

**ITEMS YOU WILL NEED:**

- Drill/power screwdriver
- Miter or circular saw with carbide-tipped blade
- Tape measure
- Carpenter's level
- Carpenter's pencil
- Quick clamps
- Speed square
- Safety glasses/goggles
- Gloves

**PREPARATION FOR MOULDED LINE RAIL KIT**

This rail may only be used in residential applications. Prior to construction, check with your local regulatory agency for special code requirements in your area. Typical requirements are minimum height from the walking surface to the top of the top rail of 36". All gaps are typically required to be less than 4". This rail kit is designed to be used with structural 4x4 posts properly secured at 6' on-center (o.c.) spacing. Pre-drill all screw locations to minimize splitting.

**MOULDED LINE RAIL KIT INSTALLATION INSTRUCTIONS**

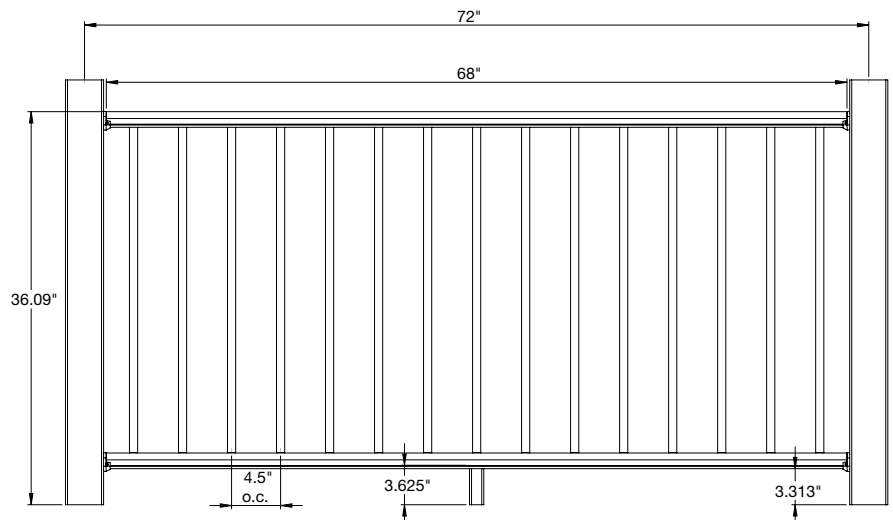
**STEP 1:** Measure the distance between posts and cut the rails to size. Remove an additional 1/4" from each end for the bracket to fit between the post and rail.

**STEP 2:** For a 6' o.c. rail with 4x4 posts, 15 balusters are needed. Find the center of the bottom rail. Center the pre-drilled insert rail on the bottom rail and clamp in place. Mark each hole location. Remove the insert rail and pre-drill using a 1/8" drill bit.

**STEP 3:** Place a bracket on each end of the bottom rail. Pre-drill and attach each bracket using the screws provided.

**BALUSTER STYLE ROUND AND SQUARE ALUMINUM BALUSTERS**

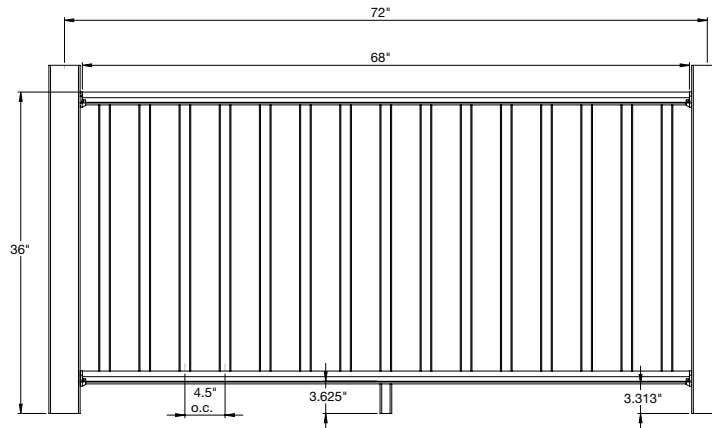
- **Tip: Position the bottom rail with the groove facing down, so it doesn't collect water.**
- Fasten a baluster connector at each pre-drilled location on the bottom rail.
- Determine the sweep beneath the bottom rail.
- Attach the support block to the center of the bottom rail using the 3.5" screw.
- Prop the bottom rail in place between posts and level.
- Pre-drill the screw locations through the brackets and attach all four screws halfway, then fully fasten each screw. This will help keep the rail centered while fastening.
- Center the insert rail on the bottom of the top rail and attach a baluster connector through each hole. Take care while pre-drilling to avoid going through the top of the rail.
- Attach a bracket to each end of the top rail.
- Slide a baluster onto each connector installed on the bottom rail.
- Install the top rail, fitting balusters onto the connectors from one end to the other.
- Attach the top rail to the posts using the brackets.



# MOULDED RAILING KIT – INSTALLATION INSTRUCTIONS

## BALUSTER STYLE WOOD AND SPINDLE BALUSTERS

- **Tip: Position the bottom rail with the groove facing down, so it doesn't collect water.**
- Pre-drill both ends of each baluster.
- Fasten a baluster at each pre-drilled location on the bottom rail from below.
- Fasten the insert rail to the other end of the balusters, working from one end to the other.
- Center the top rail on the insert rail.
- Pre-drill through the insert rail at each end and between every 3rd baluster, and attach to the top rail using the screws provided.
- Attach a bracket to each end of the top rail.
- Determine the sweep beneath the bottom rail.
- Attach the support block to the center of the bottom rail using the 3.5" screw.
- Prop the assembled rail in place between posts and level.
- Pre-drill the screw locations through the brackets and attach all four screws halfway, then fully. This will help keep the rail centered while fastening.
- Repeat for each bracket until all are fastened.



## PREPARATION FOR MOULDED STAIR RAIL KIT

This rail may only be used in residential applications. The stair railing was designed to work on stairs that have a 10" run and 6-3/4" rise, which creates a 34° angle. Prior to construction, check with your local regulatory agency for special code requirements in your area. Typical requirements are minimum height from the leading edge of the stair treads to the top of the top stair rail of 34-38". A 6" ball cannot pass through the triangle formed by the bottom rail, tread and riser. All other gaps are typically required to be less than 4-3/8". This rail kit is designed to be used with structural 4x4 posts properly secured at 6' on-center (o.c.) spacing. Pre-drill all screw locations to minimize splitting.

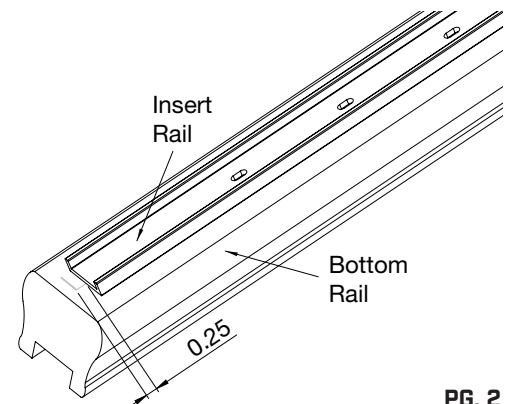
## MOULDED STAIR RAIL KIT INSTALLATION INSTRUCTIONS

**STEP 1:** Measure the distance between posts and cut the rails to size and 34° angle. Remove an additional 1/4" from each end for the bracket to fit between the post and rail.

**STEP 2:** For a 6' o.c. rail with 4x4 posts, 12 balusters are needed. Center the pre-drilled insert rail on the bottom rail and mark the end. To maintain plumb balusters once installed, slide the insert rail 1/4" toward the "top post" end of the rail and clamp in place. Mark the location of the 12 slots spaced 5.5" o.c. (there are 5 additional slots that are used for attaching to the top rail later, on wood baluster installations). Remove the insert rail and pre-drill to the correct angle using a 1/8" drill bit.

**STEP 3:** Place a stair bracket on each end of the bottom rail.

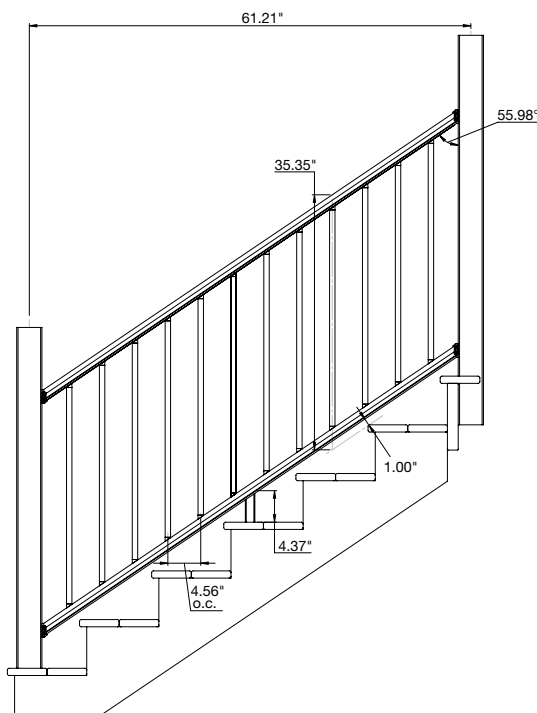
**Note:** The U-shaped insert rail is intended to create a gap for screw heads on the underside of the top rail (not fit over the balusters), and will be oriented with the extruded legs facing up.



# MOULDED RAILING KIT – INSTALLATION INSTRUCTIONS

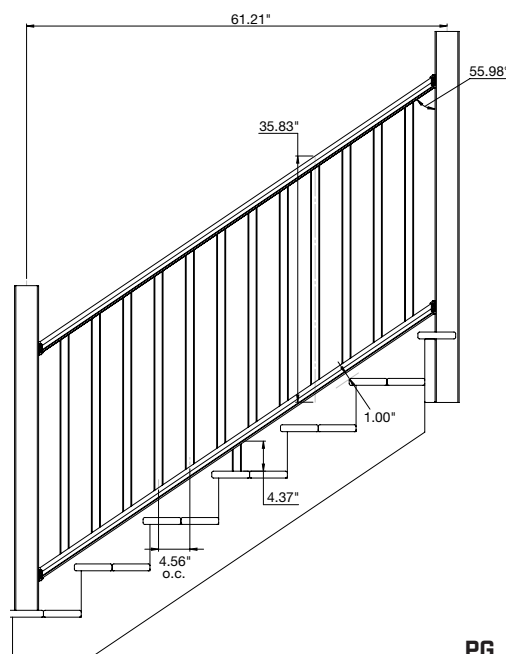
## BALUSTER STYLE ROUND AND SQUARE ALUMINUM BALUSTERS

- **Tip: Position the bottom rail with the groove facing down, so it doesn't collect water.**
- Fasten a baluster stair connector at each pre-drilled location on the bottom rail, paying attention to orient the connectors correctly.
- Determine the sweep beneath the bottom rail.
- Attach the support block to the center of the bottom rail using the 3.5" screw.
- Prop the bottom rail in place between posts.
- Pre-drill the screw locations through the brackets and attach all four screws halfway, then fully fasten each screw. This will help keep the rail centered while fastening.
- Temporarily fit the stair brackets on the top rail and determine if the insert rail needs to be trimmed to fit. Cut the insert rail to length as needed, cutting an equal amount from each side to maintain the correct baluster spacing.
- Center the insert rail on the underside of the top rail, with the extruded legs facing up (away from the balusters). Clamp in place or temporarily attach with screws at both ends. Attach a baluster stair connector through each slot spaced 5.5" o.c. Pay attention to orient the connectors in the right direction. Take care while pre-drilling to avoid going through the top of the rail.
- Attach a bracket to each end of the top rail.
- Slide a baluster onto each connector installed on the bottom rail.
- Install the top rail, fitting balusters onto the connectors from one end to the other.
- Attach the top rail to the posts using the brackets.



## BALUSTER STYLE WOOD AND SPINDLE BALUSTERS

- **Tip: Position the bottom rail with the groove facing down, so it doesn't collect water.**
- Pre-drill both ends of each baluster.
- Temporarily fit the stair brackets on the top rail and determine if the insert rail needs to be trimmed to fit. Cut the insert rail to length as needed, cutting an equal amount from each side to maintain the correct baluster spacing.
- Fasten a baluster at each pre-drilled location on the bottom rail from below.
- Fasten the insert rail - with the extruded legs facing away from the balusters - to the other end of the balusters, working from one end to the other.
- Center the top rail on the insert rail.
- At the remaining slots, pre-drill each slot location and attach the insert rail to the top rail.
- Determine the sweep beneath the bottom rail.
- Attach the support block to the center of the bottom rail using the 3.5" screw.
- Prop the assembled rail in place between posts.
- Pre-drill the screw locations through the brackets and attach all four screws halfway, then fully fasten each screw. This will help keep the rail centered while fastening. Repeat for each bracket until all are fastened.



PG. 3

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