

INSTALLATION GUIDE

STANDARD & CONTOUR VINYL RAILING

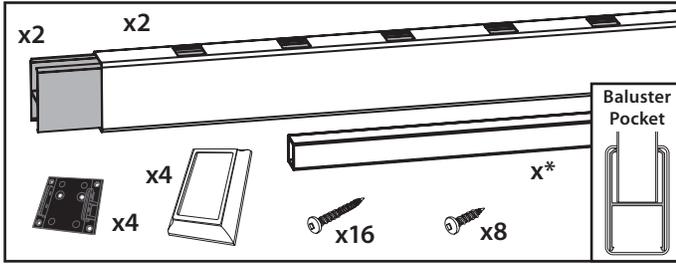


Building Products, L. P.

www.fairwayvinyl.com

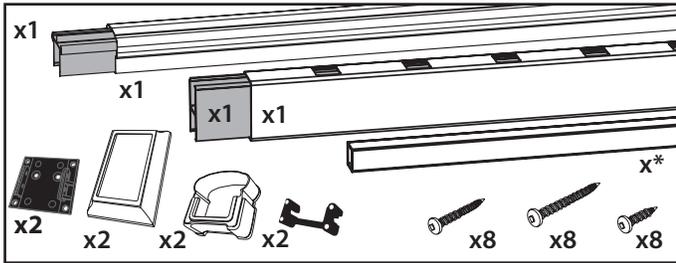
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Check all local building codes for design load requirements for your railing application. Fairway Vinyl Railing is manufactured to the standards outlined in ASTM F964 and has been tested according to AC174-09 criteria and is approved to meet the requirements for Guardrails as outlined for pertaining IRC (Residential) and IBC (Commercial) applications as documented in the Code Compliance Research Report, CCRR-0153.



LEVEL Standard Vinyl Railing Kits Include:

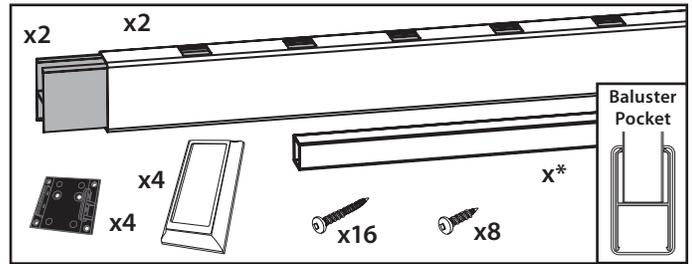
- 2 ea. - 2" x 3-1/2" Standard Vinyl Rail
- 2 ea. - Standard Rail Aluminum Insert
- 4 ea. - Standard Rail Mounting Bracket (Bracket and Trim Ring)
- 1 ea. - Pack S.S. Mounting Screws
- * Vinyl Baluster - see grid below



LEVEL Contour Vinyl Railing Kits Include:

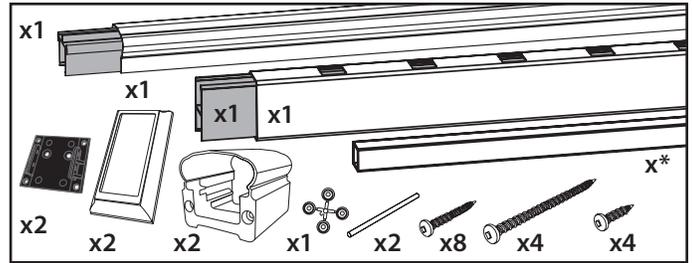
- 1 ea. - Contour Vinyl Top Rail
- 1 ea. - 2" x 3-1/2" Standard Vinyl Bottom Rail
- 1 ea. - Contour Rail Aluminum Insert (Top Rail)
- 1 ea. - Standard Rail Aluminum Insert (Bottom Rail)
- 2 ea. - Contour Mounting Bracket (Bracket and Trim Ring)
- 2 ea. - Standard Rail Mounting Bracket (Bracket and Trim Ring)
- 1 ea. - Pack S.S. Mounting Screws
- * Vinyl Baluster - see grid below

* Number of Vinyl Balusters Included in Kits:		
	Square	Turned
6' Railing Kit	13	14
8' Railing Kit	18	19
10' Railing Kit	22	24



STAIR Standard Vinyl Railing Kits Include:

- 2 ea. - 2" x 3-1/2" Standard Vinyl Rail
- 2 ea. - Standard Rail Aluminum Insert
- 4 ea. - Standard Rail Stair Mounting Bracket (Bracket and Trim Ring)
- 1 ea. - Pack S.S. Mounting Screws
- * Vinyl Baluster - see grid below

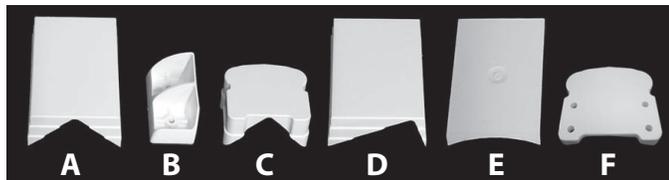


STAIR Contour Vinyl Railing Kits Include:

- 1 ea. - Contour Vinyl Top Rail
- 1 ea. - 2" x 3-1/2" Standard Vinyl Bottom Rail
- 1 ea. - Contour Rail Aluminum Insert (Top Rail)
- 1 ea. - Standard Rail Aluminum Insert (Bottom Rail)
- 2 ea. - Contour Rail Stair Mounting Bracket (3/16" S.S. Pins & Screw Plugs)
- 2 ea. - Standard Rail Stair Mounting Bracket (Bracket and Trim Ring)
- 1 ea. - Pack S.S. Mounting Screws & Pins
- * Vinyl Baluster - see grid below

* Number of Vinyl Balusters Included in Kits:		
	Square	Turned
6' Railing Kit	12	13
8' Railing Kit	17	18

OPTIONAL FAIRWAY RAILING BRACKET ADAPTERS



- A - 45° Standard Rail Bracket Adapter
- B - 22.5°/45° Internal Bracket
- C - 45° Contour Rail Bracket Adapter
- D - 22.5° Standard/ Contour Rail Bracket Adapter
- E - Standard Round Column Bracket Adapter (6"-10")
- F - Contour Round Column Bracket Adapter (6"-10")



Always use safety equipment when installing these products.

It is the responsibility of the installer to meet or exceed all code and safety requirements, and to obtain all required building permits. These instructions are only a guide and may not address every circumstance. The deck and railing installer should determine and implement appropriate installation techniques for each situation.

FAIRWAY Building Products shall not be held liable for improper or unsafe installations.

Cleaning

If your railing has any loose dirt on it from the installation, simply hose it off or wipe with a soft cloth. To remove any stubborn dirt or stains use Simple Green and #0000 steel wool.

Suggested Tools

- Measuring tape
- Pencil
- Drill
- 5/32" Drill Bit
- 7/32" Drill Bit
- #2 Square Drive Bit
- Power Miter Saw
- Carbide blade*
- Plastic Speed Square

*See saw blade manufacturer's specs for proper blade



LEVEL INSTALLATION GUIDE

STANDARD & CONTOUR VINYL RAILING

STEP 1 • POST/MOUNTING SURFACE PREPARATION

Plumb post/mounting surface.

Slide vinyl post sleeve and one piece post trim ring over post.

STEP 2 • BOTTOM RAIL & BRACKET PREPARATION

A) Determine height of bottom rail. This should be no more than 4" and no less than 2" for 36" high railing and no greater than 2" for 42" high railing. Make a pencil mark at bottom of the bottom rail on the post. Measure up 3/8" above previous mark, then square and center the bottom of the black mounting bracket. Mark screw holes in the four (4) corners of the bracket and then pre-drill four (4) 5/32" holes. Screw the bracket base into place with four (4) #12 x 1-1/4" pan head screws. Repeat on opposite post.

B) After the bottom black mounting bracket is in place, measure from **bottom of black mounting bracket** up and mark with pencil. Please use the following measurements in accordance with product style and height:

36" Standard Rail = 31-3/4" • 36" Contour Rail = 31-1/4"

42" Standard Rail = 38-1/4" • 42" Contour Rail = 37-3/4"

This will be the mounting mark for the **bottom of the top black mounting bracket**.

Square and center the top black mounting bracket on mark and pre-drill four (4) 5/32" holes. Screw into place using four (4) #10 x 1-1/4" for Standard Railing or four (4) #10 x 2" pan head screws for Contour Railing. Repeat on opposite post.

C) Measure the inside span between black mounting brackets for bottom rail. (Make sure you have equal and maximum amount of spacing between baluster pocket and post on each end.) Cut bottom rail to length squarely with a power miter box or hacksaw. You may cut vinyl and aluminum insert at same time.*

STEP 3 • INSTALL BOTTOM RAIL

A) With bottom rail cut to length, slide bracket trim ring onto each end of bottom rail, flat side towards end, facing post. (TIP: You may want to cut blocks to proper height for rail to rest on) Set bottom rail into place and align bottom rail with bottom rail height bottom mark from **Step 2A**.

B) With the bottom rail in place, insert one (1) #10 x 1" self-tapping pan head screw through one of the holes along the side of the black mounting bracket, through vinyl rail and into aluminum insert. **Only one (1) screw per side is needed.** Slide bracket trim ring onto black mounting bracket. Repeat on opposite post.

Repeat on opposite post.

NOTE: If bracket trim ring will not snap on black mounting bracket, make sure mounting screws (bracket to post connection) are not over-tightened.

STEP 4 • INSTALL BALUSTERS & TOP RAIL

A) Measure the inside span between black mounting brackets for top rail. Cut top rail to length to match bottom rail. If post is plumb, top rail should be same length as bottom rail. Make sure distance from baluster pocket to post on each end is the same for both top and bottom rail. Place a baluster in each hole (If you wish to adjust the height of the top rail by cutting balusters, you may do so now). Slide bracket trim ring on both ends of top rail, flat side towards end, facing post. From one end, begin to insert top of balusters into corresponding pocket holes and be sure rail slides down into black mounting brackets side guides.

B) Once all balusters are in place, the top rail will rest in the black mounting bracket. Insert one (1) #10 x 1" self-tapping pan head screw through one of the holes along the side of the black mounting bracket, through vinyl rail and into aluminum insert. **Only one (1) screw per side is needed.** Slide bracket trim ring onto black mounting bracket. Repeat on opposite post.

NOTE: If bracket trim ring will not snap on black mounting bracket, make sure mounting screws (bracket to post connection) are not over-tightened.

STEP 5 • CUT VINYL POST SLEEVE TO HEIGHT

After your railing is installed, you may wish to trim the top of the vinyl post sleeves before installing post caps. We recommend measuring up 2-1/2" to 3-1/2" from the top of the mounting bracket trim ring and making a pencil mark prior to cutting. **NOTE:** Finished post height with post cap may be adjusted for personal preference and appearance. Once all marks are satisfactory, cut the vinyl sleeve using a hand or power saw. (Be sure to cut top of post square.)

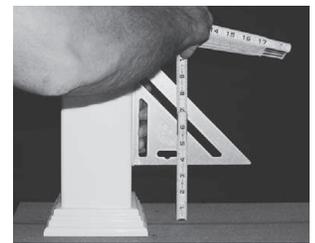
You are now ready to install your post cap.

Apply a small amount of PVC glue or silicone caulk to the inside lip of the post cap and mount in place.

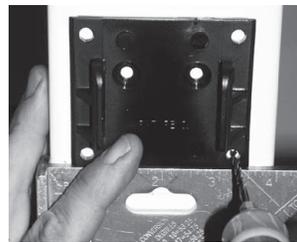
*See saw blade manufacturer's specs for proper blade



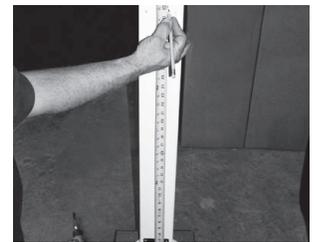
STEP 1



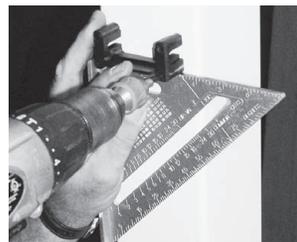
STEP 2A



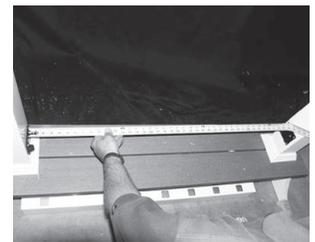
STEP 2A



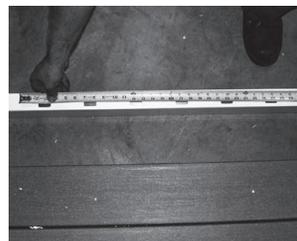
STEP 2B



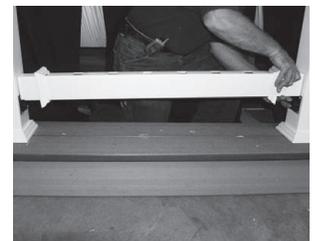
STEP 2B



STEP 2C



STEP 2C



STEP 3A



STEP 3B



STEP 4A



STEP 4A



STEP 4B



STEP 5



STEP 5



LEVEL INSTALLATION GUIDE STANDARD & CONTOUR VINYL RAILING

IMPORTANT!

Vinyl Railing with Round Aluminum Balusters - ONLY

STEP 2 (B) - TOP RAIL MEASUREMENTS

Top Rail Bracket measurements will not work for Vinyl Railing with Round Aluminum Balusters.

STEP 2 • BOTTOM RAIL & BRACKET PREPARATION

A) Determine height of bottom rail. This should be no more than 4" and no less than 2" for 36" high railing and no greater than 2" for 42" high railing. Make a pencil mark at bottom of the bottom rail on the post. Measure up 3/8" above previous mark, then square and center the bottom of the black mounting bracket. Mark screw holes in the four (4) corners of the bracket and then pre-drill four (4) 5/32" holes. Screw the bracket base into place with four (4) #12 x 1-1/4" pan head screws. Repeat on opposite post.

B) After the bottom black mounting bracket is in place, measure from **bottom of black mounting bracket** up and mark with pencil. Please use the following measurements in accordance with product style and height:

~~36" Standard Rail = 31-3/4" • 36" Contour Rail = 31-1/4"~~
~~42" Standard Rail = 38-1/4" • 42" Contour Rail = 37-3/4"~~

This will be the mounting mark for the **bottom of the top black mounting bracket**. Square and center the top black mounting bracket on mark and pre-drill four (4) 5/32" holes. Screw into place using four (4) #12 x 1-1/4" for Standard Railing or four (4) #10 x 2" pan head screws for Contour Railing. Repeat on opposite post.

C) Measure the inside span between black mounting brackets for bottom rail. *(Make sure you have equal and maximum amount of spacing between baluster pocket and post on each end.)* Cut bottom rail to length squarely with a power miter box or hacksaw. You may cut vinyl and aluminum insert at same time.*

DO NOT USE MEASUREMENTS
for Vinyl Railing with Round Aluminum Balusters

INSTALL TOP RAIL BRACKET BY USING THIS METHOD.

INSTALL CONTOUR TOP RAIL BRACKETS - WHEN USING ROUND ALUMINUM BALUSTERS

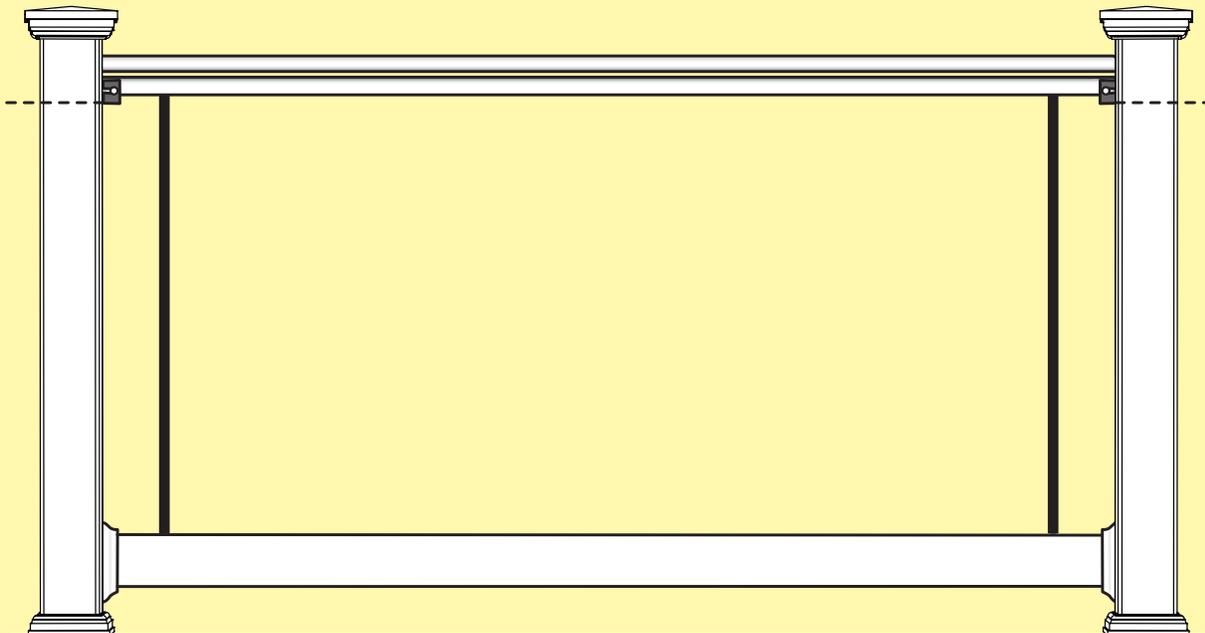
A) Measure the inside span between posts.

Make sure distance from baluster pocket to post on each end is the same for both top and bottom rail. Cut top rail to length.

Place 1 round aluminum baluster in each end baluster hole. Slide black mounting brackets on top rail and mark black mounting bracket location.

B) Remove top rail. Place black mounting brackets on post at marked locations and

insert (4) #10 x 2" pan head screws through black mounting bracket and into post. Repeat on opposite post.





STAIR INSTALLATION GUIDE

STANDARD & CONTOUR VINYL RAILING



STEP 1

STEP 1 • POST/MOUNTING SURFACE PREPARATION

Plumb post/mounting surface. Slide vinyl post sleeve and post trim ring over post. (See Rise/Run Chart on next page for proper angle)



STEP 2

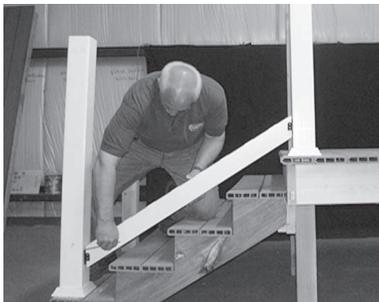
STEP 2 • BOTTOM RAIL & BRACKET PREPARATION

A) Place one end of the bottom rail on deck surface and the other end on the last stair tread nosing. (Baluster pockets up.)

B) Measure distance from the mounting surface to the first baluster. Make sure you have maximum and equal distance between baluster pockets at both ends of the bottom rail. With the bottom rail set in the proper baluster spacing, draw a vertical line with a pencil on the inside of the mounting surface where the post and rail meet. Repeat on opposite end of rail.

C) With bottom rail marked, deduct 1/4" from each rail end to allow for black mounting bracket. Cut bottom rail to length.

You may cut both aluminum and vinyl at the same time with a power miter box or hack saw.*



STEP 3A

STEP 3 • INSTALL BOTTOM RAIL, BRACKET & TOP RAIL PREPARATION

A) Slide black mounting brackets onto the ends of the bottom rail and center on end of rail. Place rail with black mounting bracket between posts set to proper height off deck and bottom tread nosing. Mark the top of black mounting brackets on post.

(Check with local building code for height and opening requirements.)

B) Remove the black mounting bracket from the ends of bottom rail, square and center brackets with the mark on the posts. Mark the screw holes in the four (4) corners of the black mounting bracket. Pre-drill four (4) 5/32" holes. Install black mounting brackets with four (4) #12 x 1-1/4" pan head screws.

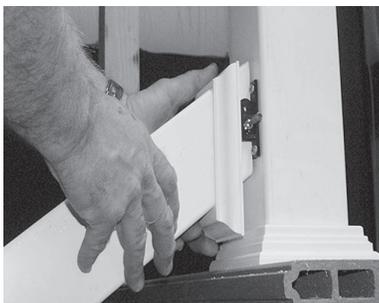
C) With both black mounting brackets screwed to mounting surfaces, slide bracket trim rings on end of rail, flat side towards mounting surface. (TIP: If pitch is greater than 32° cut along marks on inside of all **Standard Rail** bracket trim rings) Set bottom rail into black mounting brackets making sure rail is centered. (TIP: You may want to cut blocks to proper height for rail to rest on) Insert one (1) #10 x 1" self-tapping pan head screw through one of the holes along the side of the black mounting bracket, through vinyl rail and into aluminum insert. Only one (1) screw per side is needed. Slide bracket trim ring onto black mounting bracket. Repeat on opposite post.

NOTE: If bracket trim ring will not snap on black mounting bracket, make sure mounting screws (bracket to post connection) are not over-tightened.



STEP 3B

D) Insert a baluster into the baluster pocket closest to the post at each end of stair. Set top rail in place over balusters. Measure the distance from baluster to post at bottom rail and adjust the top rail to match. draw a vertical line with a pencil on the inside of the mounting surface where the post and rail meet. Repeat on opposite end of rail. (If you wish to adjust the height of the top rail by cutting balusters, you may do so now.)



STEP 3C

STEP 4 • INSTALL BALUSTERS & TOP RAIL FOR STANDARD VINYL RAILING

(Skip **STEP 4** if using Contour Rail.)

A) With top rail marked, deduct 1/4" from each rail end to allow for black mounting bracket. Cut top rail to length.

B) Slide black mounting brackets on each end of rail. Insert two (2) end balusters in bottom rail, match up with top rail and align top rail in between posts. With top rail in place and black mounting bracket centered on rail ends, mark black mounting bracket position on post. Remove the black mounting bracket from the ends of top rail, square and center brackets with the mark on the posts. Mark the screw holes in the four (4) corners of the black mounting bracket. Pre-drill four (4) 5/32" holes. Install black mounting brackets with four (4) #12 x 1-1/4" pan head screws.

C) With black mounting brackets in place, you may now insert your balusters in bottom rail baluster pockets. With balusters in place, slide bracket trim rings on each end of top rail, flat side towards mounting surface. Starting at the bottom of stair run, slide top rail into black mounting bracket. Insert balusters into baluster pockets as you work upward to top of stair. Continue up to top of stair run. Insert one (1) #10 x 1" self-tapping pan head screw through one of the holes along the side of the black mounting bracket, through vinyl rail and into aluminum insert. Only one (1) screw per side is needed. Slide bracket trim ring onto black mounting bracket. Repeat on opposite post.

D) Make sure all four bracket trim ring rings are snapped over black mounting brackets.

NOTE: If bracket trim ring will not snap on black mounting bracket, make sure mounting screws (bracket to post connection) are not over-tightened.



STEP 3D

E) Skip to **STEP 9**

*See saw blade manufacturer's specs for proper blade



STAIR INSTALLATION GUIDE

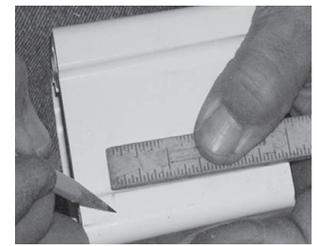
STANDARD & CONTOUR VINYL RAILING

STEP 5 • CUT CONTOUR TOP RAILS

With both ends of top rail marked from **STEP 3D**, place the bottom (baluster pocket side) against the back stop of the miter box. Match up miter cut with line marked on top rail and cut top rail to length. You may cut both aluminum and vinyl at the same time.*



STEP 5A



STEP 5B

STEP 6 • CUT CONTOUR STAIR BRACKET

- A)** Measure the distance from the end of rail to the baluster pocket (so Contour Stair Bracket will not cover baluster pocket). Mark bottom of Contour Stair Bracket with this measurement. Make sure mounting screws are facing towards balusters.
- B)** Slide Contour Stair Bracket onto a piece of scrap contour rail and cut at same angle as top rail. (**TIP:** Use another Contour Stair Bracket to hold railing level in miter box for a correct angle cut.)



STEP 6A



STEP 6B

STEP 7 • INSTALL 3/16" S.S. PINS IN CONTOUR STAIR BRACKET

(3/16" S.S. Pins keep rail from pulling out of Contour Rail Bracket under load.)

- A)** With both Contour Stair Brackets cut to match top rail, slide Contour Stair Bracket onto top rail and hold flush with end of top rail. Make a mark on both sides of Contour Stair Bracket.
- B)** Remove Contour Stair Bracket. Measure from marks toward the end of the top rail 1/2" and down 1/8" from bottom of bead on the side of top rail. Where the lines intersect, drill a 7/32" hole through the vinyl and aluminum (**make sure aluminum is flush with vinyl**) on both sides of top rail. Slide Contour Stair Brackets onto top rail, insert 3/16" S.S. pin and engage pin into Contour Stair Brackets.



STEP 7A



STEP 7B

STEP 8 • INSTALL BALUSTERS & CONTOUR TOP RAIL

Install all balusters into bottom rail. Start at the bottom of stair run and one by one insert balusters into top rail. Set rail in place and center on mounting surface. Insert two (2) #10 x 4" pan head screws into Contour Stair Bracket. While keeping Contour Stair Bracket square and centered on mounting surface, start screw enough to mark mounting surface. Push top rail to one side and pre-drill a 5/32" hole at same angle as mounting screw. Set rail in place and install mounting screws. Insert fill plugs, two (2) per Contour Stair Bracket, using PVC glue or silicone caulk to hold in place.



STEP 8A



STEP 8B

STEP 9 • CUT VINYL POST SLEEVE TO HEIGHT

After your railing is installed, you may wish to trim the top of the vinyl post sleeves before installing post caps. We recommend measuring up 2-1/2" to 3-1/2" from the top of the mounting bracket trim ring and making a pencil mark prior to cutting. **NOTE:** Finished post height with post cap may be adjusted for personal preference and appearance. Once all marks are satisfactory, cut the vinyl sleeve using a hand or power saw. (*Be sure to cut top of post square.*)

You are now ready to install your post cap.

Apply a small amount of PVC glue or silicone caulk to the inside lip of the post cap and mount in place.

RUN in Inches

		6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0
RISE in Inches	3.5	28	27	25	24	22	21	20	19	18	18	17	16	16	15	15	14	14	13
	4.0	32	30	28	27	25	24	23	22	21	20	19	18	18	17	17	16	15	15
	4.5	35	33	31	29	28	27	25	24	23	22	21	21	20	19	18	18	17	17
	5.0	38	36	34	32	30	29	28	27	25	24	23	23	22	21	20	20	19	18
	5.5	40	38	36	35	33	31	30	29	28	27	26	25	24	23	22	21	21	20
	6.0	43	41	39	37	35	34	32	31	30	29	28	27	26	25	24	23	22	22
	6.5	45	43	41	39	37	36	34	33	32	31	29	28	27	27	26	25	24	23
	7.0	47	45	43	41	39	38	36	35	34	32	31	30	29	28	27	27	26	25
	7.5	49	47	45	43	41	40	38	37	36	34	33	32	31	30	29	28	27	27
	8.0	51	49	47	45	43	42	40	39	37	36	35	34	33	32	31	30	29	28
8.5	53	51	49	47	45	43	42	40	39	38	36	35	34	33	32	31	30	30	
9.0	54	52	50	48	47	45	43	42	41	39	38	37	36	35	34	33	32	31	
9.5	56	54	52	50	48	47	45	44	42	41	40	38	37	36	35	34	33	32	
10.0	57	55	53	51	50	48	46	45	44	42	41	40	39	38	37	36	35	34	
		36° - 41°																	
		29° - 35°																	

*See saw blade manufacturer's specs for proper blade

Calculated Angle in Degrees



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