

Dec'orators® CXT

6' Graspable Stair Rail Installation Instructions

For Installations Using Co-Extruded Composite, Classic and Estate Balusters

For each 6' on-center stair railing section, you will need:

One 6' Dec'orators Graspable Stair Rail Kit, which contains:

- * (1) Graspable upper rail
- * (1) Lower rail
- * (2) Inner rails
- * (2) Support block kits
 - (2) Support blocks
 - (2) Support block connectors with screws
- * (1) Stair hardware kit, which contains:
 - (4) Stair brackets
 - (16) 1" long countersunk screws
 - (4) 1-1/2" long pan head screws
 - (8) 2" long countersunk screws
 - (2) 2-1/2" long countersunk screws
 - (1) Drill bit
 - (1) Screw pack consisting of 30 screws (use with Dec'orators Baluster Connectors)
 - (1) Post Sleeve Bracket placement template

Baluster options:

One Co-Extruded Composite Baluster Kit, which contains:

- * (15) – Balusters
- * (30) – Baluster Connectors with screws

One and a half Classic or Estate Aluminum Baluster Kits, which contain:

- * (10) – Aluminum Balusters

and

One and a half Classic or Estate Baluster Connector Kits, which contain:

- * (20) – Baluster Connectors
- * (20) – Stair Adaptors

Two Scenic Glass Baluster Kits, which contain:

- * (5) – Glass Balusters

and

Ten Scenic Baluster Connector Kits, which contain:

- * (2) – Glass Baluster Stair Connectors

One 40" or 52" Post Sleeve Kit, which contains:

- * (1) – post sleeve
- * (1) – post base trim

One Post Cap for each post sleeve (Sold separately)

Prior to construction, check with your local regulatory agency for special code requirements in your area. Common railing heights are 36" and 42". Structural support should come from the continuation of deck support posts that extend up through the deck floor or from railing posts that are bolted to the inside of the rim or outer joists. Never span more than 6' on-center between railing posts. Install railing posts before deck boards are fastened to the joists.

Pre-drilling of all railing components is essential to successful installation. Do not over-tighten screws. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.

Step 1: Cedar or pressure-treated pine 4x4 railing posts provide the structural strength for the railing. The length of each post is determined by the total of the stair stringer width (7-1/4") + tread thickness (1") + railing height (36" or 42") + spacing for post cap (1-1/4") = 45-1/2" or 51-1/2".

Important: Do not notch the 4x4 railing posts. Notching will reduce the strength of the post and could result in railing collapse or failure (fig. 1).

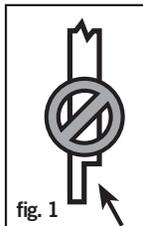


fig. 1

Step 2: Position, plumb with a level, and clamp the rail post on the interior face of the stair stringer. Plumb again. The 4x4 railing post

Items you will need:

- Drill/power screwdriver
- Assorted drill bits
- Hammer
- Miter or circular saw with fine-tooth carbide tip blade
- Construction adhesive
- Marked speed square
- Two clamps
- Carpenter's level
- Carpenter's pencil
- Adjustable wrench or socket wrench for bolts, etc.
- Safety glasses/goggles
- Assorted fasteners (see instructions)
- Tape measure

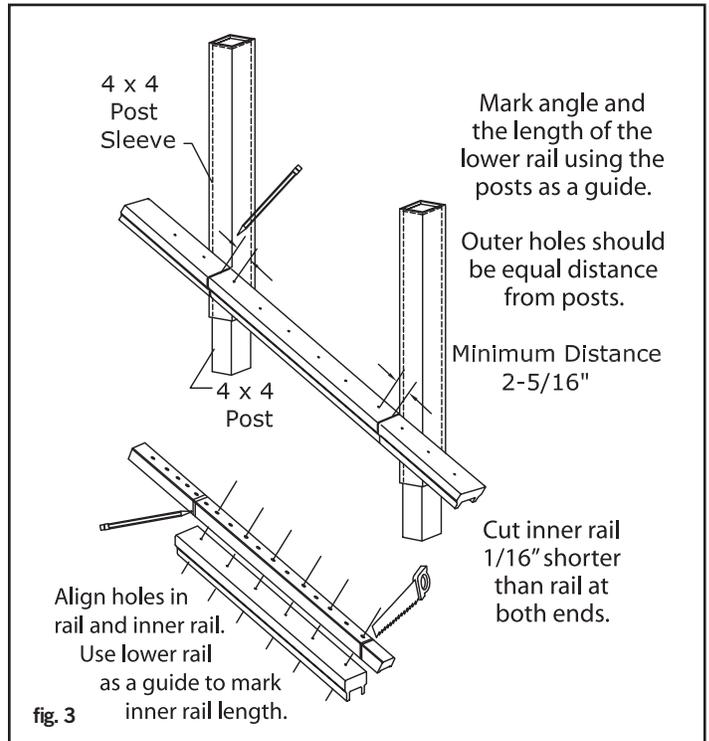


fig. 3

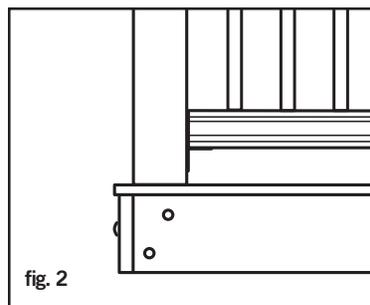


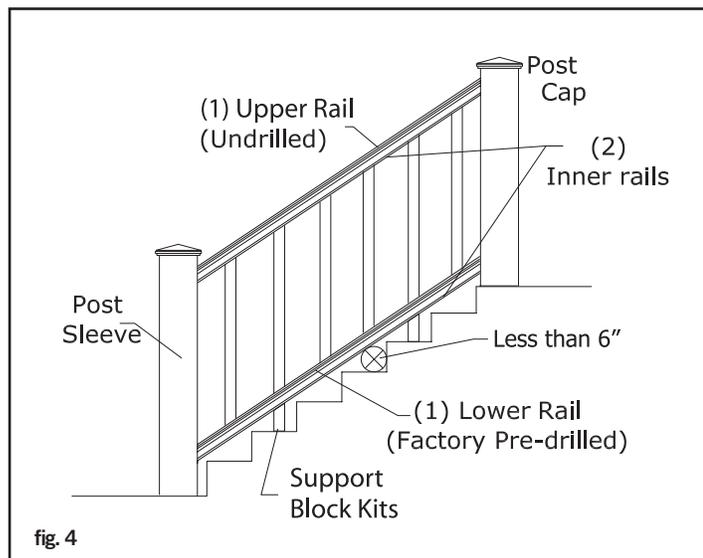
fig. 2

should be bolted to the inside of the stair stringer using two 1/2" x 6" galvanized carriage bolts. Corner posts use a third carriage bolt inserted through the adjacent joist. Ground-level posts should be set in concrete (fig 2).

Step 3: Complete stair tread installation prior to installing post sleeves. Trim 4x4 post sleeves to length. Post sleeves should be a minimum of 1-1/2" longer than the railing height to accommodate a post cap. Slide a trimmed post sleeve over each 4x4 railing post. Slide a post base trim over each post sleeve.

Step 4: Note! The rails are pre-drilled. To ensure the outer balusters are equally spaced, the rail components require trimming at both ends. Using the lower pre-drilled rail as a guide, place it adjacent the post sleeves and center the rail so the furthest pre-drilled holes for the balusters are equal distances from the post sleeves. Using the posts as a guide, mark the angle for the beveled cut vertically through the rail section. Mark the gap between the posts onto the rail and trim to fit.

Step 5: **Note!** To ensure the balusters are installed plumb, the holes between the rail sections must all be aligned. **Tip:** Use a gauge pin or a 3/32" drill bit to ensure the holes are aligned. Using the trimmed lower rail as a guide, set the upper inner rail for the system on top of the trimmed bottom rail and align the pre-drilled holes. Mark the cut lines on the inner rail with a pencil. **Note!** To allow for the thickness of the brackets, the inner rails should be 1/8" shorter than the lower rails with all holes equally spaced. Remove an additional 1/16" from the pencil mark on each end and trim the inner rail to length. Repeat for the second inner rail (fig. 3).



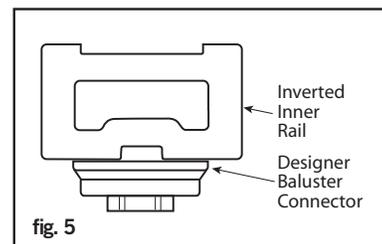
Step 6: Assemble the lower inner rail and support block assembly. Position the bottom rail between the posts. Check building code requirements for maximum spacing on a staircase, typically less than 6". A 6" ball cannot pass through the triangle formed by the bottom rail, tread and riser (fig. 4). A support block is needed every 2' on-center. Trim support blocks to desired height and pre-drill 1/8" holes in the proper location. Holes must be centered on the inner rail for support blocks to fit properly. Using the support block connectors, fasten support blocks to the underside of the inner rail.

Step 7: Mark the height of the brackets on the inside of the post using the bracket placement template included in the kit. Another option is to use the inner rail as a guide. The top of the bracket should be even with the top of the inner rail assembly. Drill two 1/8" holes through the bracket holes shown on the template and through the post sleeve, for both the upper and lower brackets. Remove the bracket placement template from the post sleeve and fasten the upper and lower brackets to the post using two 2" long countersunk screws. **Tip:** For best results, use a long drill bit or add an extension bit to the drill. Repeat on the adjacent post. Set the inner rail in place and pre-drill eight 1/8" holes at each bracket hole and into the inner rail. Fasten the rail to the bracket using eight 1" long countersunk screws.

Step 8: Set the lower rail on the lower inner rail between the posts. Using two 2-1/2" long countersunk screws, set the two outermost connectors. For co-ex composite balusters, use the connectors that come with the baluster kit. For Deckorators aluminum or glass balusters, use the appropriate stair adaptor (sold separately) with the proper baluster connector (sold separately). Using the screws provided with the baluster connectors, install the balance of the baluster connectors onto the lower rail assembly.

Step 9: Determine the length of the balusters. Fig. 3 illustrates how a 36" high railing might be sized. Use fig. 3 as a planning tool to determine the height to cut the post sleeves and the balusters. **Note:** Use a fixture to ensure a consistent length (+/- 1/16"). If using co-ex composite balusters, the baluster will need to be miter cut to the proper stair angle. Trim the balusters to the required angle (co-ex composite balusters only) and length. (One per hole in lower rail). Install balusters on each connector. Gently tap the balusters with a rubber mallet to eliminate any gaps. Check for level end to end. **Tip:** Wrap painters tape around the back side of both posts and place balusters against the tape. The tape will balance the balusters in place until the upper rails are installed. Remove tape when upper rail is in place.

Step 10: Important: when using Deckorators Designer Baluster Connectors (both Estate and Classic) in conjunction with the stair adaptors, the upper inner rail must be inverted (fig. 5). Use an exterior adhesive on



the underside of the Designer Baluster Connectors to prevent the balusters from spinning. Install the remaining baluster connectors and stair adaptors (if applicable) on the underside of the upper inner rail. Set the rail onto the balusters, gently tapping the rail to remove any gaps. Attach the inner rail to the brackets by pre-drilling eight 1/8" holes at each bracket hole and into the inner rail. Fasten the rail to the bracket using eight 1" countersunk screws.

Step 11: Measure the distance between the posts and trim the graspable upper outer rail to length, and set on the assembly. **Taking care not to drill all the way through the upper rail, use a 1/8" drill bit to pre-drill four 1/2" deep holes, equally spaced, through the underside of the inner rail and into the underside of the upper rail.** **Tip:** Place a piece of tape 1-1/2" from the end of the drill bit. Do not drill past the tape. Fasten cap rail in place using four 1-1/2" pan head screws.

Step 12: Apply construction adhesive to the inside edges of the post caps and place over each post sleeve.

Note: Touch-up paint is available to repair any chips or blemishes that occur during assembly and installation. Contact a Deckorators customer service agent at 877-463-8379 for availability.

Deckorators railing is a decorative railing and can only be used in those applications where a structural railing is not required by building codes. Deckorators is not suitable for structural use. It should not be used for primary load-bearing members such as posts, joists, beams or stringers. The same common-sense precautions should be taken when handling Deckorators as with wood or other building materials. Dust masks and eye protection devices are recommended to avoid possible irritation from sawdust and chips. Gloves will help to protect the hands. Hands should be washed after doing construction work.

The diagrams and instructions in this brochure are for illustration purposes only and are not meant to replace a licensed professional. Any construction or use of the product must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction or use of this product. The consumer or contractor should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. **EXCEPT AS CONTAINED IN THE WRITTEN LIMITED WARRANTY, WARRANTOR DOES NOT PROVIDE ANY OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES.**