



ORIGINAL RAIL™

INSTALLATION INSTRUCTIONS

- Level Rail
- Stair Rail

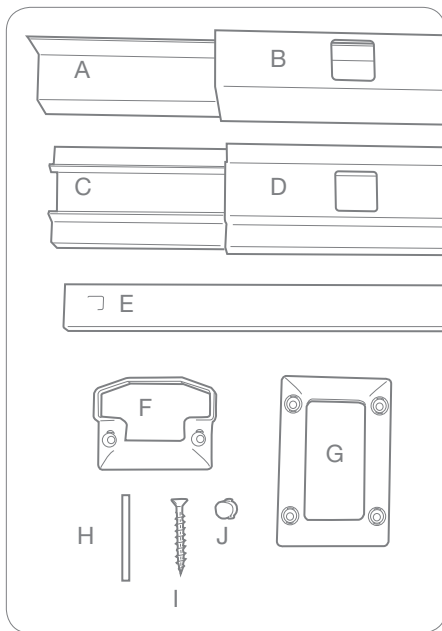
ICC-ES Evaluation Report No. ESR-1849

LEVEL RAIL

RDI has obtained an ICC evaluation report on the 2006 International Building Code® and the 2006 International Residential Code®. For a full report, see ICC-ES Evaluation Report No. ESR-1849 at www.icc-es.org.

COMPONENT LIST:

Check the kit to ensure all components are included:



- A) Aluminum Bottom Rail Stiffener – 1
- B) Vinyl Bottom Rail – 1
- C) Aluminum Top Rail Stiffener – 1
- D) Vinyl Top Rail – 1
- E) Baluster – 2 crimped*
- F) Top Mounting Bracket – 2
- G) Bottom Mounting Bracket – 2
- H) Aluminum Locking Pin – 2
- I) Mounting Screws – 12
- J) Screw Head Cover – 12

Warning:
Always wear
safety goggles.

RAIL LENGTH	SQUARE BALUSTERS PER KIT	TURNUED BALUSTERS PER KIT
4' Kit	9	9
5' Kit	12	12
6' Kit	14	14
8' Kit	19	19
10' Kit	24	24

1.

Prepare all posts and mounting surfaces before installation.

2.

Establish the level placement of the lower rail so that there is no more than a 4" space* from the bottom of the rail to the standing surface (Fig. 1).

Mark the mounting surfaces at this dimension, minus 3/4" to determine the placement of the mounting brackets for the bottom rail.

Tip:

Standard Original Rail measures 36" in height with a 2" space below the bottom rail. Use 2" blocks to establish bottom rail height (Fig. 2).

** Southern Building Code maximum bottom space is 2".*

3.

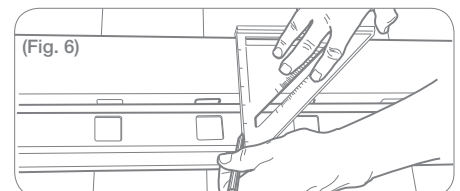
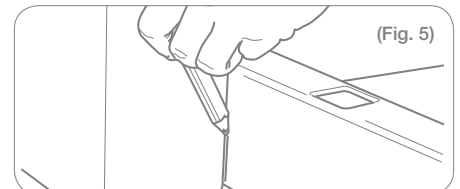
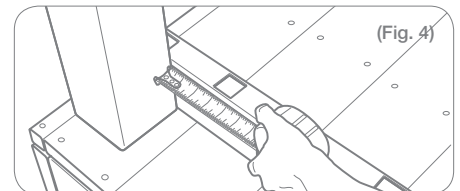
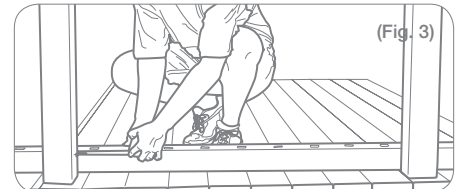
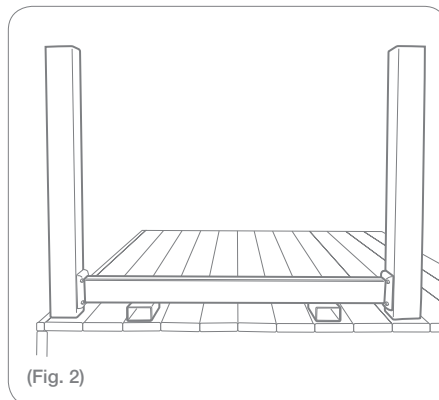
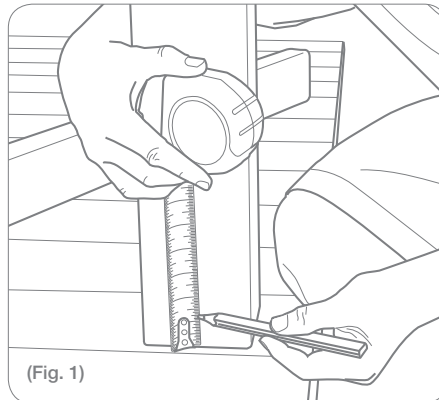
Place the Bottom Rail across the opening where it is to be installed (Fig. 3). Measure from the mounting surface to the first baluster hole on each end (Fig. 4), and adjust until these dimensions are equal.

Trace the post onto the bottom rail and mark 1/8" short at each end to allow for expansion (Fig. 5).

Tip:

If all of your mounting surfaces are plumb, transfer your measurements and baluster layout from the bottom rail to the top rail (Fig. 6).

NOTE: A minimum of 1" from the edge of the first baluster to the end of the rail is necessary to accommodate the mounting brackets.

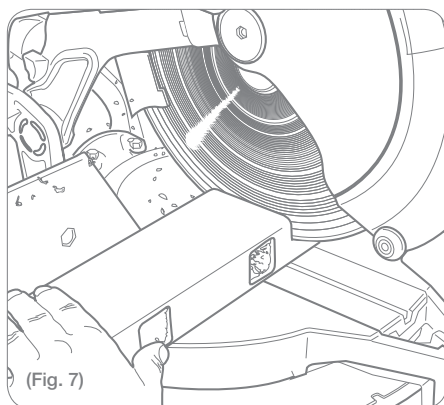


4.

Cut each end of the rail at the measurement determined in Step 3 (Fig. 7).

Tip:

If using a power saw, a carbide tip blade of at least 60 teeth is recommended.



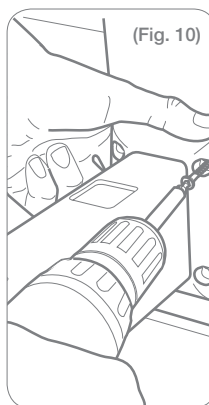
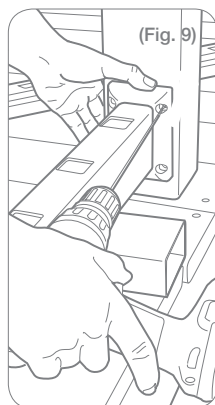
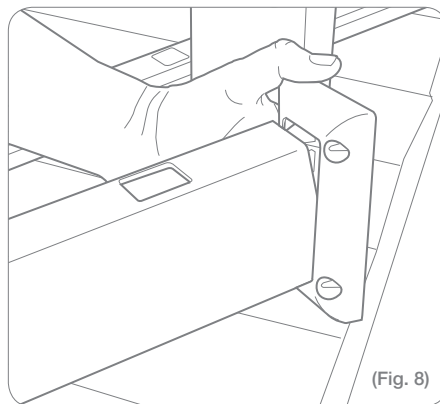
5.

Place a Bottom Mounting Bracket on each end of the Bottom Rail with the flat side facing the mounting surface (Fig. 8).

Place on the marks determined in Step 2. Pre-drill the holes (Fig. 9) for the mounting brackets to avoid stripping the stainless steel screws and secure in place (Fig. 10).

NOTE: The looped part of the aluminum P-channel must be facing away (down) from the baluster holes while the flat side of the P-channel must be facing the outside of the deck when mounted.

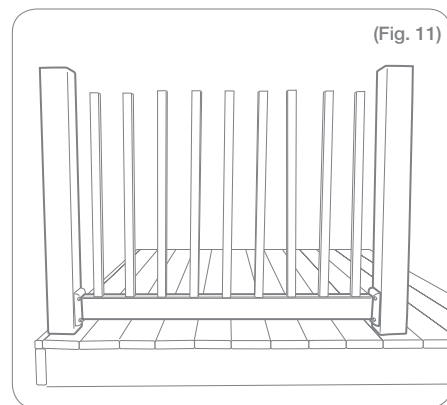
Repeat Steps 3 through 5 for each rail section.



6.

Insert a baluster in each routed hole of the bottom rail (Fig. 11).

NOTE: Each kit contains 2 crimped balusters, space them evenly in each section.



7.

If you did not cut the top rail in steps 3 and 4, do so now following the same procedure you used in steps 3 and 4 for the bottom rail.

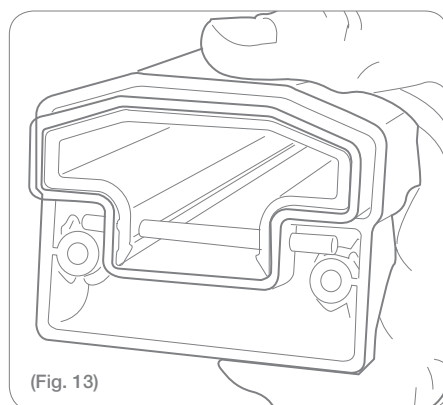
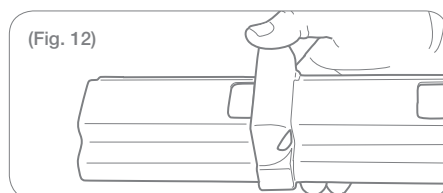
8.

Place a T-shaped mounting bracket on each end of the top rail, with the flat side facing the mounting surface. Slide the bracket back past the first baluster hole (Fig. 12).

Make sure that the aluminum T-channel is flush with the end of the vinyl top rail.

Use a 7/32" drill bit to drill through both ends of the top rail and aluminum T-channel. The hole should be 5/16" from the end and 7/16" from the bottom of the rail.

Place an aluminum retaining pin through the hole. Slide the bracket over the pin to the end of the rail (Fig. 13).

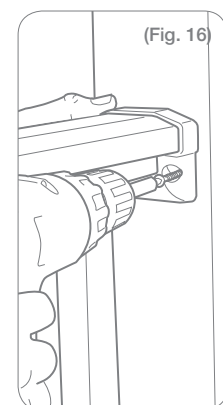
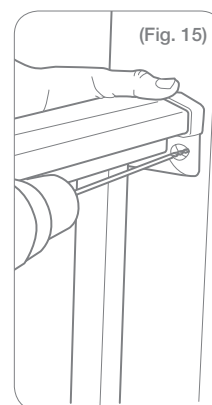
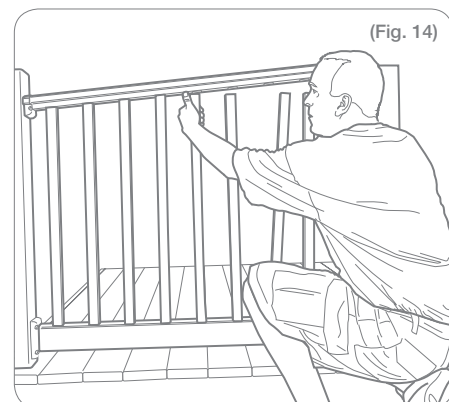


9.

Beginning at one end of the rail section, (Fig. 14) insert each baluster installed in Step 6 into the corresponding baluster hole in the top rail.

To allow for baluster expansion, raise the top rail approximately 1/8". Pre-drill the holes (Fig. 15) for the mounting brackets to avoid stripping the stainless steel screws and secure in place (Fig. 16).

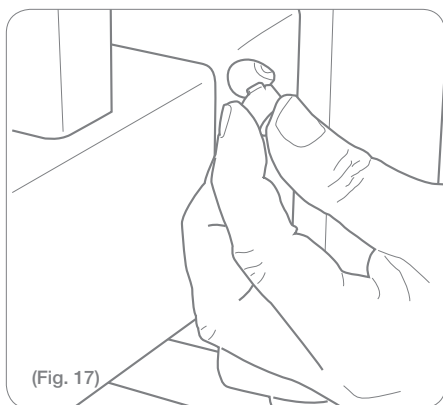
Repeat Steps 6 through 9 for each rail section.





10.

Check entire installation for accuracy
before snapping Screw Head Covers
(Fig. 17) into place.



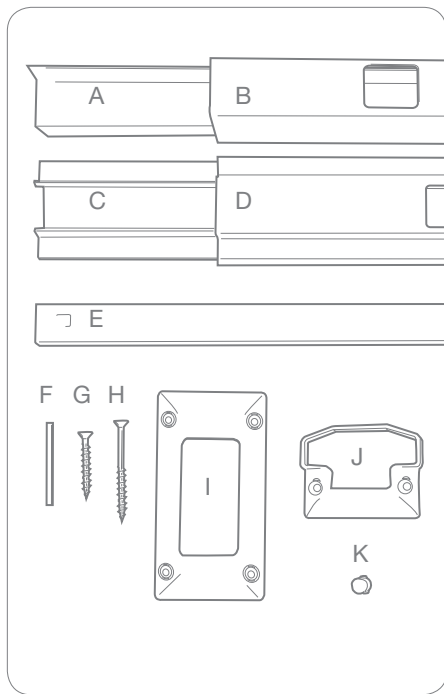


STAIR RAIL

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COMPONENT LIST:

Check the kit to ensure all components are included:



- A) Aluminum Bottom Rail Stiffener – 1
- B) Vinyl Bottom Rail – 1
- C) Aluminum Top Rail Stiffener – 1
- D) Vinyl Top Rail – 1
- E) Baluster – 2 Crimped*
- F) Aluminum Locking Pin – 2
- G) Bottom Rail Mounting Screws – 8
- H) Top Rail Mounting Screws – 4
- I) Bottom Mounting Bracket – 2
- J) Top Mounting Bracket – 2
- K) Screw Head Cover – 12

Warning:
Always wear
safety goggles.

29°- 35° STAIR KIT	BALUSTERS PER KIT*	36°- 41° STAIR KIT	BALUSTERS PER KIT
6' Kit	12	6' Kit	11
8' Kit	16	8' Kit	15

1.

Prepare all posts and mounting surfaces before installation.

2.

Temporarily secure a plank on the noses of the stairs between the posts onto which you are installing the stair rail. (Fig. 1) The thickness of the plank will determine the space between the stairs and the bottom rail.

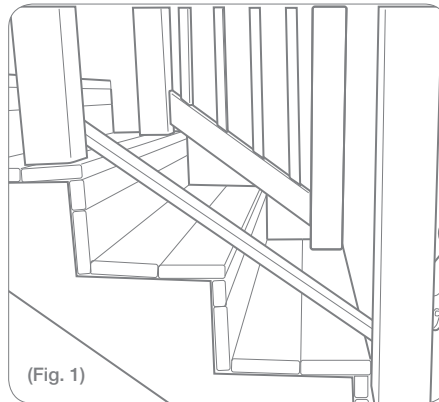
Place the Bottom Rail, baluster holes facing up, on the plank with the sticker reading “this end at the top” at the top post (Fig. 2).

Slide the rail up or down until the baluster hole spacing is even on each end (Fig. 3).

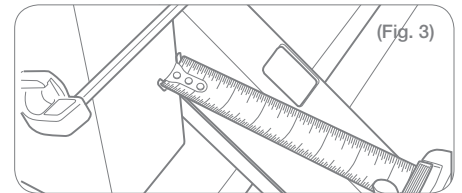
Trace the post onto the rail and mark $1/8$ " short at each end to allow for expansion (Fig. 4).

Now cut the rail to fit (Fig. 5).

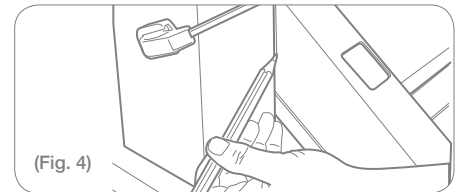
Tip:
If using a power saw, a carbide tip blade of at least 60 teeth is recommended.



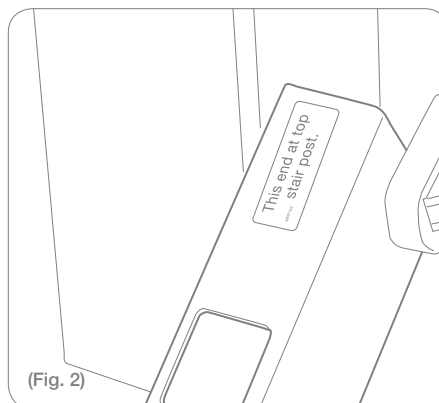
(Fig. 1)



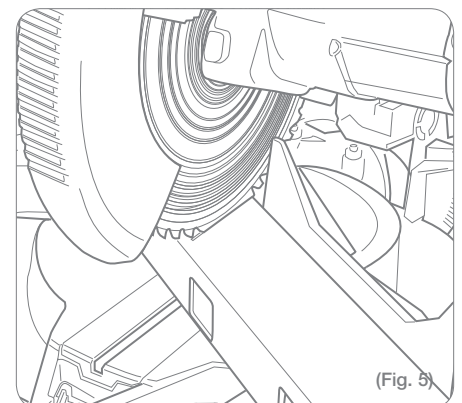
(Fig. 3)



(Fig. 4)



(Fig. 2)



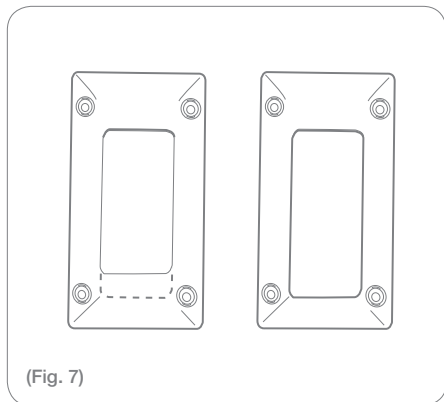
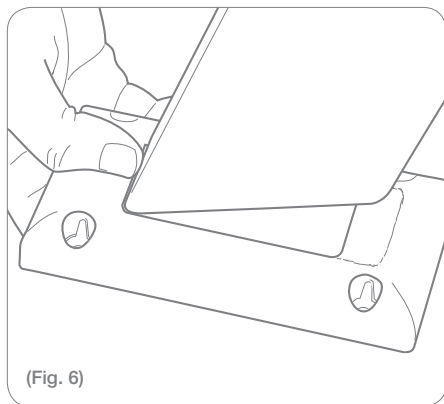
(Fig. 5)

3.

Align a Bottom Mounting Bracket with one end of the rail. Trace the rail end onto the bracket face, (Fig. 6) and adjust bracket up or down as needed to ensure a proper fit.

Cut the excess vinyl from the bracket (Fig. 7).

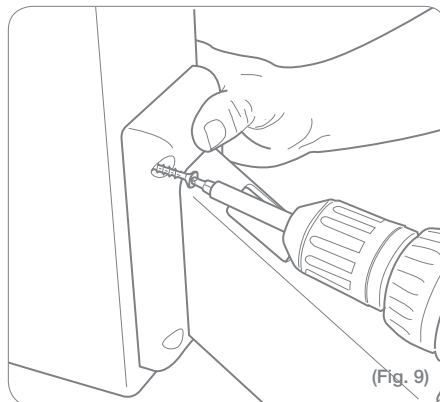
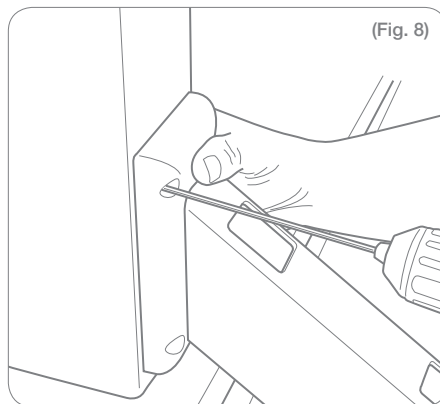
Repeat this procedure for the opposite rail end.



4.

Place the brackets from Step 3 on each end of the rail, flat side facing the mounting surface. Pre-drill the holes for the mounting brackets to avoid stripping the stainless steel screws and secure in place (Fig. 8, 9).

NOTE: The looped part of the aluminum P-channel must be facing away (down) from the baluster holes while the flat side of the P-channel must be facing the outside of the deck when mounted.



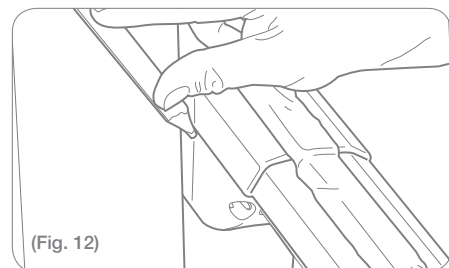
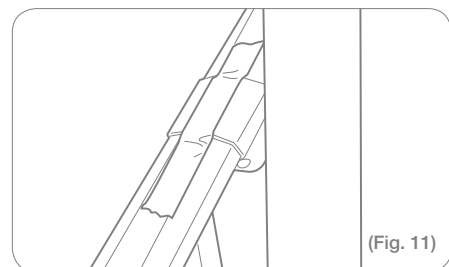
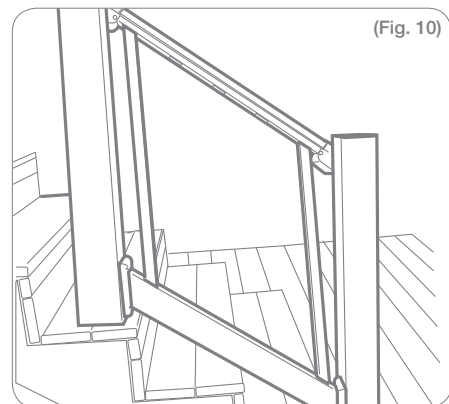
5.

Insert a baluster in each of the first and last baluster holes of the bottom rail, and set the Top Rail in place by inserting them into the corresponding holes (Fig. 10).

Place the top rail inside of the posts to measure accurately.

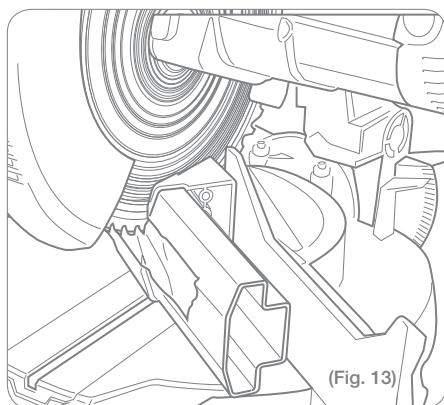
Adjust for plumb. Slide a Top Mounting Bracket in place at each end of the top rail, and temporarily secure in place with tape (Fig. 11).

Trace the posts onto the mounting brackets and mark 1/8" short to allow for expansion (Fig. 12).



6.

Leave the mounting brackets taped in place and cut the top rail to fit (Fig. 13).

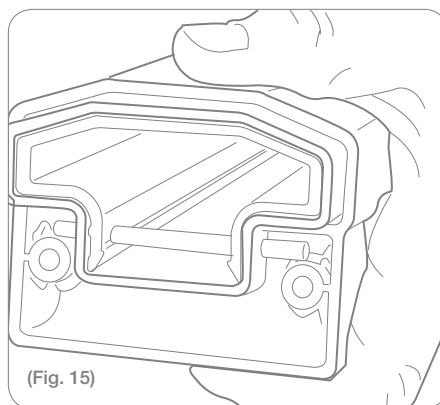
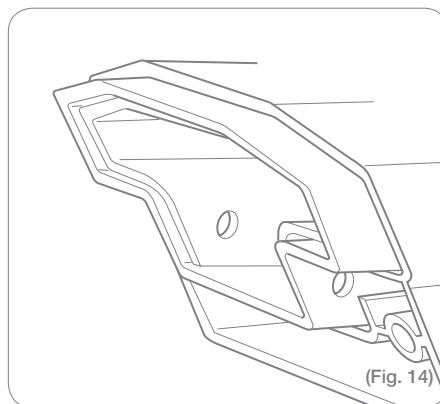


7.

Pull the bracket back from each end approximately 1/4" from the end. Trace the retaining pin channel onto the rail sleeve, and mark 5/16" from the end of the rail (Fig. 14).

Make sure the aluminum T-channel is flush with the end of the vinyl and drill (7/32" bit) through both ends of the top rail and the T-channel.

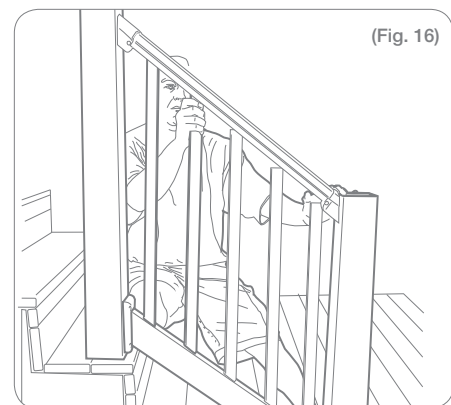
Insert aluminum retaining pin into the drilled hole. (Fig. 15) Slide the bracket over the dowel to the end of the rail.



8.

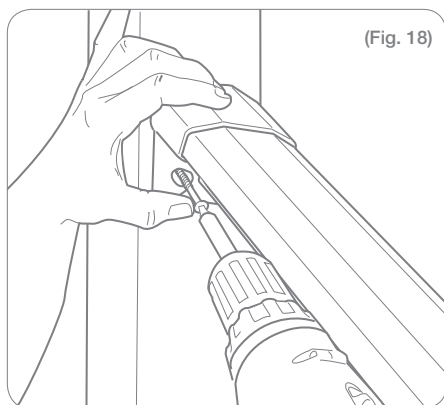
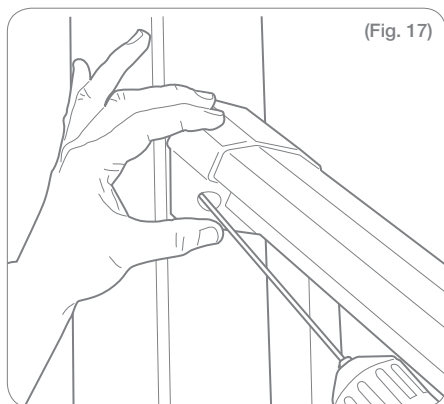
Insert a Square Baluster in each rout of the bottom rail. Each kit contains 2 crimped balusters; space them evenly in each section.

Set the top rail in place by inserting the first baluster (at the upper post) in the corresponding rout of the top rail, and work toward the bottom (Fig. 16).



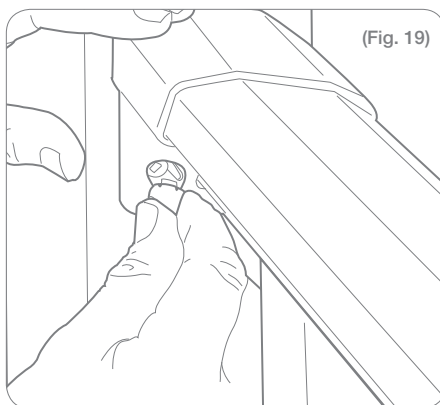
9.

To allow for baluster expansion, raise the top rail approximately 1/8". Pre-drill the holes for the mounting brackets to avoid stripping the stainless steel screws, and secure in place (Fig. 17, 18).



10.

Check entire installation for accuracy before snapping Screw Head Covers (Fig. 19) into place.





RAILING DYNAMICS, INC.
FOR HOME, FOR LIFE™

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