using the included template, drill a 3/16" hole, using a carbide tipped drill bit, centered left to right and 1" up from the bottom edge of the post sleeve. (Figure #1)

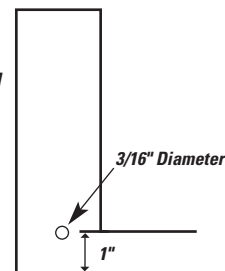
Slide the post skirt over the sleeve until the bump on the inside of the skirt snaps into the drilled hole. Slide post sleeves over 4" X 4" pressure treated post.

Note: If optional post skirt base is used, install prior to installing railing.



Note: One inch from the post sleeve bottom edge, drill a 3/16" hole. (Center Left to Right)

Figure #1



Note: If your application does not make use of wood posts, see steps 10, 10A and 10B.



2 Railing measurements

See "Prior to Installation" information for measuring tips.

Measure the distance between the post sleeves to determine the length of the railing. Be sure to measure both the top rail and the bottom rail distance as they may not be equal. Measure the top rail/retainer from its centerpoint. Trim each end of the top rail/retainer equally while maintaining the correct overall length. Repeat these steps for the bottom rail using the bottom rail measurement determined previously.

Note: Due to variation in length of the top rail, retainer and bottom rail – it may be necessary to cut off differing amounts from each rail to have all three rails evenly fit between the posts.

INSTALLATION GUIDE



Note: Installation photos show Bermuda™ all white rail kits with colonial balusters. Exotics™ railing systems by Monarch™ include traditional square balusters only.

3 Attaching the balusters to the bottom rail

Place the bottom rail on a clean flat surface. Screw the balusters to the bottom rail, the channel of the bottom rail has screw holes and indentations for the flat screw heads (Figure #2) Thus creating a flat surface once the #8 - 1½" flat head screws are installed. Take care to install both end balusters at each end of the bottom rail, as the end balusters are used to install the actual fully constructed railing section. (see NOTE to the right and photos to the left.)

Note: Take time to set up a proper working surface as shown to the left (two saw horses and a sheet of plywood), it will make set up of the Exotics™ rail systems more manageable and save installation time.

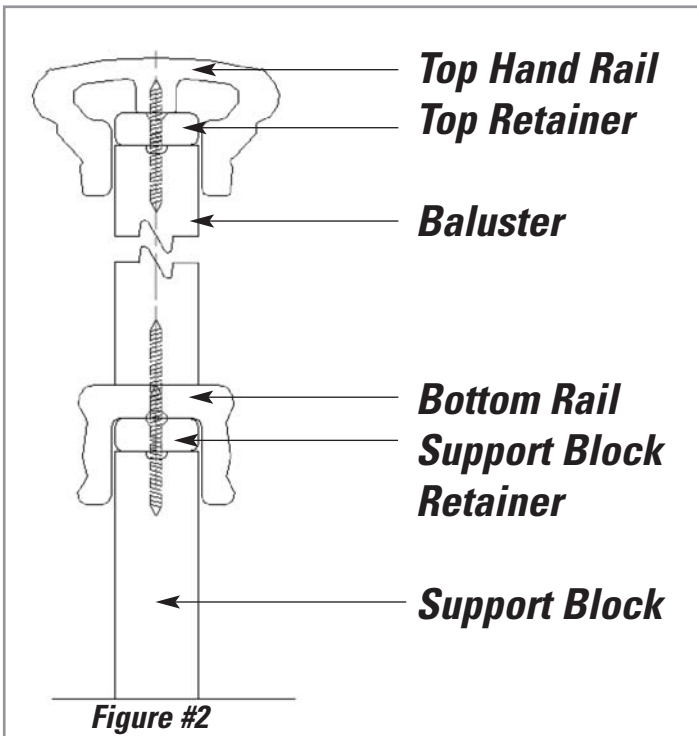
Note: Two balusters are marked as "End balusters". These two balusters have been pre-drilled for installation to each end of the hand rail. These balusters serve to mount the railing to the post sleeve.

Note: If trimming occurred to the rails, you may need to drill pilot holes for the placement of the end balusters.



4 Attaching the balusters to top retainer

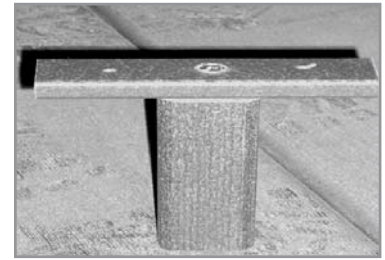
After attaching the bottom rail, attach the top retainer to the balusters using #8 - 1½" flat head screws, the top retainer rail has screw holes with indentations on top for the flat screw heads. (Figure #2) Thus creating a flat surface once the #8 - 1½" flat head screws are installed. Take care to install both end balusters at each end of the bottom rail, as the end balusters are used to install the actual fully constructed railing section.



Installed Exotics™ Rail End View

5 Attach support block retainer to support block

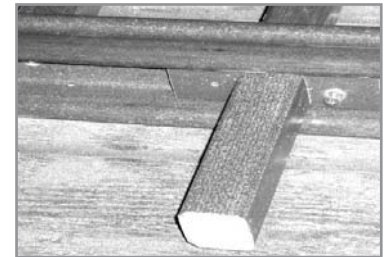
Place rail section between posts on 2" X 4" blocks to acquire the desired rail height. Measure at the center of the bottom rail to the deck surface to determine the desired support block height. Trim support block to length (if needed) and attach the support block retainer to support block using a 1 1/2" screw. (see photo between Figure #3 and Figure #4)



Note: Figure out the desired rail height and trim the support block so that the support block rests firmly on the deck surface.

6 Support block to bottom rail

Center the support block and retainer on the bottom rail of the completed rail section, then attach the completed support block assembly to the underside groove of the bottom rail with two included 1" screws.



7 Railing installation

Balance the completed railing section on 2" X 4" blocks to insure proper height from the deck surface. Attach the section to the post sleeves using the included 3" composite screws. (Figure #3) (Figure #4)

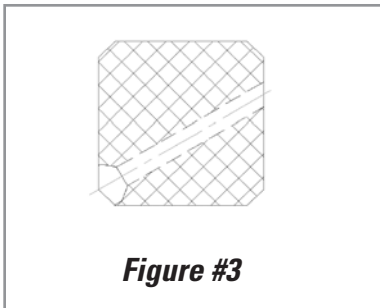


Figure #3

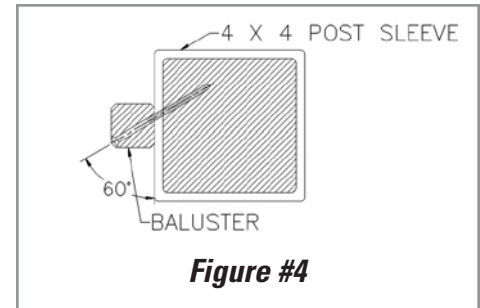


Figure #4

8 Attach the top rail to the top rail retainer

Slide the top hand rail over the top retainer. Using the remaining holes in the top retainer, screw into the under side of the top hand rail with the #8 - 1" pan head screws. (see photos)



One inch down from the post sleeve's top edge, drill a 3/16" hole centered left to right.

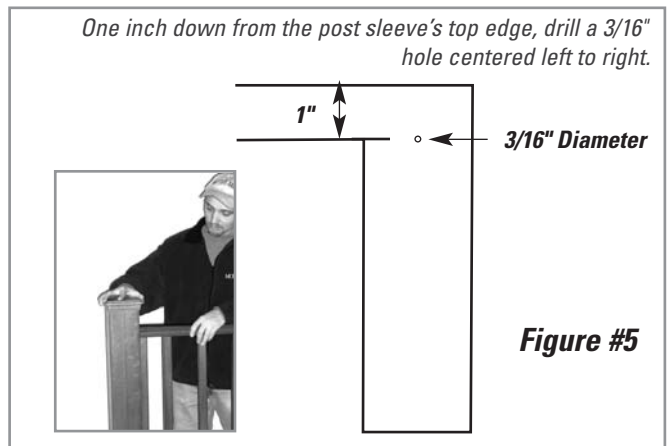


Figure #5

9 Install post caps

Using the included template, drill a 3/16" hole centered left to right on the post sleeve and one inch down from the top edge. Align the remaining "bump" on the cap's underside with the side of the post with the hole just drilled and slide the cap over until the "bump" snaps into the hole. (Figure #5)

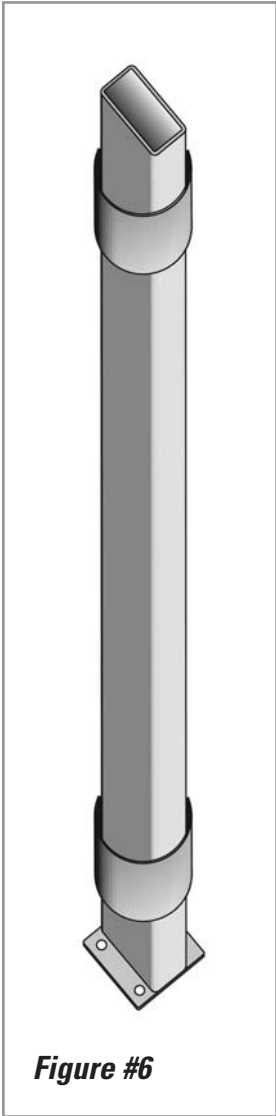


Figure #6

10 Monarch™ post supports available for existing decks

Monarch™ offers metal post supports (sold separately) that can be used for wood or concrete decks, porches, patios, docks and/or stairs. They are installed easily – simply bolt to an existing surface, using 5/16" concrete anchors or 5/16" lag bolts or carriage bolts, depending on application. (Figure #6)



10A Concrete application (surface mount)

Layout post supports for proper alignment. With all supports facing the same direction, mark the 4 holes for drilling. Drill the 4 holes in the concrete for a 5/16" concrete anchor bolt (see your local supplier for proper hardware). Cut the Monarch post sleeve to proper length and install over the Monarch post support.

Note: Make sure Monarch™ post supports are facing the same way for all applications. Double check your layouts before drilling holes.

10B Wood application (surface mount)

Layout post supports for proper alignment, trace the 4 holes from the bottom support plate prior to drilling the 4 holes in the deck. Use a 5/16" lag, screw or carriage bolts (see your local supplier for proper hardware). Depending on application, some reinforcement of the deck may be necessary. Cut the post sleeve to proper length and install over the post support.

Note: Reinforce from joist to joist on the under side of the existing structure to insure sufficient strength to support railing system.

Note: Some applications may require metal lag screws to install the Monarch™ rail system. See your local supplier for proper hardware.

