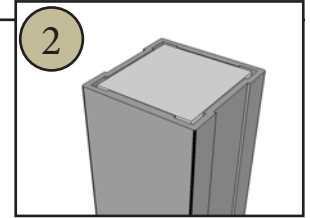




Installing UltraDeck® Post Sleeves:

- 1 Cut the UltraDeck® post sleeve to the proper length.
- 2 Slide the cut UltraDeck® post sleeve over the 4x4 treated post. With the UltraDeck® Rustic™ or UltraDeck® Fusion® post sleeves, be sure to slide the ring base to the bottom before installing the railing. Post sleeves are secured to the 4x4 post as the first spindle is fastened to the post sleeve.
- 3 Install the Post Cap by aligning it with the top of the post sleeve and sliding it into position. A silicone adhesive caulk can be used to secure the post cap to the post sleeve, if desired.



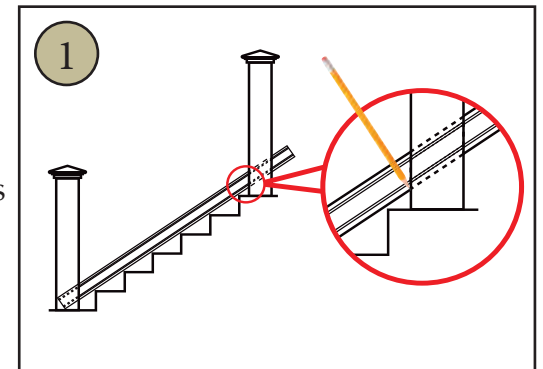
 **Note:** UltraDeck® Post Sleeves are designed to fit over dimensional 4x4 posts. If the 4x4 posts you are using are outside of standard, trimming or shimming of the 4x4 edges may be required. Check fit of the 4x4 post into the Post Sleeve prior to attaching it to your deck structure and make any changes to the 4x4 if needed. Post sleeves are available in both 48" and 96" lengths. Since decking and railing components are extruded products and post cap and ring base components are injection molded, each will fade at a different rate.

 Trim 4x4

Spindle & Handrail Preparation for Stair Rails:

- 1 Inserts, railings, and top caps can be marked for cutting by laying the components on the stairs and marking the angle and length using the installed post as a reference.
- 2 On the lines that you marked, trim all pieces to the same angle. This angle will also be used to cut the spindles.
- 3 Once railing and spindles are cut to necessary angle and length, follow the appropriate railing instructions (listed below).

i Note: It is very important to verify spindles are all the same length. Measure and cut accordingly.



Types of Railing Installation:

*All UltraDeck® Railing methods are recommended for spans of 6' or less

Method 1: For UltraDeck® Rustic™ (see page 10)

Method 2: For UltraDeck® Rustic™ (see page 12)

Fusion: For UltraDeck® Fusion® (see page 14)

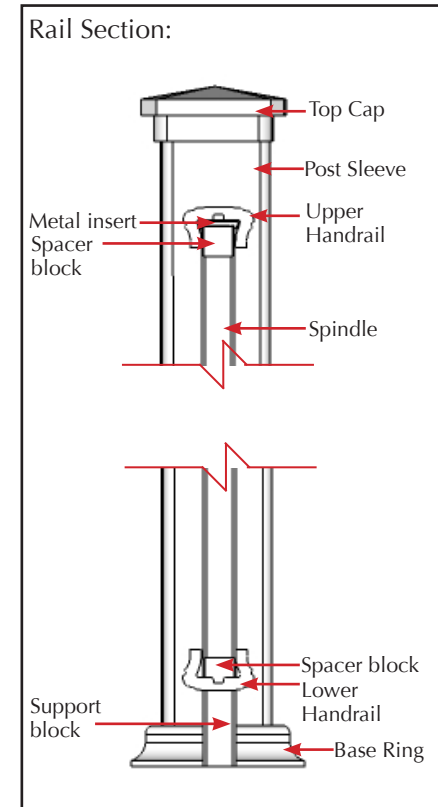
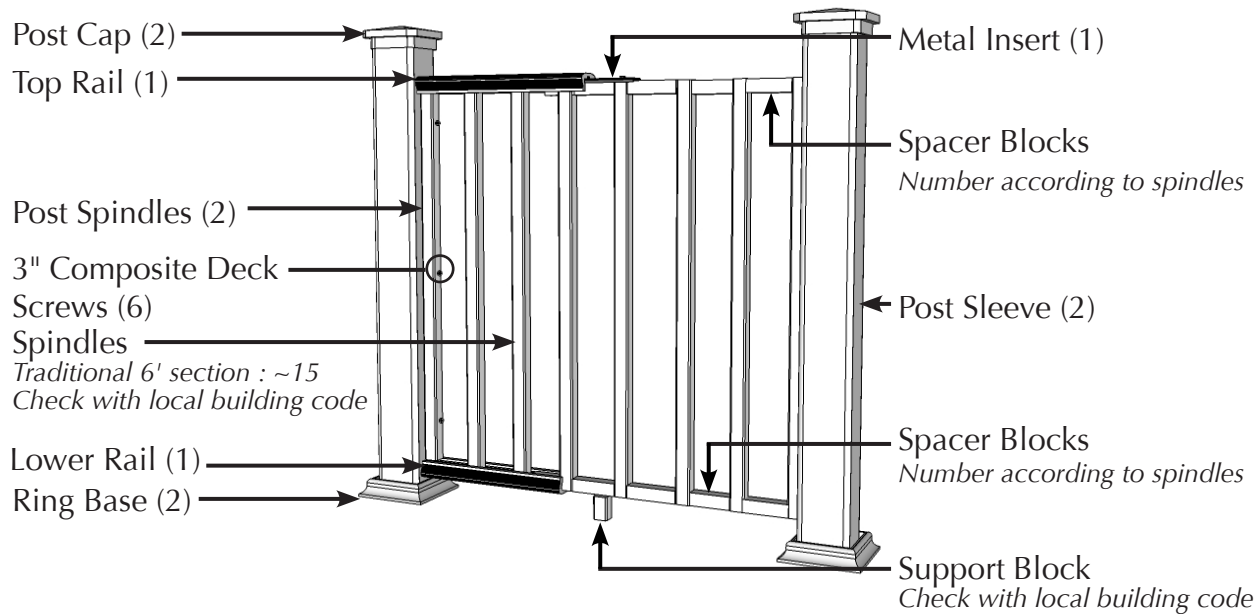
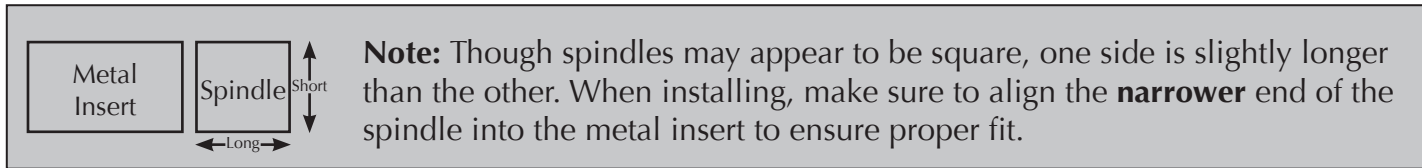
Method 1 Railing System:

! Make sure the post sleeve and ring base have been installed. Make sure post is plumb and level. Properly size the top and lower rail, and metal insert by measuring the distance between the two post sleeves, and cut to desired length. Make sure the spindles are all the same length, measure and cut accordingly.

i **Note:** It is very important to verify spindles are all the same length. Measure and cut accordingly.

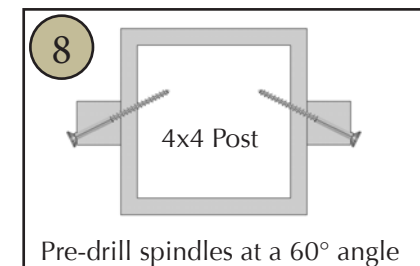
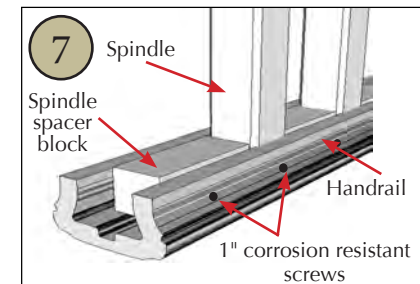
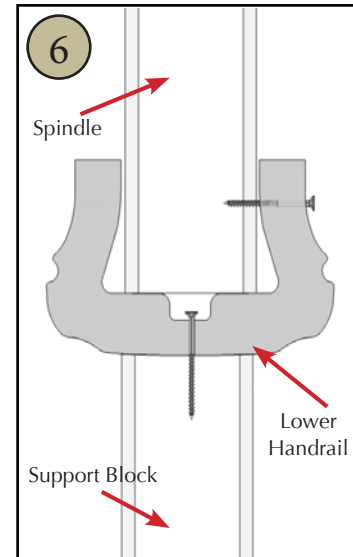
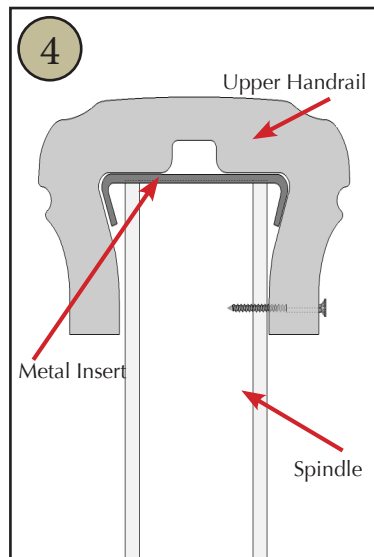
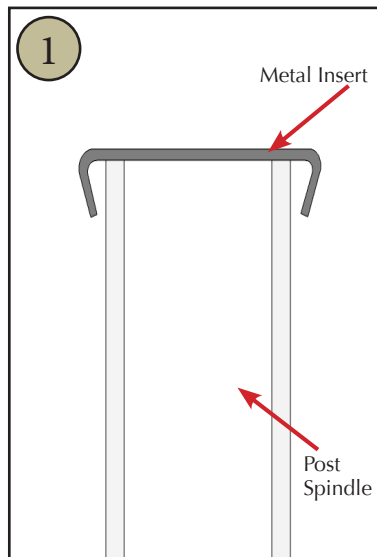
Method 1 uses spacer blocks between the spindles, and does not require pre-drilling of the metal insert.

To apply this method as a stair rail assembly, please see preparation instructions, page 9.



Method 1 Installation:

- 1 Starting with the post spindle set even with the end of the insert, continue down the top rail, evenly spacing spindles, making sure to meet local building code for spacing. Keep in mind an additional post spindle is placed even with the opposite end of the insert. Measure the distance between spindles and cut spindle spacer blocks from UltraDeck® spindles for the upper and lower railing.
- 2 The two post spindles will need to be pre-drilled to attach the completed rail to the post sleeves. Using a 1/8" drill bit, drill three holes at a 60° angle in the spindle, spacing them 3-1/2" from the top and bottom, and one on center.
- 3 All rail spans over 3' require a spindle support block centered under the lower rail assembly. Check with local building codes and cut the support block to the required height from UltraDeck® spindles.
- 4 Starting with one of the post spindles, begin sliding the spacer blocks and spindles into the profile of the metal insert. Make sure the post spindles are flush on the ends of the assembly. Slide the upper handrail over the metal insert. This is intended to be a tight fit; please use soap as a lubricant if needed.
- 5 Pre-drill and fasten the spacer blocks and spindles to the top rail using 1" corrosion resistant screws.
- 6 To install the support block, attach the block to the bottom side of the lower rail by fastening a screw through the lower rail into the support block.
- 7 Slide the spindles and spacer blocks into the profile of the lower railing. Pre-drill and fasten the spacer blocks using 1" corrosion resistant screws.
- 8 Position the rail assembly between the post sleeves, following local building code height requirements. Secure the post spindles to the post sleeves using six 3" composite deck screws through the pre-drilled holes.
- 9 Align the post caps with the top of the post sleeve and slide into place. A silicone adhesive may be used to secure the cap.



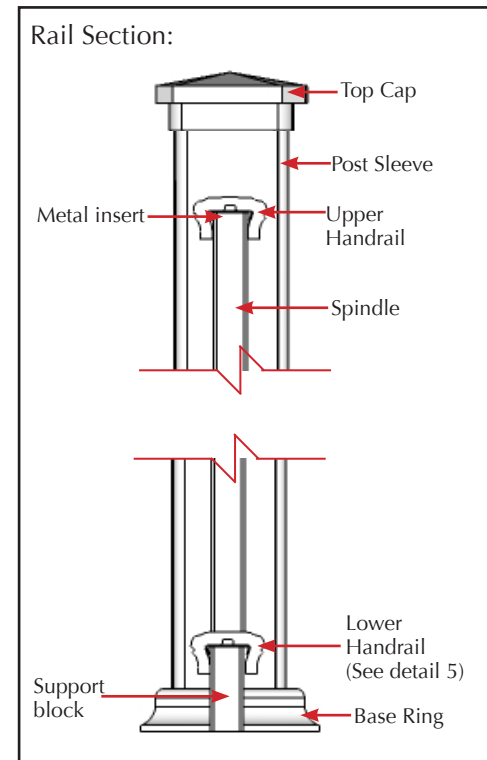
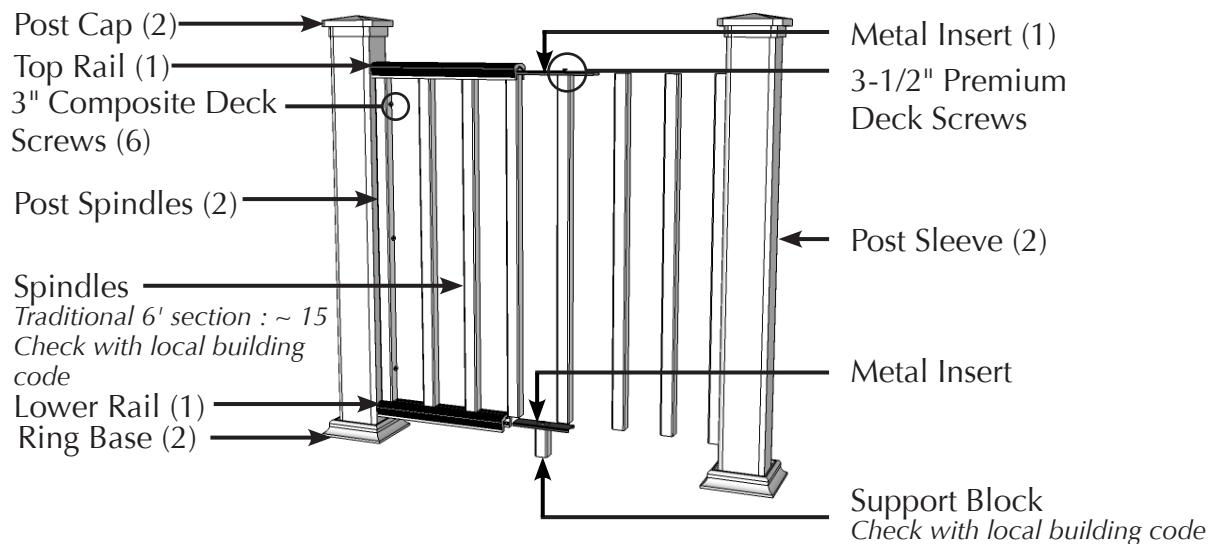
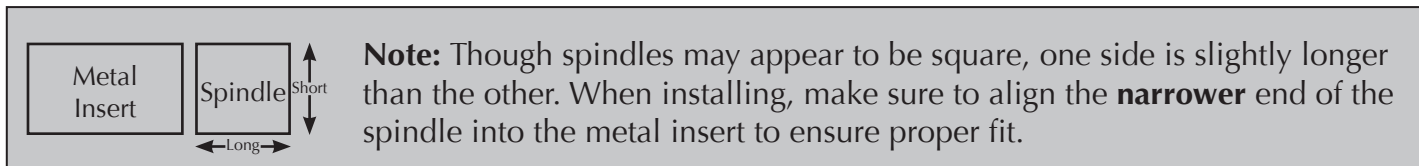
Method 2 Railing System:

! Make sure the post sleeve and ring base have been installed. Make sure post is plumb and level. Properly size the top and lower rail, and metal insert by measuring the distance between the two post sleeves, and cut to desired length. Make sure the spindles are all the same length, measure and cut accordingly.

i **Note:** It is very important to verify spindles are all the same length. Measure and cut accordingly.

Method 2 does not require spacer blocks between spindles, requires pre-drilling of the metal insert, and the top and lower rail profiles are identical.

To apply this method as a stair rail assembly, please see preparation instructions, page 9.



Method 2 Installation:

- 1 Starting with the post spindle, set even with the end of the insert, continue down the top rail, evenly spacing spindles, making sure to meet local building code for spacing. Keep in mind an additional post spindle is placed even with the opposite end of the insert. Pre-drill holes on the metal insert with a 1/4" drill bit, aligning the center of the spindles to the center of the metal handrail insert.
- 2 On each end of the spindles, pre-drill the center, using a 1/8" drill bit to avoid splitting. The two post spindles will need to be pre-drilled to attach the completed rail to the post sleeves. Using a 1/8" drill bit, drill three holes at a 60° angle in the spindle, spacing them 3-1/2" from the top and bottom, and one on center.
- 3 All rail spans over 3' require a spindle support block centered under the lower rail assembly. Check with local building codes and cut the support block to the required height from UltraDeck® spindles.
- 4 Taking the metal insert, begin to slide the spindles into place, aligning the pre-drilled holes. Starting with the center spindle, attach metal insert and spindles using 3-1/2" premium deck screws. Attach post spindles flush on the two ends of the assembly. Remember spindles must be centered to ensure ease of assembly when attaching the top rail. Do not use composite deck screws.
- 5 Position the lower rail so the spindles will rest on the top side of the rail. Secure the spindles to the rail from the underside using quality 3-1/2" premium deck screws. Do not use composite deck screws. Screws should be snug; do not over tighten.
- 6 Slide the top rail onto the metal insert with attached spindles. This is intended to be a tight fit; please use soap as a lubricant if needed.
- 7 To install the support block, take the trimmed piece of metal insert, slide the support block into the profile of the insert, and secure with a premium deck screw. Slide the insert to the center of the lower rail.
- 8 Position the rail assembly between the post sleeves, following local building code height requirements. Secure the post spindles to the post sleeves using six 3" composite deck screws through the pre-drilled holes.
- 9 Align the post caps with the top of the post sleeve and slide into place. A silicone adhesive may be used to secure the cap.

Note: Make sure screw is centered. If screw head falls out of groove, sliding rail may be difficult.

