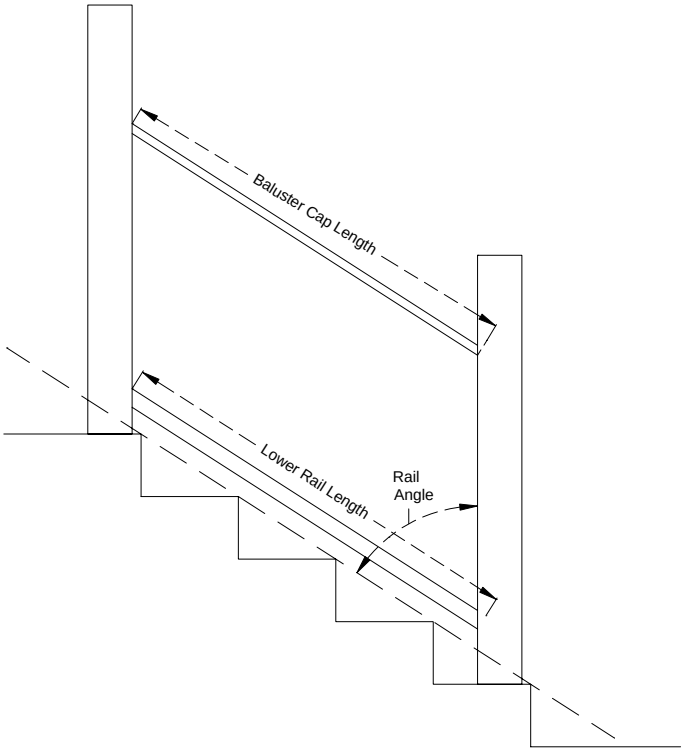
Intex RS30 Stair/Rake Rail Installation Instructions

Stair or Rake Application



1. Determine angle, measure and cut rail sections to length.

a. Insure newels or columns to which rail will be mounted are plumb and sturdy enough to support rail. If newel/column covers are used, insure they have blocking at each location where railing will be attached.

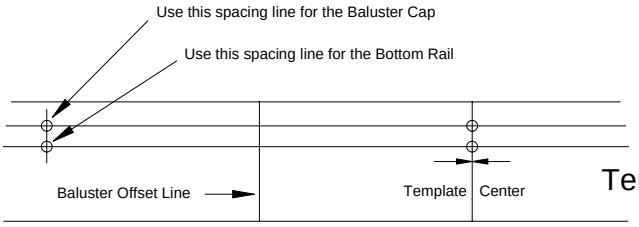
b. Determine and mark angle

c. Determine location and cut Lower Rail and Baluster Cap to required length.

2. Determine baluster layout and assemble rail/baluster section.

a. Trim Balusters to desired length and angle.

b. For standard baluster spacing (with the variable spaces at the ends of each rail section) use the template provided. Align the template reference edge as indicated to the inside of the bottom rail. Determine best end spacing by either locating a baluster directly at the center of the rail section, or the mid-point between two balusters as the center of the rail section, and tape template in center and at ends. Drill a 1/8" hole through the template and bottom rail using the appropriate spacing line marked 'bottom rail', remove template and drill back through each hole at the angle to match balusters. Repeat this for process for the baluster cap, using the same template, but drill through the spacing line marked 'baluster cap'.

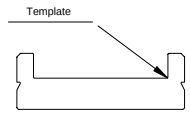


Template

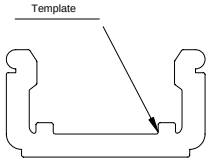
Align either the Template Center or Baluster Offset Line with the mid-point of the rail section

c. If equal spacing between all balusters and newels/columns is desired, disregard section 'a' above and determine spacing based upon width and number of balusters (Note: check local building codes for maximum spacing allowed).

Template Placement

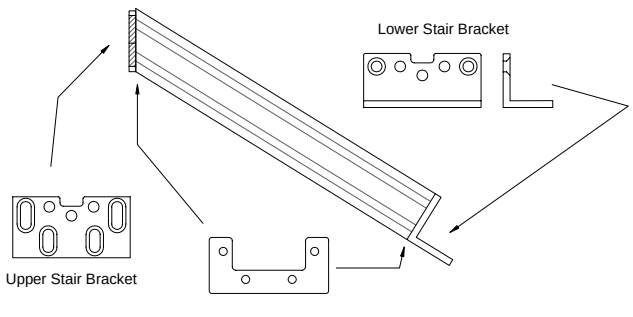


Baluster Cap



Bottom Rail (inverted)

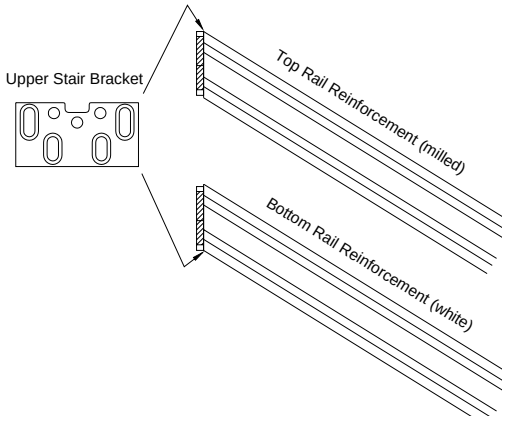
d. Secure each baluster with one #8 x 2-1/2" Square Drive T17 18-8SS screw through the baluster cap, and one through the bottom rail. Insure balusters are straight and aligned and secure with one #8 x 1-1/2" Square Drive T17 18-8SS screw through the bottom rail (offset from center) to preclude baluster from rotating after installation.



3. Prepare aluminum reinforcements.

a. Attach a lower stair bracket (90 degree bend) using two #8 x 1-1/4" Square Drive T17 18-8SS screws supplied to the lower end of each reinforcement. Note: on the bottom (white) rail reinforcement, insert one of the gaskets supplied between the bracket and the aluminum reinforcement. Lubricate the threads with oil or soap to avoid binding or stripping screws Note: Do not cut this end of the reinforcement to the rail angle.

b. Measure and cut the upper end of both reinforcements to the rail angle determined in Step 1, ***include the protruding portion of the lower bracket as part of the total length***. Attach an upper stair bracket to the angle cut end of the top (mill finish) rail reinforcement, with the bracket flush with the top of the reinforcement, using four #8 x 1-1/4" Square Drive T17 18-8SS screws supplied. Attach an upper stair bracket to the angle cut end of the bottom (white) rail reinforcement, with the bracket flush with the bottom of the reinforcement, using four #8 x 1-1/4" Square Drive T17 18-8SS screws supplied. Note: on the bottom (white) rail reinforcement, insert one of the gaskets supplied between the bracket and the aluminum reinforcement. Lubricate the threads with oil or soap to avoid binding or stripping screws.



c. Cut one end of crush block to angle of rail and locate to the bottom (white painted) aluminum rail reinforcement, with spacing no greater than 32" from the end, or between crush blocks. Insure that crush block(s) will be located on a stair tread.

d. Drill a 3/16" hole through the aluminum rail reinforcement, and secure each crush block using one #8 x 2-1/2" Square Drive T17 18-8SS screw.

4. Install rail

a. Position bottom aluminum rail reinforcement, with crush block(s) attached, between newels or columns, centered in newel or column face, and secure each end with three #10 x 3" Slot Hex Washer Head TA 18-8SS screws supplied.

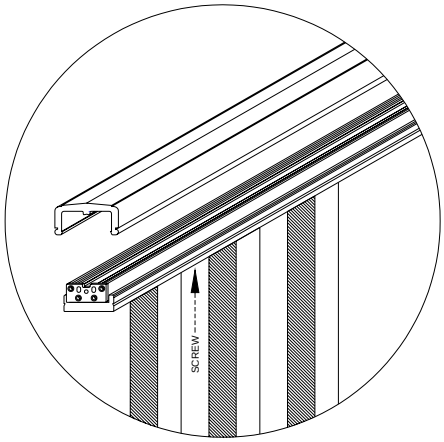
b. Position vinyl rail/baluster assembly between newels or columns and seat fully down on bottom aluminum rail reinforcement.

c. Seat remaining aluminum reinforcement into baluster cap.

d. Insure rail is centered on face of newel or column and secure each end with three #10 x 3" Slot Hex Washer Head TA 18-8SS screws supplied.

e. Drill a 3/16" hole through the aluminum reinforcement over every third baluster (note: offset to avoid the screw which is into the top of each baluster) and secure the aluminum reinforcement to the rail/baluster assembly using #8 x 2-1/2" Square Drive T17 18-8SS screws

f. Measure and cut Top Cap. Drill a 3/16" hole down through the aluminum reinforcement and the baluster cap, plumb, at both ends and near the center of the span (all between balusters). Seat the Rail Cap fully onto Baluster Cap, and use the screws provided to attach Rail Cap, screwing up through the underside of the Baluster Cap. Note: screws provided for RS30350 rail are #8 x 1-7/8" Square Drive T17 18-8SS, and screws for RS30400 rail are #8 x 2-1/4" Square Drive T17 18-8SS white heads.



<u>Please see rail installation instructions included with rail kit for parts list and other information</u>