

### General & Safety Information

- Wear proper personal protective equipment (PPE).
- Operate all tools per manufacturer guidelines.
- Standard woodworking saws and blades can be used for cutting Fypon® PVC products, except in cases where metal is being cut.
- These instructions only refer to installing a stair rail kit in applications with a with a slope between 32 and 37 degrees. The assembly requires that correctly specified posts are already properly installed per code requirements.
- Consult your local building department for applicable codes and building requirements.
- All Fypon products must be installed per the following instructions to maintain warranty coverage.
- Do NOT paint or stain QuickRail products, it will void the warranty.

### Tools / Materials

- Pencil
- Tape Measure
- Level
- Screwdriver or drill with #2 Philips bit
- Circular saw
- Hacksaw (for top rails with a metal insert)

### Installation Instructions

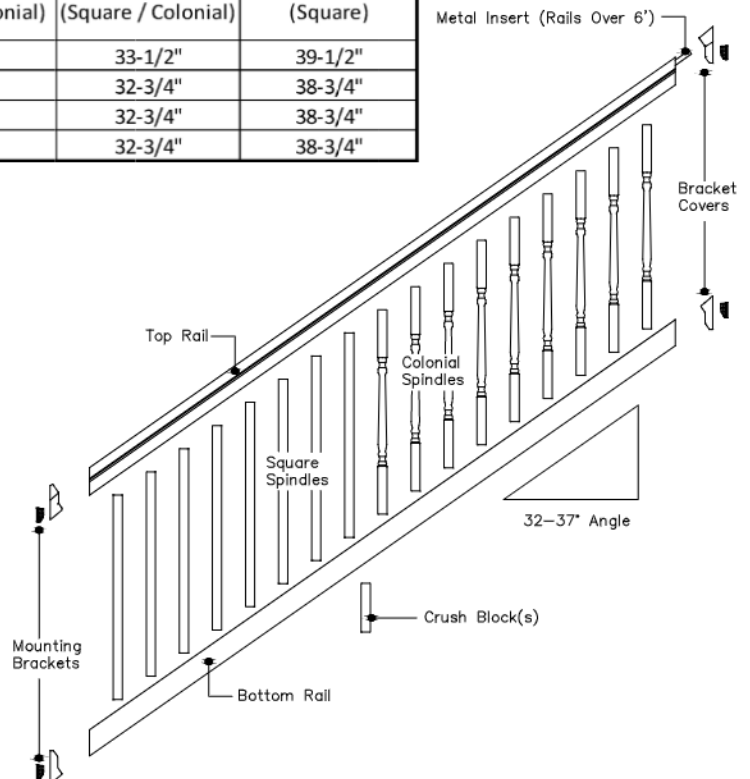
Note: If working with multiple rail kits, DO NOT mix spindles between kits. Spindle height and spacing varies with rail length because top rails longer than 6' have a metal structural insert.

Rail Specifications

Nominal Lengths	Rail Lengths			Spindle Heights	
	Straight Rail Kits (Square Spindles)	Straight Rail Kits (Colonial Spindles)	Stair Rail Kits (Square / Colonial)	36" Rail Height (Square / Colonial)	42" Rail Height (Square)
6'	72"	70-1/2"	78"	33-1/2"	39-1/2"
8'	96"	94-1/8"	102"	32-3/4"	38-3/4"
10'	120"	117-3/4"	126"	32-3/4"	38-3/4"
12'	144"	141"	NA	32-3/4"	38-3/4"

RAIL ATTACHMENT GUIDELINES		Rail Length	
		8' or less	Greater than 8' (up to 10')*
Height Above Ground	30" or less	Any nailable substrate	Any nailable substrate
	Greater than 30"	APPROVED: Wall Support Column QuickRail QuickPost DuraPoly Post QuickRail Ultra Post  NOT APPROVED: Complete Post Kit Post Sleeve only	APPROVED: Wall Support Column QuickRail QuickPost DuraPoly Post  NOT APPROVED: Complete Post Kit Post Sleeve only

\*Rails longer than 10' should only be installed in applications that are 30" or less above ground.



#### 1) Measure and cut rails.

Lay the bottom rail on the stair treads next to the mounting posts with the spindle holes facing up and equally spaced between the posts (Figure 1A). Any crush block holes on the bottom of the rail should also be approximately centered on the rail and completely over a stair tread if possible. Mark lines on the rail to align with the mounting surfaces (Figure 1B).

Make marks that are offset to the inside of the previous marks by 3/8" for the stair brackets. These will be the cut marks (Figure 1C).

If the top rail will be mounted to the same surfaces as the bottom rail, position the rails next to each other with the spindle holes up and aligned. Mark the top rail as shown (Figure 1D).

Then rotate the rails so the spindle holes face each other, line up the marks, and extend the cut lines as shown (Figure 1E).

If the top and bottom rails will be attached to different mounting surfaces, use the longer of the two spans to center the hole pattern, but make sure the spindles still align vertically.

Cut both rails to length. Note that top rails longer than 6' have a metal insert.

#### 2) Install bottom mounting brackets.

Identify top and bottom mounting brackets (Figure 2A).

Lay the bottom rail on the stair treads between the mounting surfaces and mark the mounting surfaces to denote the bottom of the rail (Figure 2B).

If attached to a post, install the bottom mounting brackets directly above the marks and centered side-to-side, using the provided 1-1/2" screws (Figure 2C). Note that the brackets can be installed higher if needed to clear trim, but confirm that bottom rail clearance code requirements are still met.

Figure 1A

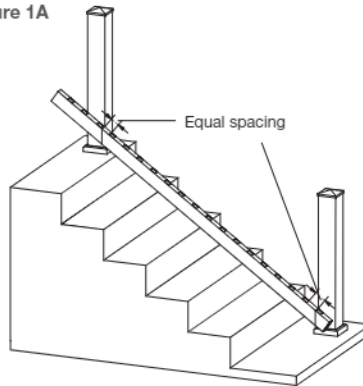


Figure 1B

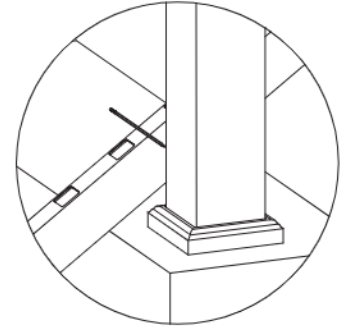


Figure 1C

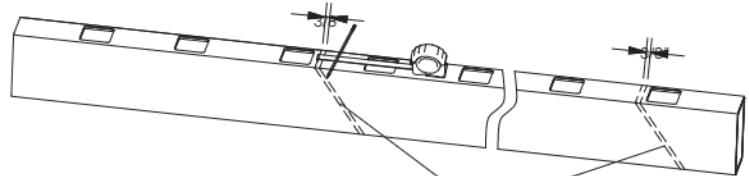


Figure 1D

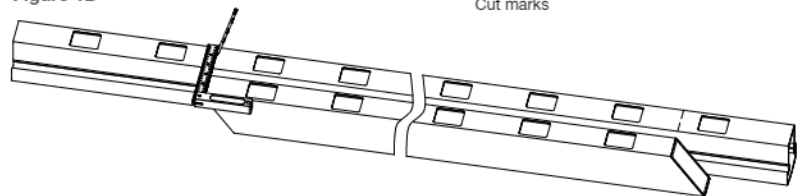


Figure 1E

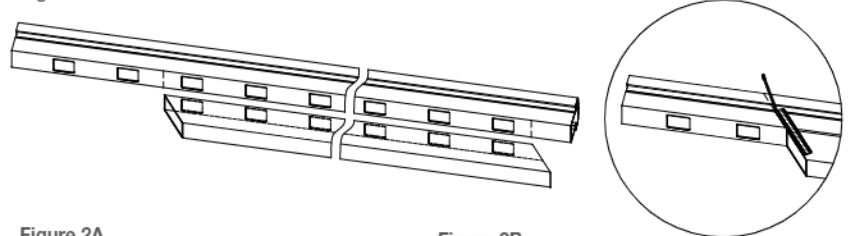


Figure 2A

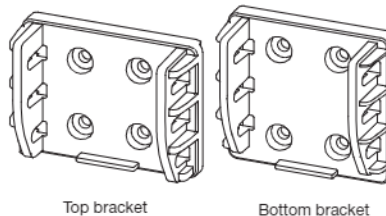


Figure 2B

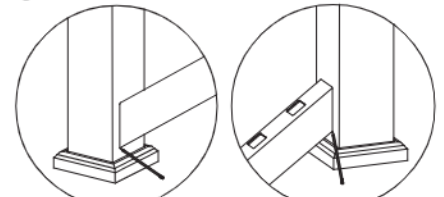
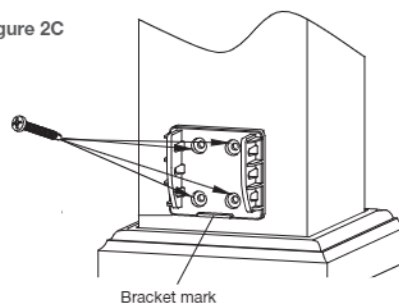
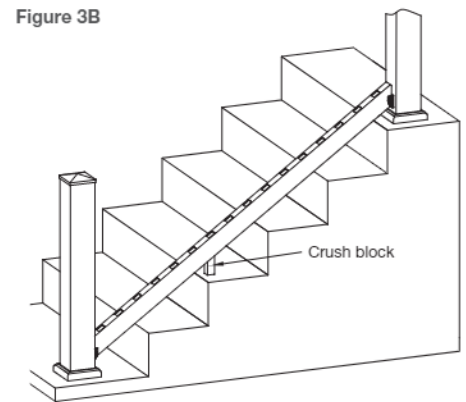
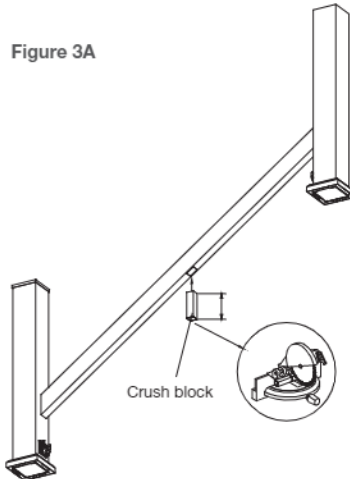


Figure 2C



#### 3) Cut and install crush block (if applicable).

Cut crush block(s) to length and insert into the crush block hole(s) on the bottom of the bottom rail (Figure 3A). If possible, crush block should be located toward the front half of a stair tread (Figure 3B). If hole location does not allow a crush block to be inserted, cut it and use a PVC-compatible adhesive to adhere it to the bottom of the bottom rail.



#### 4) Install bottom rail.

Identify the proper bottom rail bracket covers (Figure 4A). Slide the bottom rail bracket covers onto their respective ends of the bottom rail with spindle holes facing up and the smooth sides of the bracket covers facing the spindle holes. Fit the bottom rail onto the bottom mounting brackets so the rail sits on the resting flanges and insert a 1" screw (provided) at the rounded end of the middle slot on each side of the bracket to secure it to the bottom rail (Figure 4B). Slide the bracket covers over the mounting brackets until a "click" is heard (Figure 4C).

Figure 4A

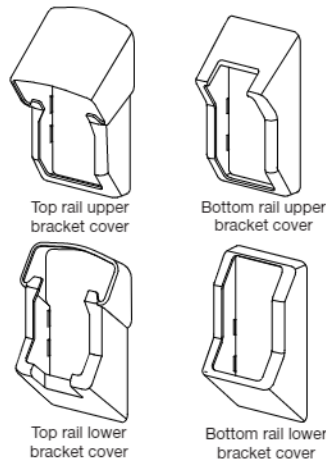


Figure 4B

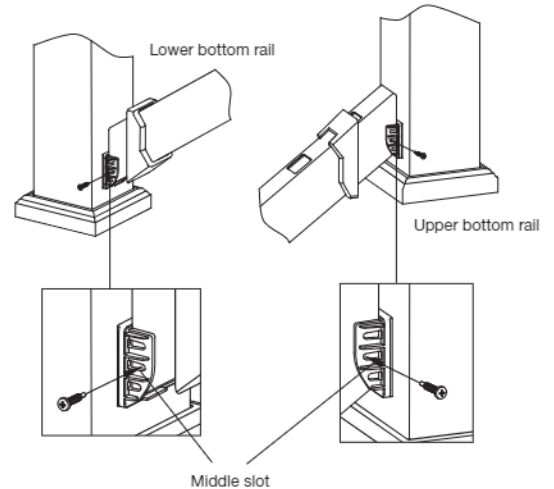
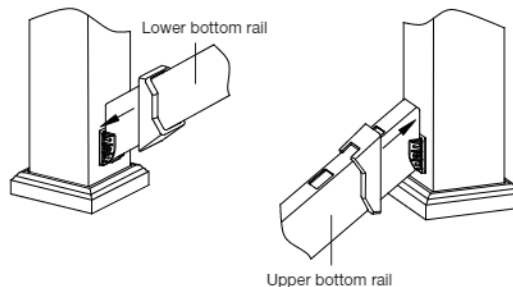


Figure 4C



#### 5) Install top mounting brackets.

Temporarily insert a spindle at each end of the bottom rail and fit the top rail over the spindles so they fully seat into the top rail (Figure 5A). After making sure the top rail is aligned with the bottom rail and the spindles are plumb, slide a bracket up from the bottom at the lower end of the top rail as far as possible (the underside of the rail will not be sitting on the resting flange) and mark the bracket location. Then repeat for the upper end of the top rail, but with the rail sitting on the resting flange (Figure 5B).

Figure 5A

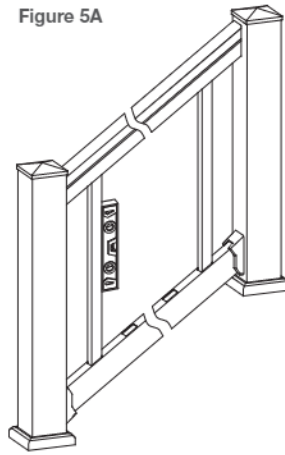
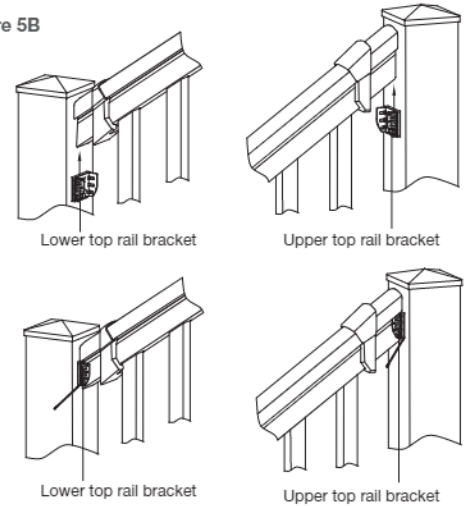


Figure 5B



Remove the top rail and install the top mounting brackets at the marked locations using the provided 1-1/2" screws (Figure 5C), as done for the bottom mounting brackets in Step 2.

Figure 5C

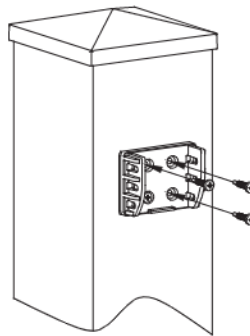
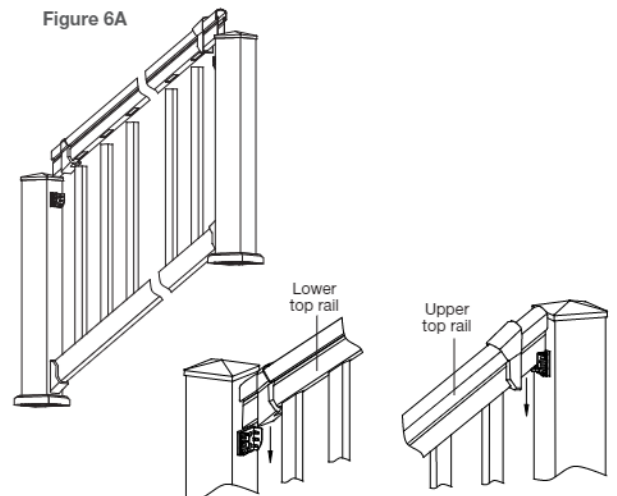


Figure 6A



#### 6) Install spindles and top rail.

Insert all of the spindles into the pre-cut holes in the bottom rail.

Similar to the bottom rail in Step 4, slide upper and lower top rail bracket covers onto their respective ends of the top rail with smooth sides facing the spindle holes. With spindle holes facing down, fit the top rail over the spindles and onto the mounting brackets. The upper end of the rail should sit on the resting flange, but the lower end of the rail will not sit on the resting flange (Figure 6A). Insert two 1" screws (provided) on each side of the bracket to secure it to the top rail, at the rounded ends of the top and bottom slots (Figure 6B). Slide the top rail bracket covers over the mounting brackets until a "click" is heard (Figure 6C).

Figure 6B

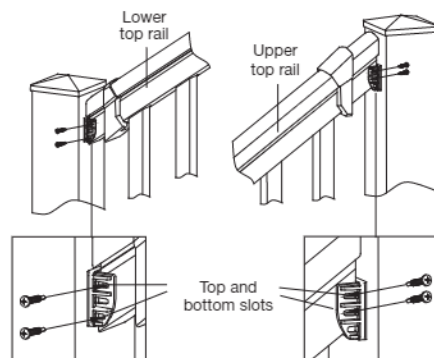


Figure 6C

