Prior to construction:
Check with your local regulatory agency for special code requirements in your area. Common railing heights are 36” or 42”. Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
Rapid Rail Stair Rail Kit

**Important Notes**
- We STRONGLY suggest watching the install video before installation.
- This assembly requires the use of a long driver bit extension.
- A 6" sphere must not be able to pass through bottom rail and any part of the stair tread.
- This rail kit spans a maximum of 72" between posts for a 6' kit and 93" between posts for an 8' kit. Measure parallel to the stair angle to ensure fitment.
- Height of top rail = 36" (or 42" for the 42" Rail Kit).
- IRC Code for stair rail height is 34" to 38".
- Compound angle swivel brackets sold separately.
- Stair brackets can swivel from 27° to 42°.

**Required Tools**
- Power Drill
- 6" long 1/8" Drill Bit
- T20 Torx Bit
- 6" Driver bit extension
- Rubber Mallet
- Miter Saw
- Pencil
- Speed Square
- Tape Measure
- Bar Clamp
- Rubber Mallet
- Miter Saw
- Pencil

**Bottom Bracket Mount Placement**
- Lay a straight edge across the stair noses parallel to the stair angle.
- Mark a line on the upper post 1" above where the bottom of the straight edge touches.
- Repeat for the other post.

**Measure and Mark Top Bracket Location**
- Measure up 32-1/8" from the mark created in step one and create a mark for the top bracket mount. (38-1/8" for 42" stair kit)
- Repeat for the lower post.

**Check for Post Skirt**
- If using a one-piece post skirt, ensure it is installed before moving forward.

**Install Bracket Mounts**
- Align the bottom edge of the bracket mounts with the marks from step one and two.
- Drill a pilot hole and attach using one of the (2) supplied 1" screws.
- The openings of the mounts will point down for the upper post and up for the lower post.

**Place the Top Base Rail Centered Between Posts**
- Ensure the rail is parallel to the stair angle.
- Ensure the baluster holes have equal spacing to the posts on both sides.
- Ensure baluster holes are not closer than 1-1/2" to the bracket mounts. You must shift the rail to one side until the above conditions are met.

**Measure 1/2" from the Face of Each Bracket Mount and Mark Rail**
- This gap is for the bracket clearance.

**Transfer Marks to All Rails and Cut**
- Bottom cap rail baluster holes are shifted to account for rail angle. Make sure the ends of all rails are aligned before transferring marks.
- Use a miter saw equipped to cut aluminum and cut all rails to the same dimensions.
- Both end of the rails will need to be cut to ensure symmetry.
8. Install bracket bases and base rails
   - Attach the bracket bases to the lower end of the base rails a 1/8” pilot hole and (2) supplied 1/2” screws.
   - Set the attached lower bracket base into the lower bracket mounts.
   - Set the upper bracket base into the upper bracket mount. Set the base rail onto the bracket base but DO NOT ATTACH!

9. Determine crush block position:
   - Temporarily put the crush block connectors into the crush block(s).
   - Keeping the crush block vertical, slide the crush block assembly under the central area of the bottom rail base until it hits both the stair tread and the bottom base rail. *8ft kits require two crush blocks evenly spaced under the rail.
   - Mark the position of the connectors, remove the bottom base rail from the brackets and connectors from the crush block.
   - Attach the crush block connectors to both the rail and tread surface. Use 1/8” drill bit to drill pilot holes, then attach using one supplied 1” screw.

10. Finish attaching lower base rail
    - As you lower the bottom base rail into position, make sure the crush block gets installed into the connectors attached in the last step.
    - Finish attaching the lower base rail to the bracket base using a 1/8” pilot hole and (2) supplied 1/2” screws.
    - Use a bar clamp to help attach the rail to the bracket.

11. Attach bracket bases to bracket mounts
    - Secure the base to the mount through the hole in the back of the base.
    - Use a 6” long 1/8” drill bit for the pilot hole, and one 1” screw with the 6” driver bit extension for installation.
    - Repeat the previous applicable steps to attach the top base rail.

12. Install bottom rail cap.
    - The bottom rail cap has baluster cutouts that are shifted to account for rail angle.
    - To ensure the balusters are parallel, install the cap rail with the baluster cutouts shifted UP towards the higher end of the rail.
    - Press rail cap into base rail using a rubber mallet if necessary.
    - Start at one end and work down the rail for an easier install.

13. Install Balusters
    - Insert balusters through the top rail base and seat into the bottom rail baluster cutouts.
    - Use a rubber mallet to fully seat the balusters into the baluster compressor in the bottom rail when necessary.

14. Install top rail cap
    - Press the rail cap into the top base rail making sure the ends line up. Use a rubber mallet if necessary.
    - Start at one end and work down the rail for an easier install.

15. Install bracket caps
    - Press the bracket caps into place on the bracket bases. Use a rubber mallet if necessary.