

**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 2X4 LINE RAIL KIT**

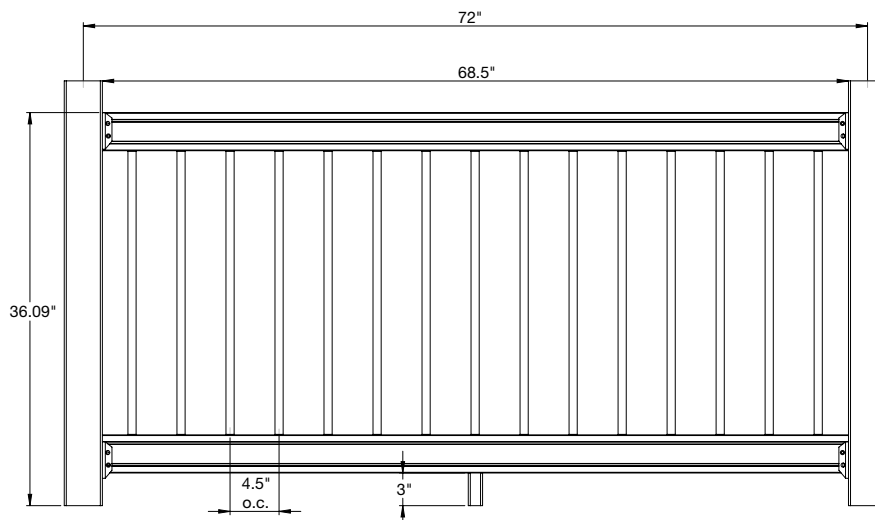
This rail may only be used in residential applications. Prior to construction, check with your local regulatory agency for special code requirements in your area. Typical requirements are minimum height from the walking surface to the top of the top rail of 36". All gaps are typically required to be 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.

**2X4 LINE RAIL KIT INSTALLATION INSTRUCTIONS**

- STEP 1:** Measure the distance between posts and cut the rails to size.
- STEP 2:** Determine the sweep beneath the bottom rail. Attach the support block to the center of the bottom rail using the 3.5" screw.
- STEP 3:** Prop the bottom rail in place between posts. Mark the location of the (4) 2x4 railing brackets and attach to the posts according to the included instructions.
- STEP 4:** Level and attach the bottom 2x4 rail to the 2x4 railing brackets.

**BALUSTER STYLE ROUND AND SQUARE ALUMINUM BALUSTERS**

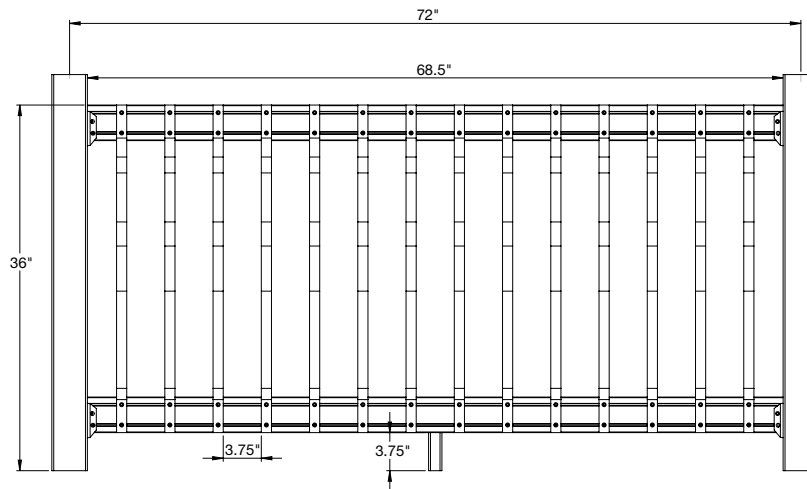
- For a 6' o.c. rail with 4x4 posts, 15 balusters are needed.
- Mark top and bottom rails 4.5" on-center starting from the center.
- Fasten a baluster connector on each mark.
- Slide a baluster onto each connector installed on the bottom rail.
- Install the top rail, fitting balusters onto the connectors from one end to the other.
- Attach the top 2x4 rail to the 2x4 railing brackets.



# 2X4 RAILING KIT – INSTALLATION INSTRUCTIONS

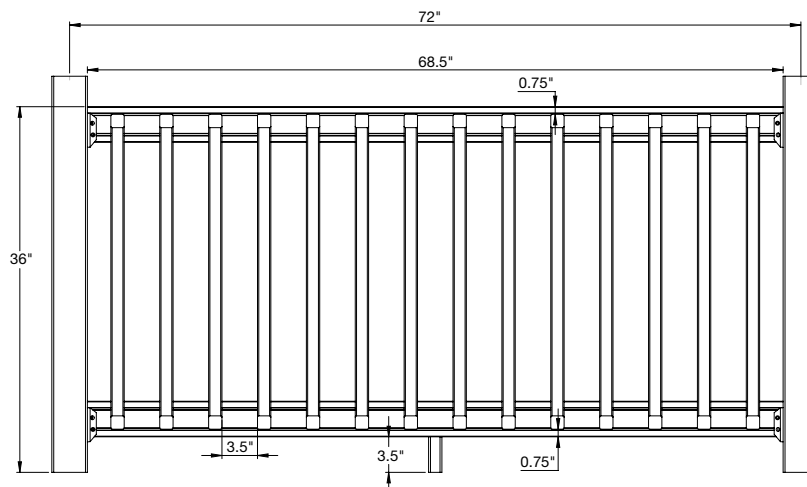
## BALUSTER STYLE FACE-MOUNTED ALUMINUM BALUSTERS

- Level and install top rail to the 2x4 railing brackets.
- The face-mounted balusters are spaced 4.75" on-center with a 3.75" gap between balusters.
- For a 6' o.c. rail with 4x4 posts, 14 balusters are needed.
- Find the center of the rail and mark 2-3/8" from the center.
- Use a speed square to draw a vertical line on the rail face. This mark will indicate the center of the baluster, where the screws will fasten. From this starting point, measure 4.75" on-center to each end of the rail.
- Using a level to ensure plumb, attach the face-mounted balusters to the top and bottom rails.
- **Tip: Once the first baluster is installed plumb, a 3.75" block can be used to quickly space and attach the remaining balusters.**



## BALUSTER STYLE FACE-MOUNTED WOOD BALUSTERS

- Level and install top rail to the 2x4 railing brackets.
- The face-mounted balusters are spaced 4.81" on-center with a 3.5" gap between balusters.
- For a 6' o.c. rail with 4x4 posts, 14 balusters are needed.
- Find the center of the rail and mark 1-3/4" from the center.
- Use a speed square to draw a vertical line on the rail face. This mark will indicate the side of the first wood baluster.
- Clamp a baluster in place and plumb using a level.
- Pre-drill and attach baluster to rail using 2 screws at each baluster end.
- Once the first baluster is installed plumb, use a piece of 2x4 to quickly space and attach the remaining balusters with a 3.5" gap.



# 2X4 RAILING KIT – INSTALLATION INSTRUCTIONS

## PREPARATION FOR 2X4 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.

## 2X4 STAIR RAIL KIT INSTALLATION INSTRUCTIONS

**STEP 1:** Measure the distance between posts and if necessary, cut the rails to size by trimming the unnotched end. Cut the rail to length at a 34° angle using a miter saw.

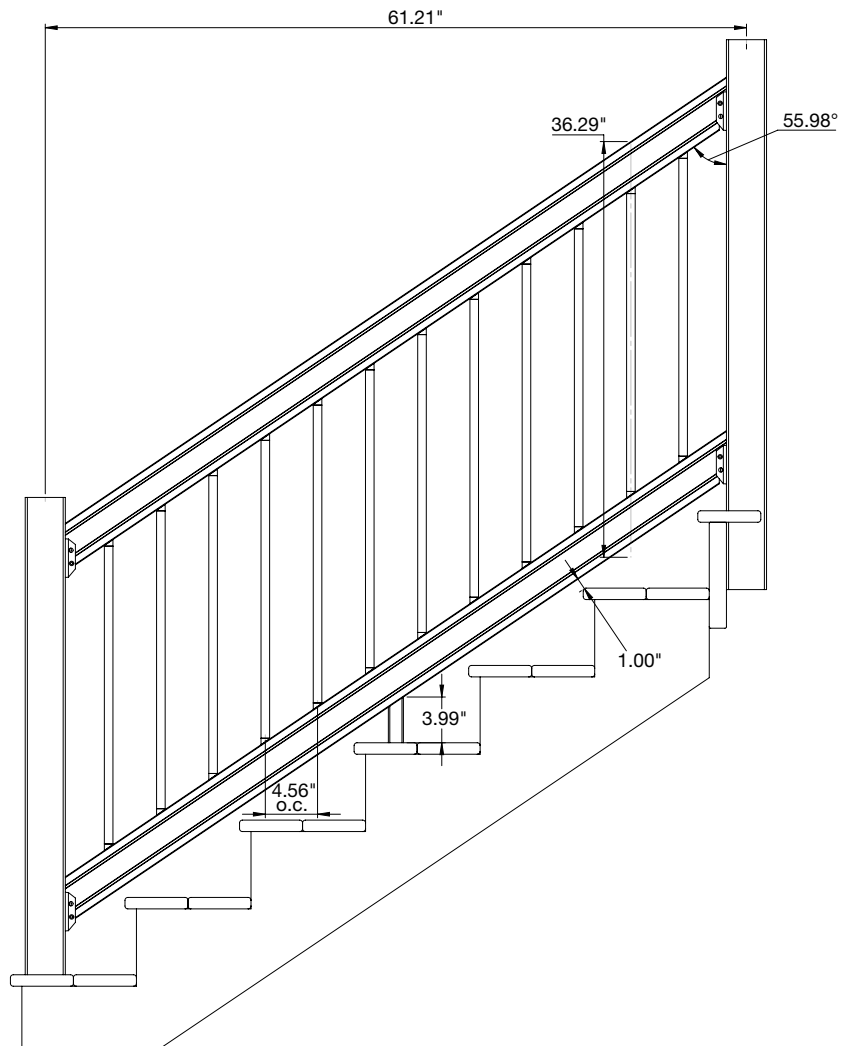
**STEP 2:** Determine the sweep beneath the bottom rail. Attach the support block to the center of the bottom rail using the 3.5" screw.

**STEP 3:** Prop the bottom rail in place between posts. Mark the location of the (4) 2x4 railing brackets and attach to the posts according to the included instructions.

**STEP 4:** Attach the bottom 2x4 rail to the 2x4 railing brackets.

## BALUSTER STYLE ROUND AND SQUARE ALUMINUM BALUSTERS

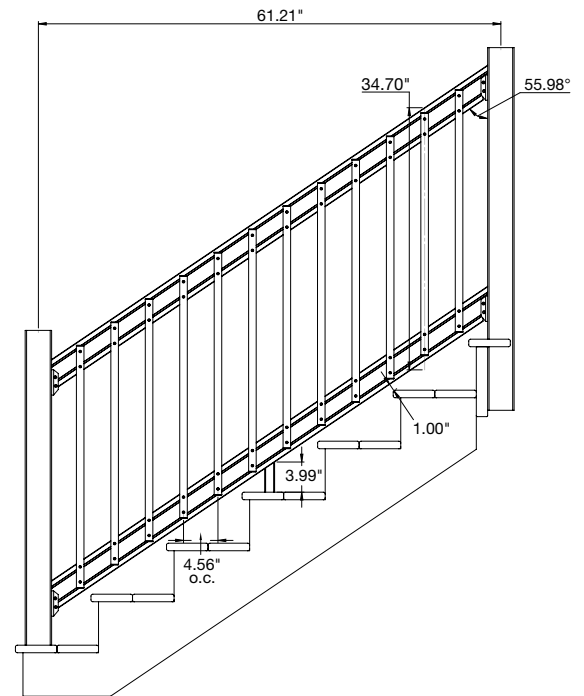
- For a 6' o.c. stair rail with 4x4 posts, 12 balusters are needed.
- Find the center of the rail and make a mark 2.75" from the center.
- Mark top and bottom rails 5.5" on-center from this point.
- Fasten a stair baluster connector on each mark.
- Slide a baluster onto each connector installed on the bottom rail.
- Install the top rail, fitting balusters onto the connectors from one end to the other.
- Attach the top 2x4 rail to the 2x4 railing brackets.



# 2X4 RAILING KIT – INSTALLATION INSTRUCTIONS

## BALUSTER STYLE FACE-MOUNTED ALUMINUM BALUSTERS

- Measure and install top rail to the 2x4 railing brackets.
- The face-mounted balusters are spaced 5.5" on-center with a 3.5" gap between balusters.
- For a 6' o.c. stair rail with 4x4 posts, 12 balusters are needed.
- Find the center of the rail and mark 2.75" from the center.
- Use a speed square to draw a vertical line on the rail face. This mark will indicate the center of the baluster, where the screws will fasten. From this starting point, measure 5.5" on-center to each end of the rail.
- Using a level to ensure plumb, attach the face-mounted balusters to the top and bottom rails.
- **Tip: Once the first baluster is installed plumb, a piece of 2x4 can be used to quickly space and attach the remaining balusters with a 3.5" gap.**



## BALUSTER STYLE FACE-MOUNTED WOOD BALUSTERS

- Measure and install top rail to the 2x4 railing brackets.
- The face-mounted balusters are spaced 5.81" on-center with a 3.5" gap between balusters.
- For a 6' o.c. rail with 4x4 posts, 12 balusters are needed.
- Find the center of the rail and mark 1.75" from the center.
- Use a speed square to draw a vertical line on the rail face. This mark will indicate the side of the first wood baluster.
- Clamp a baluster in place and plumb using a level.
- Pre-drill and attach baluster to rail using 2 screws at each baluster end.
- Once the first baluster is installed plumb, use a piece of 2x4 to quickly space and attach the remaining balusters with a 3.5" gap.

