

IMPRESSION RAIL™



Installation Guide



Installing Impression Rail.....	1
Installing Impression Rail 45° & 22½ Angled Brackets...	9
Installing Impression Rail Site Cut Angled Brackets.....	10
Installing Impression Rail Stairs	12
Notes	18

Impression Rail Level Rail Kits are available in 10', 8', and 6' lengths.

Visit www.azek.com/installation or www.timbertech.com/installation to view AZEK or TimberTech installation videos.

Consult your local building codes for guard and handrail requirements.

Measuring Your Railing Area

- Impression Rail can be installed a true 10', 8', and 6' between two posts.
- Determine how many 10', 8' and 6' Impression Rail sections you need and check to be sure you have all the components (and quantities) listed in the chart shown to the right.

Important Information

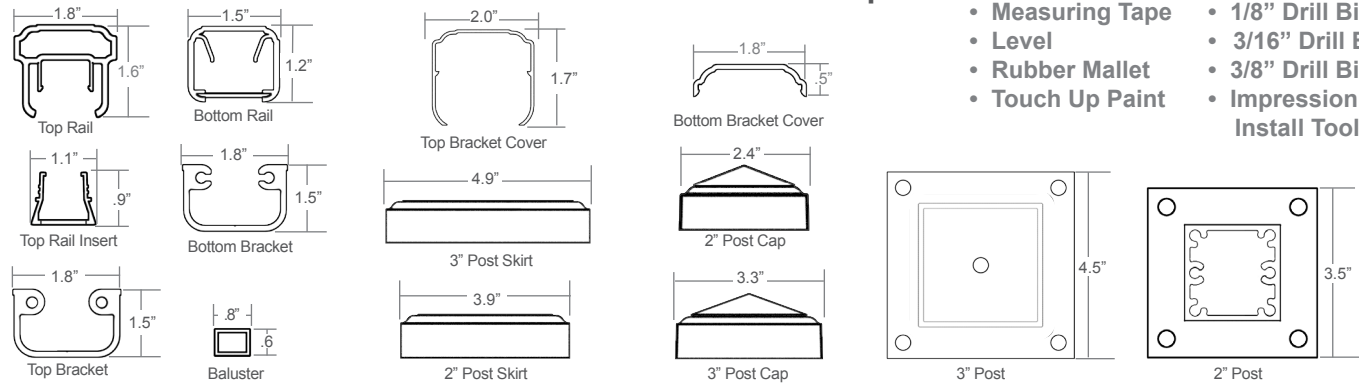


- Impression Rail 10', 8', and 6' rails are designed not to exceed 10', 8', and 6' between posts, respectively.
- Cut slowly, using a metal-cutting blade.

Components Needed For Installing Impression Rail

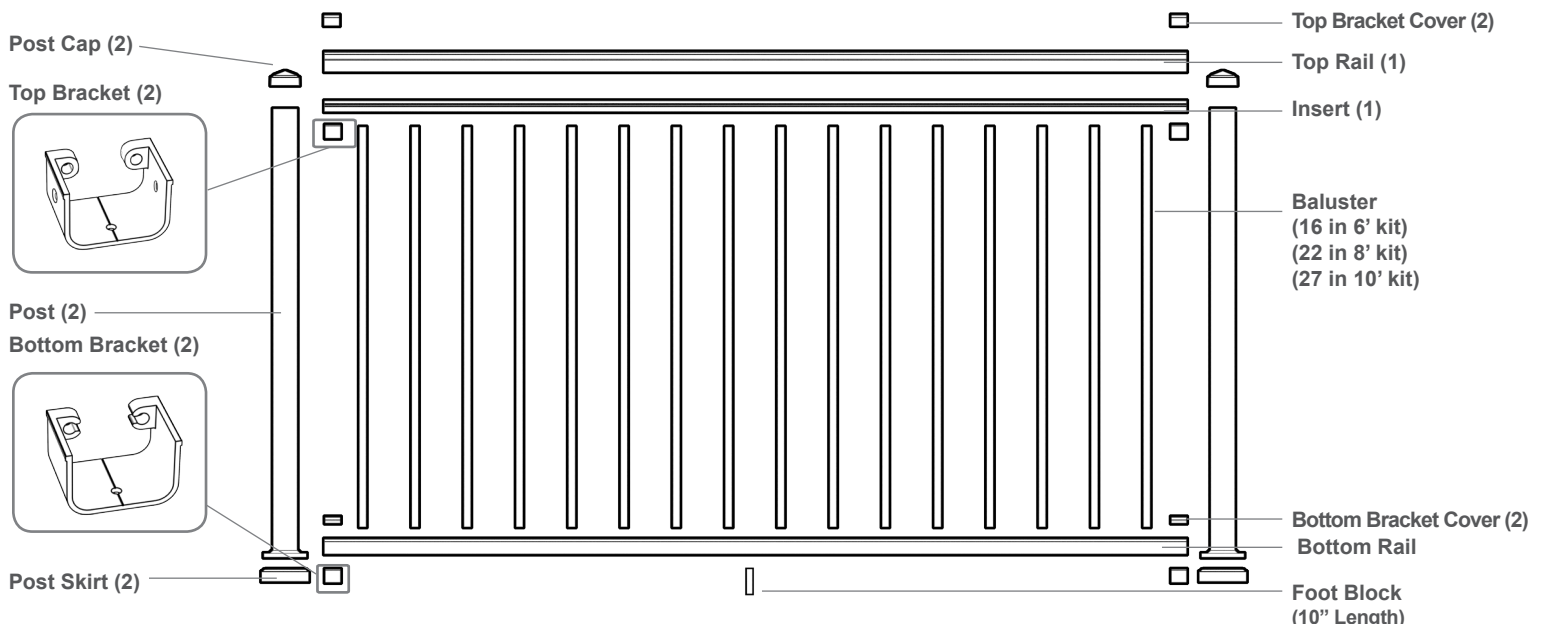
Impression Rail Level Rail Kit	1 - Top Rail w/ Insert 1 - Bottom Rail Balusters (33" for 36" Railing; 39" for 42" Railing) - 16 in 6' Kits, 22 in 8' Kits, 27 in 10' Kits Level Rail Bracket Kit Foot Block - 1 - 10" Square Foot Block to be cut to desired length - 2 - Foot Block Connectors
Level Rail Bracket Kit	2 - Top Brackets & Covers 2 - Bottom Brackets & Covers 8 - #10 x 3/4" Self Drilling Pan Head Screws (Bracket to Post) 4 - #10 x 3/4" Self Drilling Flat Head Screws (Bracket to Top Rail) 2 - #10 x 1" Self Drilling Screws (Foot Block) T20 - 4" Driver Bit
Additional Components Needed for Each System	2" Post Kit (includes Post, Post Cap, & Post Skirt) 3" Post Kit (includes Post, Post Cap, & Post Skirt) 2" Mounting Plate 3" Mounting Plate Optional: 45° Bracket Kit 22 1/2° Bracket Kit 4" Site Cut Bracket Kit Fastener Kit for Composite Posts and Top Rails

Component Dimensions



Tools Required

- Miter Saw
- Measuring Tape
- Level
- Rubber Mallet
- Touch Up Paint
- Drill
- 1/8" Drill Bit
- 3/16" Drill Bit
- 3/8" Drill Bit
- Impression Rail Install Tool



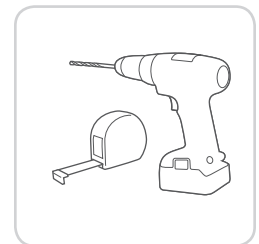
Important Information

- Please read all instructions completely before starting any part of the installation.
- Impression Rail should be installed using the same good building principles used to install wood, composite, or metal railing and in accordance with the local building codes and the installation guidelines included below.
- CPG Building Products LLC accepts no liability or responsibility for the improper installation of this product.
- Impression Rail may not be suitable for every application and it is the sole responsibility of the installer to be sure that Impression Rail is fit for the intended use. Since all installations are unique, it is also the installer's responsibility to determine specific requirements in regards to each rail application.
- CPG Building Products LLC recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation. If you have any questions or need further assistance, please call AZEK Customer Service at 877-ASK-AZEK (877-275-2935) or TimberTech Customer Service at 800-307-7780, or visit our website at www.azek.com or www.timbertech.com.
- Impression Rail is tested as a whole system and should be used that way. It is not intended to be used in conjunction with other railing systems or fasteners.
- The following Installation Guidelines are applicable for installation of Impression Rail only.
- **IMPORTANT:** Make sure the DRIVE TOOL/DRILL is configured or set to use the SCREW setting when driving and/or tightening all FASTENERS.
- **SAFETY:** Always wear goggles when handling, cutting, drilling and fastening materials.
- Failure to install this product in accordance with applicable building codes and Impression Rail's written Rail Install Guide may lead to personal injury, affect rail system performance and void the product warranty.
- The buildup or generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions. This static electricity can discharge once contact is made with hardware, railing, or other conductors of electricity.

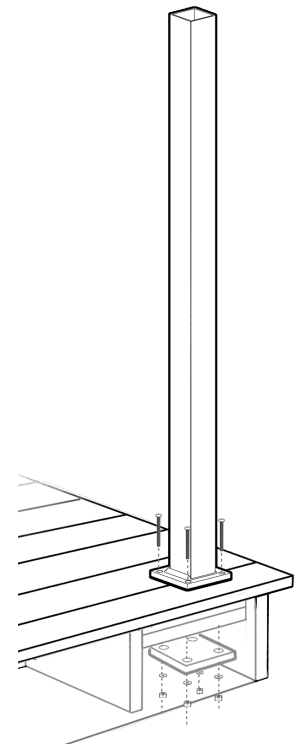
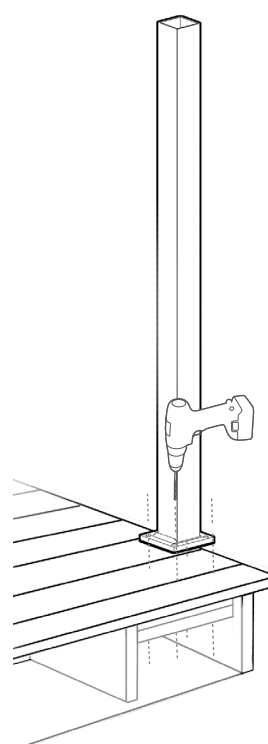
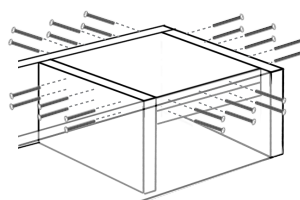
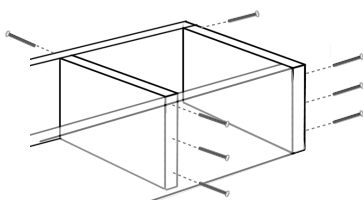
1

Install Posts

- Determine Post locations.
- For deck applications, install 2 pieces of 2x8 (min.) blocking.
- Drill 3/8" holes through decking and blocking, matching the bolt hole pattern on the Posts.
- Position and secure posts using 3/8" x 6" bolts, mounting plate, washers, and nuts.



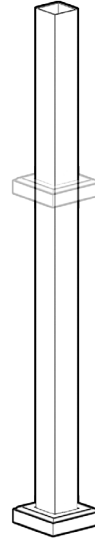
ENSURE Posts Are Plumb.
Additional Washers May Be Required.



2

Install Skirts

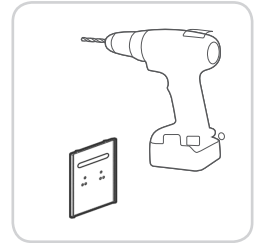
- Slide Skirts over Posts.



3

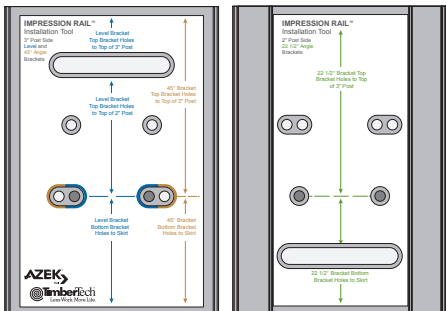
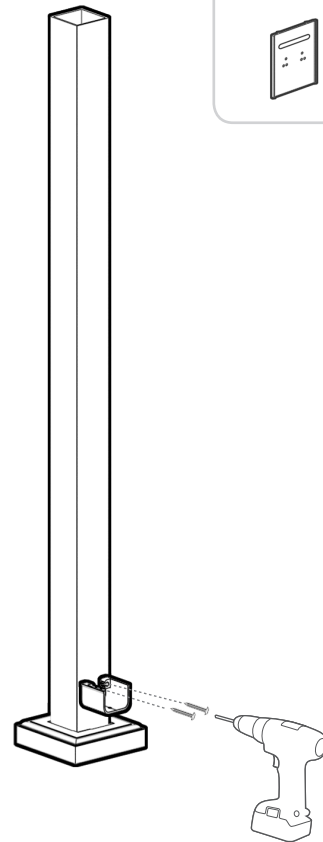
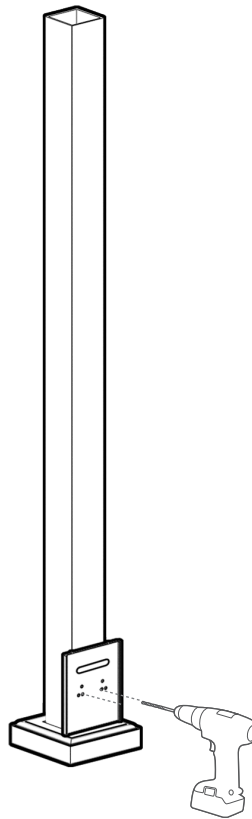
Pre-Drill Posts and Install Bottom Brackets to Posts

- Place Impression Rail Installation Tool directly on the Skirt, and use the appropriate holes as a guide to pre-drill Bottom Bracket holes in the Post.
- Attach the Bottom Brackets to the Posts using provided 3/4" pan head screws.



2" Post

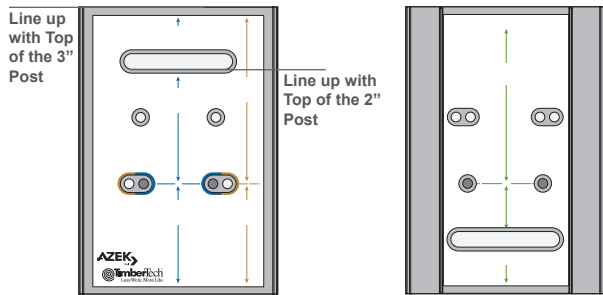
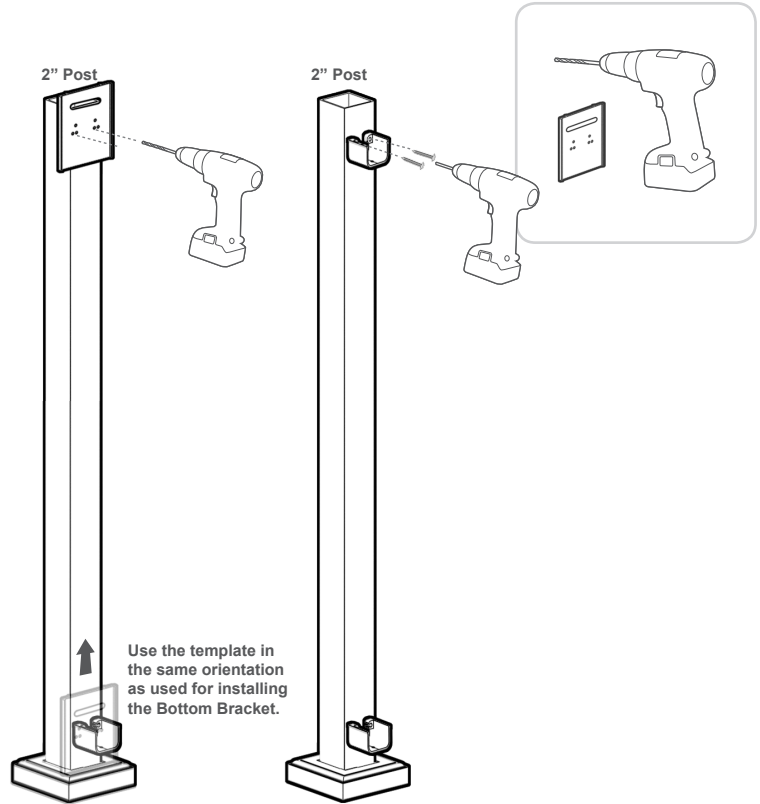
2" Post



4

Install Top Brackets to Posts

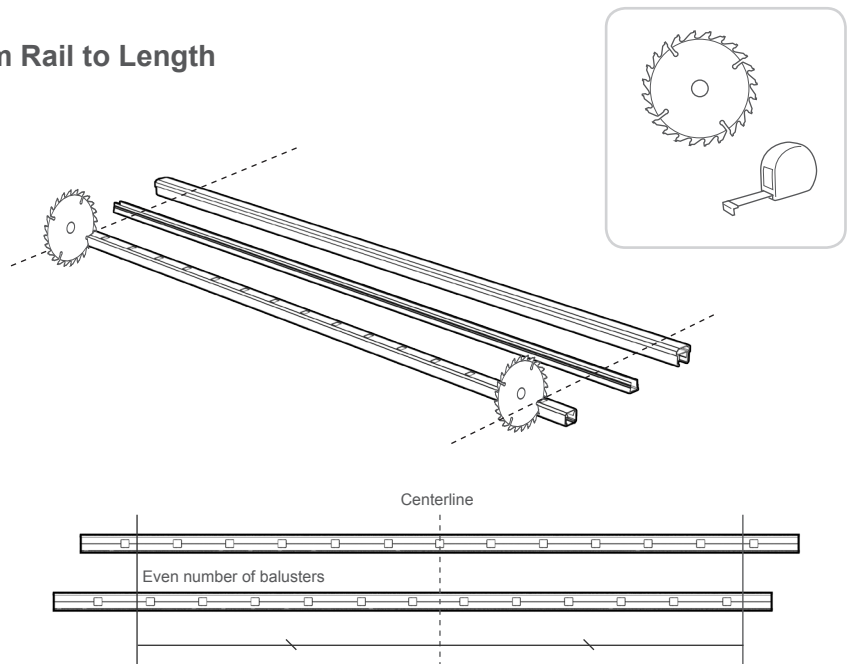
- Place Impression Rail Installation Tool flush with the top of the 3" Post or flush with the top of the window on the 2" Post, and use the appropriate holes as a guide to pre-drill Top Bracket holes in the Post.
- Attach the Top Brackets to the Posts using provided 3/4" pan head screws.



5

Cut Top Rail, Insert, and Bottom Rail to Length

- Measure the distance between posts at the Top and Bottom Brackets locations.
- All rails will be cut 13/16" shorter than the distance between the Posts.
- Determine the desired center of the rail: either a baluster hole or between two baluster holes.
- Measuring from the determined center, cut both ends of the rails.

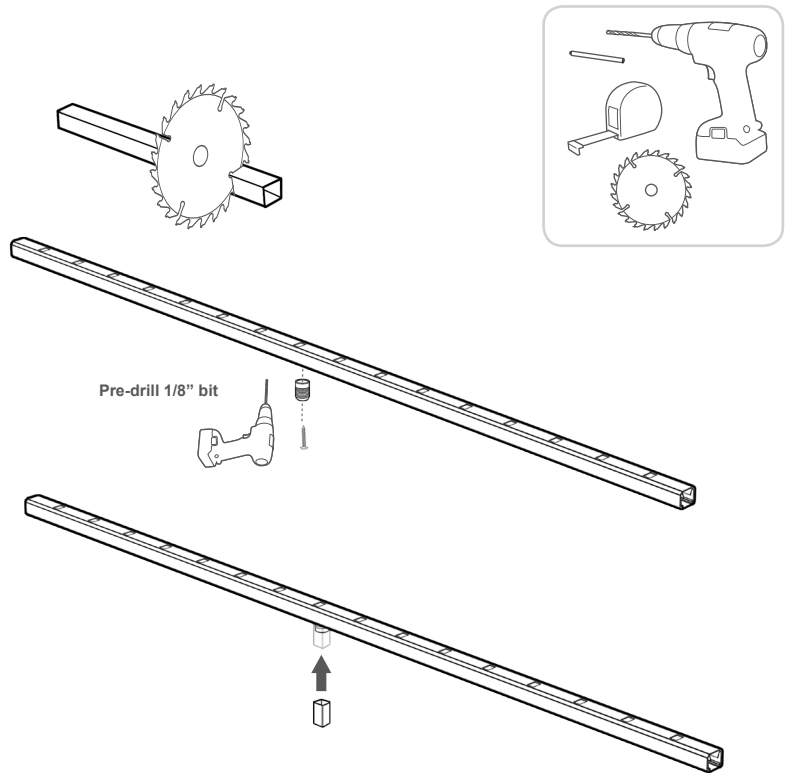


IMPORTANT: The space between the end Baluster and Post cannot exceed 4". There must be a space of at least 1 1/4" between the Post and the first Baluster.

6

Attach Foot Block to Bottom Rail

- Applications shorter than 72" require 1 Foot Block, while applications longer than 72" require 2 Foot Blocks, evenly spaced.
- Cut the provided 10" Foot Block to 2" for standard applications.
- Pre-drill the center of the underside of the Bottom Rail with an 1/8" Drill Bit.
- Attach the Foot Block Connector to the underside of the Bottom Rail using the provided 1" pan head screw.
- Secure the cut Foot Block by pressing it onto the Foot Block Connector.



7

Install Bottom Rail into Bottom Brackets

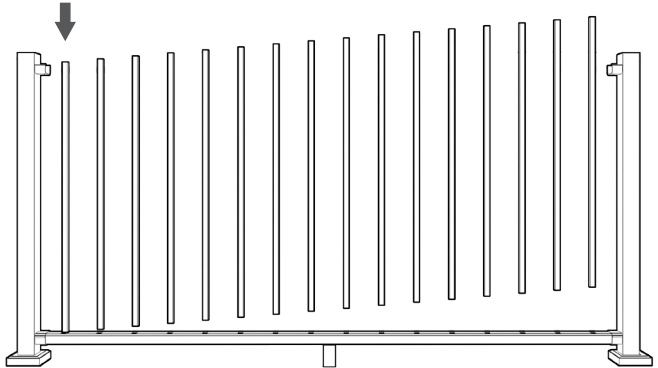
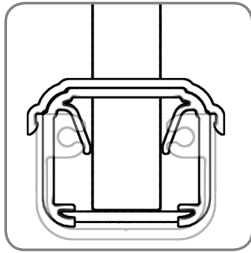
- Place Bottom Rail in Bottom Brackets.
- Snap Covers over Bottom Rail.



8

Install Balusters into Bottom Rail

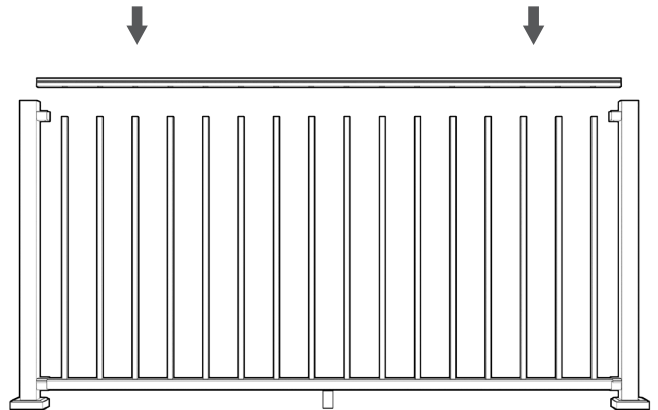
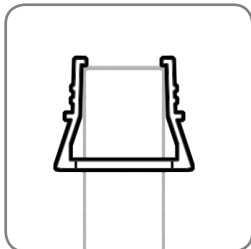
- Snap Balusters into Bottom Rail.



9

Place Insert on Balusters

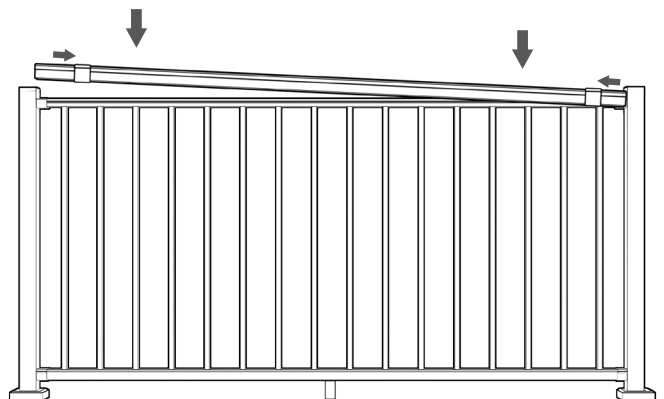
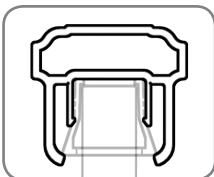
- Align punched holes in the Insert with the Balusters and press the Insert onto the Balusters until the Balusters reach the stop on the Insert.



10

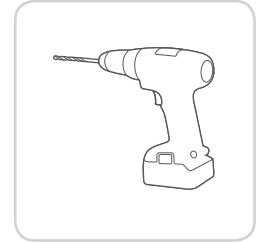
Place Top Rail on Insert

- Slide the two Top Bracket Covers onto the Top Rail.
- Place the Top Rail on the Insert and inside the Top Brackets.
- Snap the Top Rail over the Insert, making sure the Top Rail fully engages the Insert.

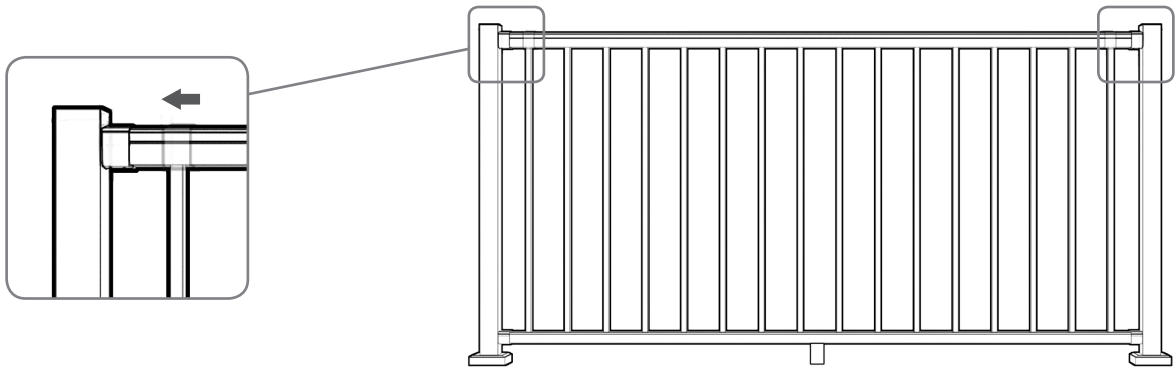
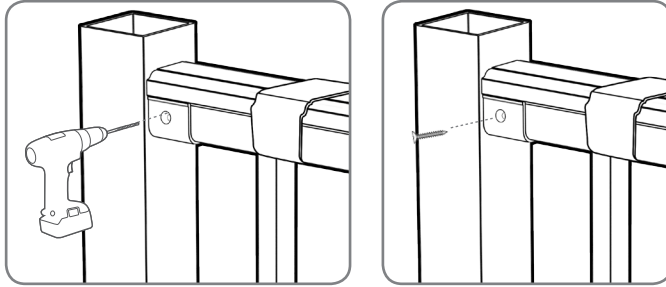


11

Fasten Bracket to Top Rail and Install Top Bracket Cover



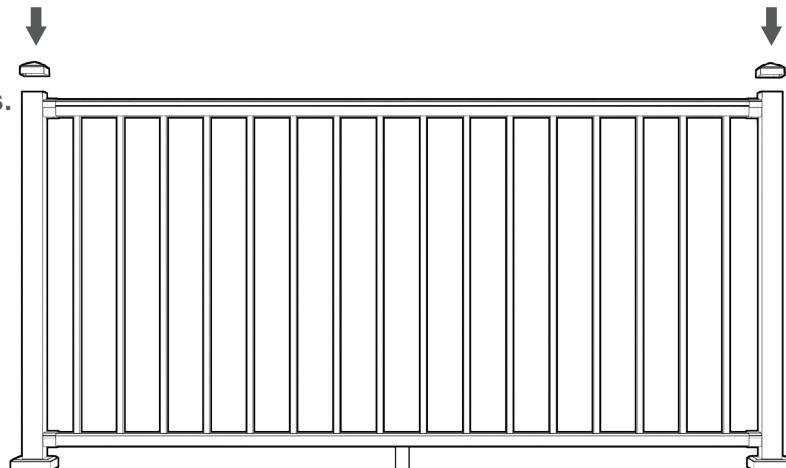
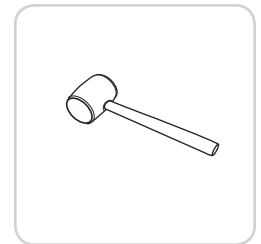
- Using the holes on the side of the Top Brackets, pre-drill 1/8" holes into the Top Rail on both sides.
- Fasten Top Bracket to Top Rail using provided 3/4" flat head screws.
- Cover the Top Bracket and Rail ends by sliding the cover over the railing then sliding it over the Bracket.



12

Install Post Caps

- Use a Rubber Mallet to secure the Post Caps onto the Posts.



Installing Impression Rail™ 45° & 22½° Angled Brackets

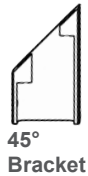
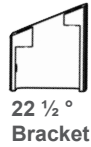


45° & 22½° Bracket Kits (3" Post and Composite Post Applications ONLY)

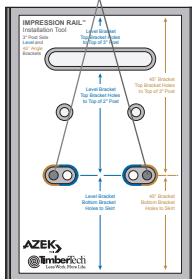
1

Pre-Drill Posts for Brackets

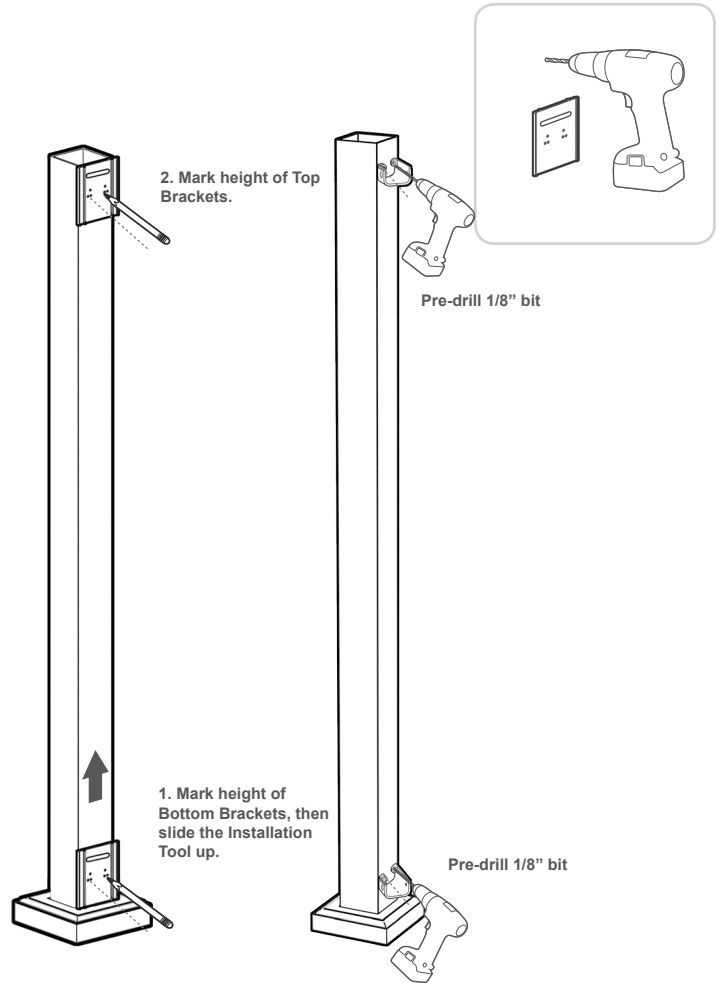
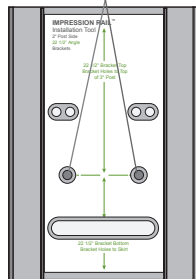
- Using the Impression Rail Installation Tool, mark the appropriate hole locations with the drill bit.
- Remove the Installation Tool, and pre-drill the Post through the marked locations. Start by drilling perpendicular to the post and slowly lean the drill bit to the desired angle of the railing.



45° Bracket Holes



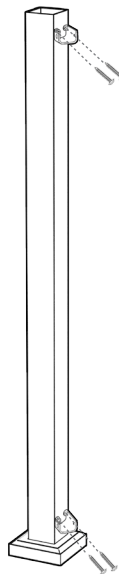
22 ½° Bracket Holes



2

Attach Brackets to Posts

- Attach the Bottom and Top Brackets to each Post using provided 1 ¼" pan head screws.

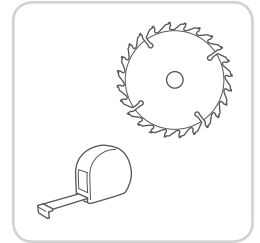
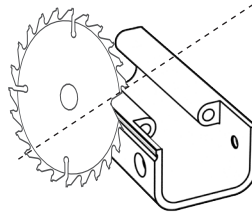


Site Cut Bracket Kits (3" Post and Composite Post Applications ONLY)

1

Cut Brackets to Desired Angle

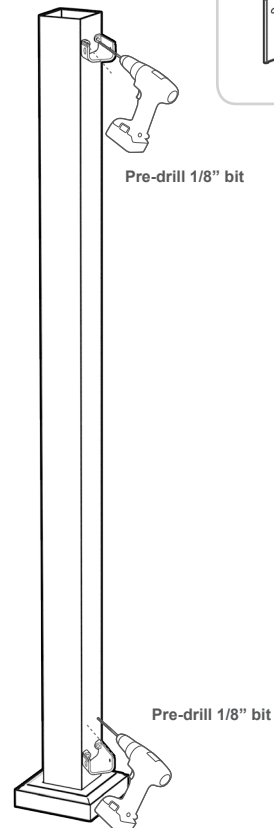
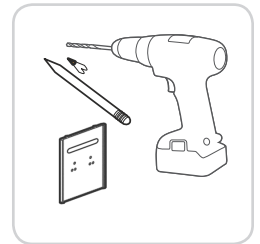
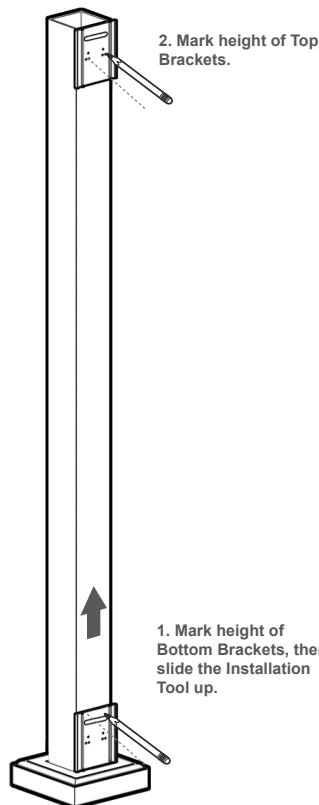
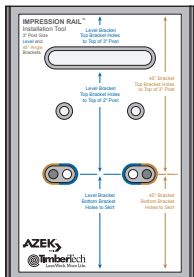
- Cut the Site Cut Brackets to the desired angle, not exceeding a 45° angle.
- Maintain a minimum of 1/4" of screw chase on both sides of the Bracket.



2

Pre-Drill Posts for Brackets

- Using the Impression Rail Installation Tool, mark the height of the hole locations. Exact hole locations will need to be marked using the Site Cut Brackets.
- Pre-drill the Post through the marked locations. Start by drilling perpendicular to the Post and slowly lean the drill bit to the desired angle of the railing.



Installing Impression Rail™ Site Cut Angled Brackets

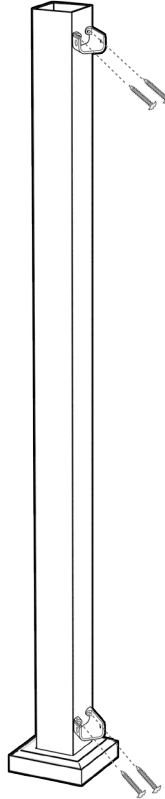


Site Cut Bracket Kits (3" Post and Composite Post Applications ONLY)

3

Attach Brackets to Posts

- Attach the Bottom and Top Brackets to the Post using provided 2" pan head screws.
- Longer or shorter screws may be required based on the angle and cut of the Bracket.

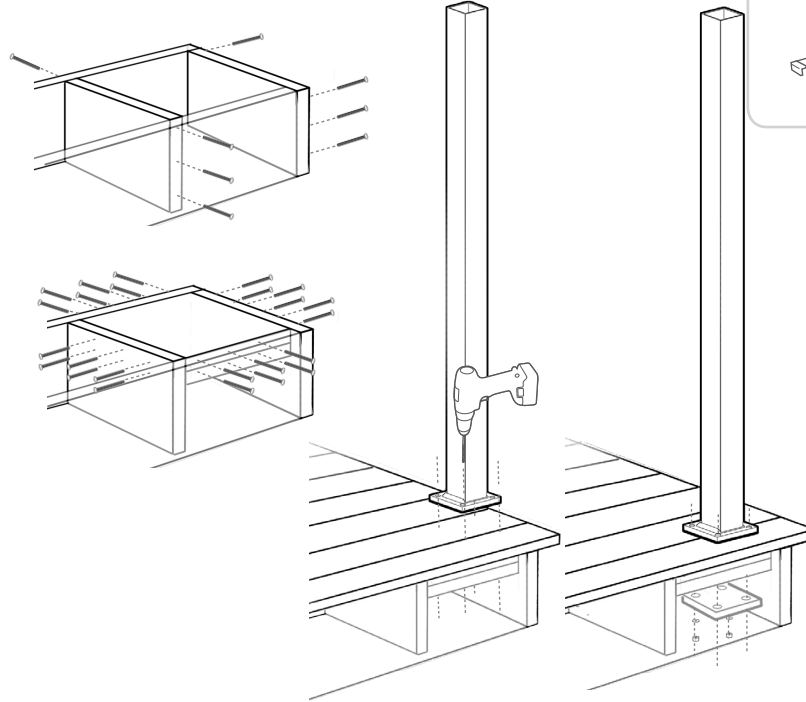


1

Install Posts

- Determine Post locations.
- For deck applications, install 2 pieces of 2x8 (min.) blocking.
- Drill 3/8" holes through decking and blocking, matching the bolt hole pattern on the Posts.
- Position and secure posts using 3/8" x 6" bolts, mounting plate, washers, and nuts.

ENSURE Posts Are Plumb.
Additional Washers May Be Required.

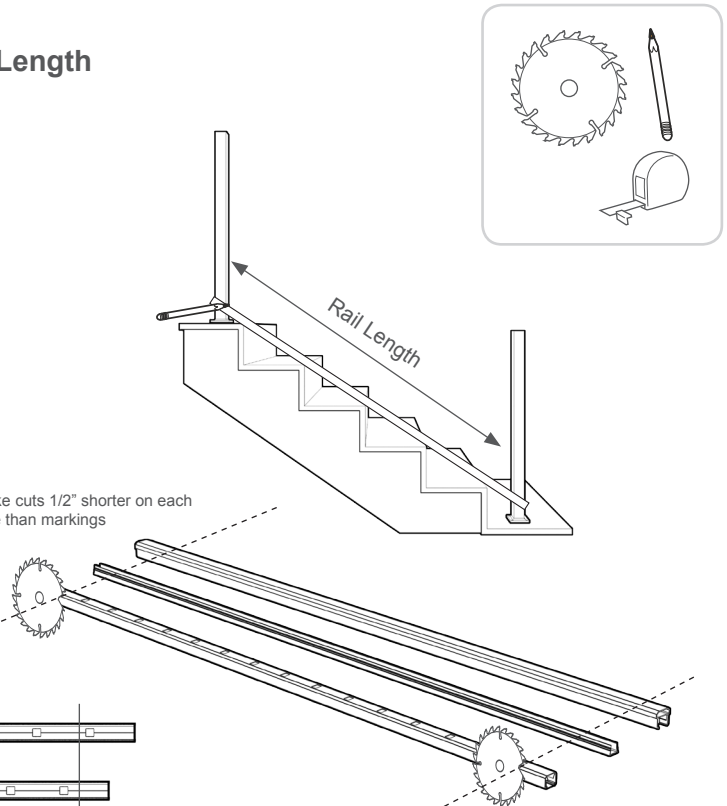
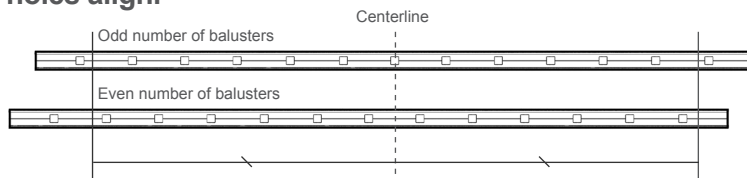


2

Cut Top Rail, Insert, and Bottom Rail to Length

- Place Bottom Rail on stair treads to determine stair angle. Position rail to maximize space between the last hole at each end. Mark length and angle of rail at the post.
- Cut Bottom Rail 1/2" shorter than marks on each side, cutting to the same angle as the stair to allow the rail to fit in the Bottom Brackets.
- Using the Bottom Rail as a guide, cut the Top Rail and Insert to the length and angle of the Bottom Rail, making sure the baluster holes align.

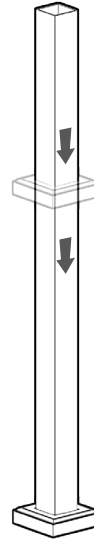
Make cuts 1/2" shorter on each side than markings



3

Install Skirts

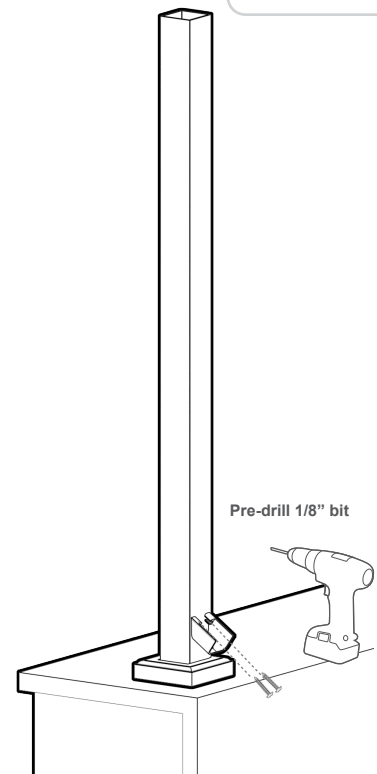
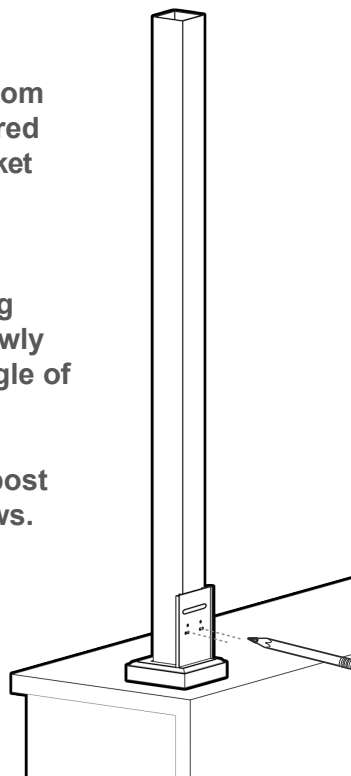
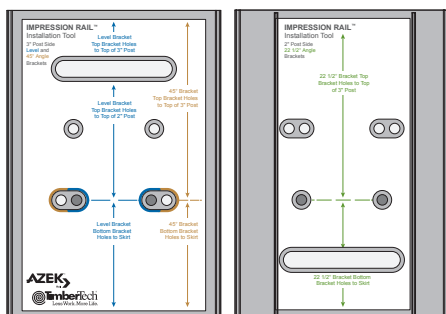
- Slide Skirts over Posts.



4

Install Bottom Brackets to Posts

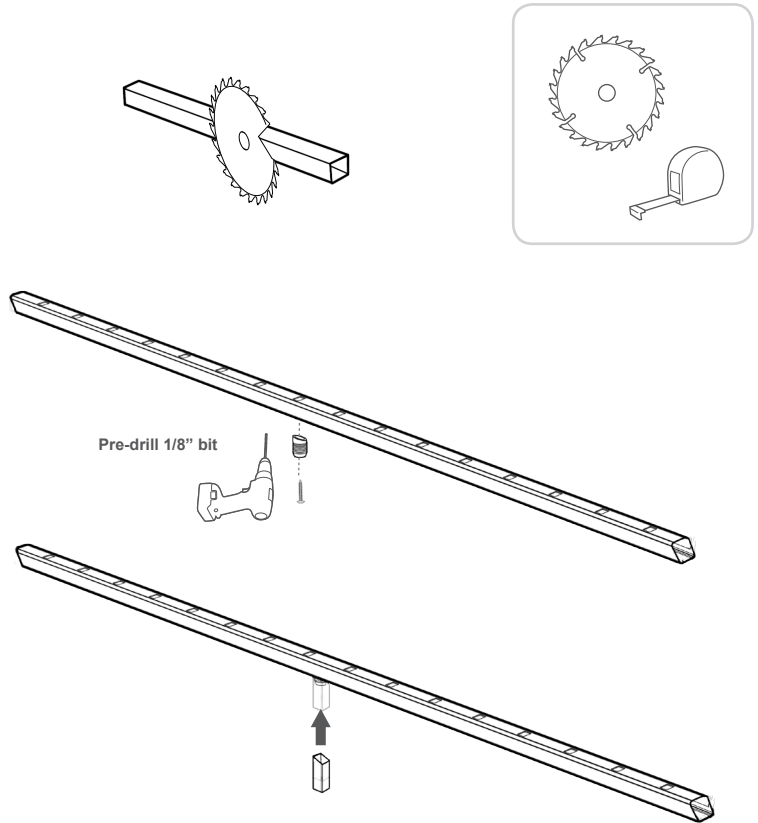
- Place Impression Rail Installation Tool directly on the Skirt, and mark the horizontal location of the Bottom Bracket holes with a pencil.
- With the cut Bottom Rail and Bottom Rail Brackets, determine the desired vertical location of the Bottom Bracket holes.
- Pre-drill the Post through the marked locations. Start by drilling perpendicular to the Post and slowly lean the drill bit to the desired angle of the railing.
- Attach Bottom Brackets to each post using provided 1" pan head screws.



5

Attach Foot Block to Bottom Rail

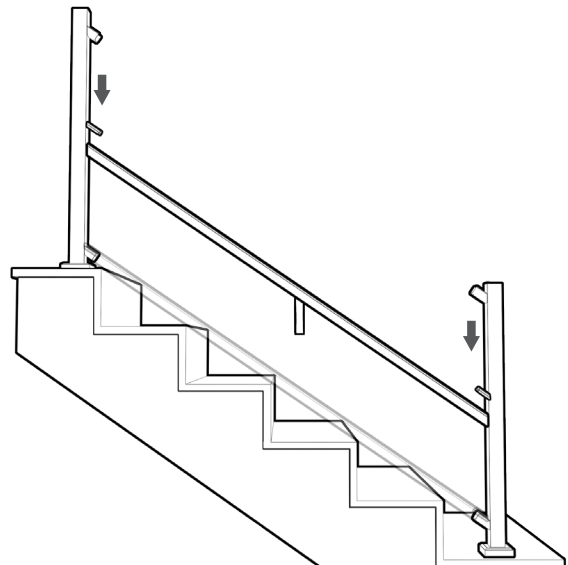
- Applications shorter than 72" require 1 Foot Block at the center of the rail, while applications longer than 72" require 2 Foot Blocks, evenly spaced.
- Cut the provided 10" Foot Block to the desired length and angle of railing.
- Pre-drill the center of the underside of the Bottom Rail with an 1/8" Drill Bit.
- Attached the Stair Foot Block Connector to the underside of the Bottom Rail using the provided 1" pan head screw.
- Secure the cut Foot Block by pressing it onto the Foot Block Connector.



6

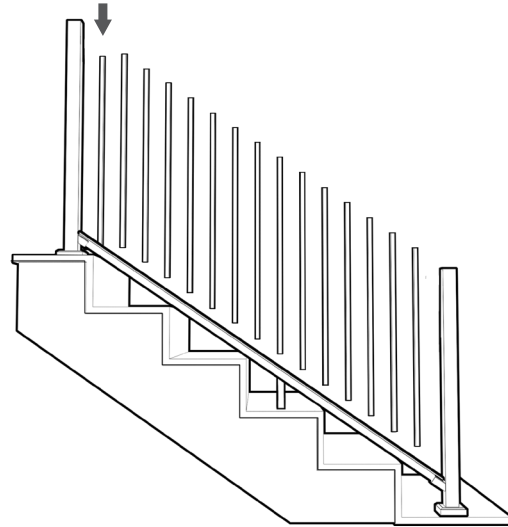
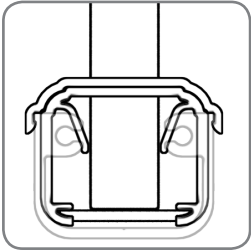
Install Bottom Rail in Bottom Rail Bracket

- Place Bottom Rail in Bottom Brackets.
- Snap Covers over Bottom Rail.



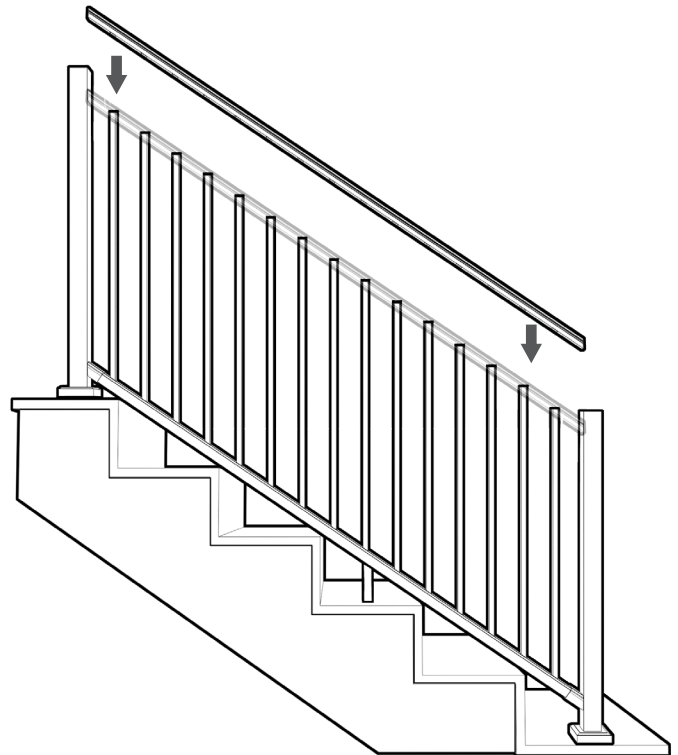
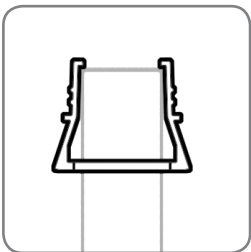
7 Install Balusters into Bottom Rail

- Snap Balusters into Bottom Rail



8 Place Insert on Balusters

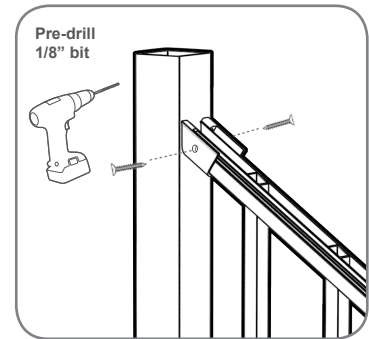
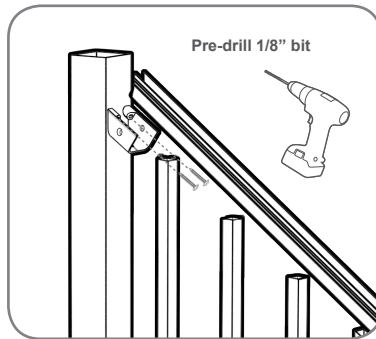
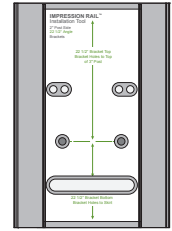
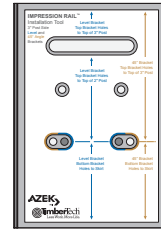
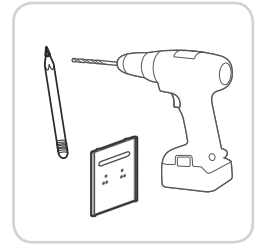
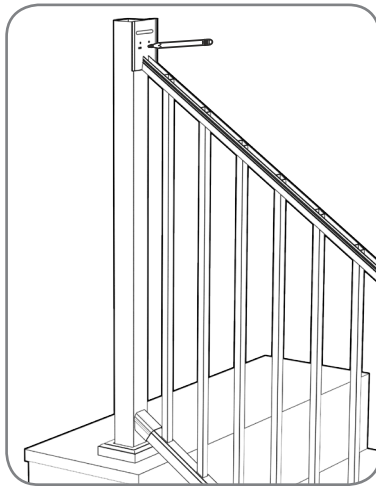
- Align punched holes in the Insert with the balusters and press the Insert onto the baluster until the baluster reach the stop on the Insert.



9

Install Top Brackets onto Posts

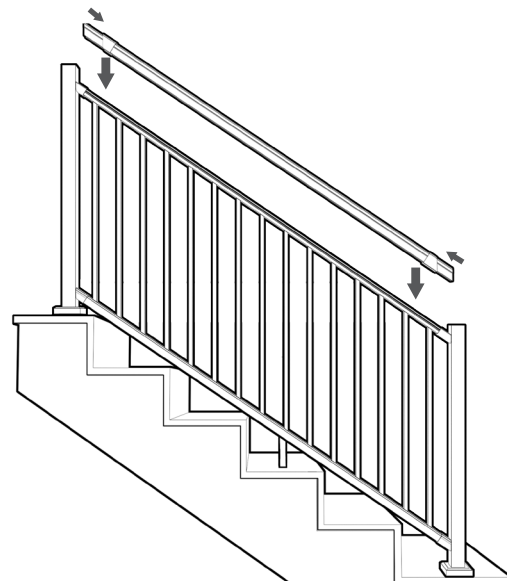
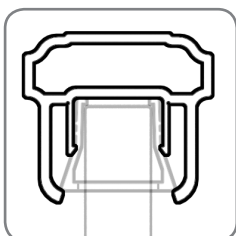
- Place Impression Rail Installation Tool near the top of the Post and mark the horizontal location of the Top Bracket holes with a pencil.
- With the Insert and Top Rail Brackets installed, determine the desired vertical location of the Top Bracket holes.
- Moving the Insert to the side, proceed to pre-drill the Post through the marked locations. Start by drilling perpendicular to the post and slowly lean the drill bit to the desired angle of the railing.
- Attach Top Brackets to each Post using provided 1" pan head screws.



10

Place Top Rail on Insert

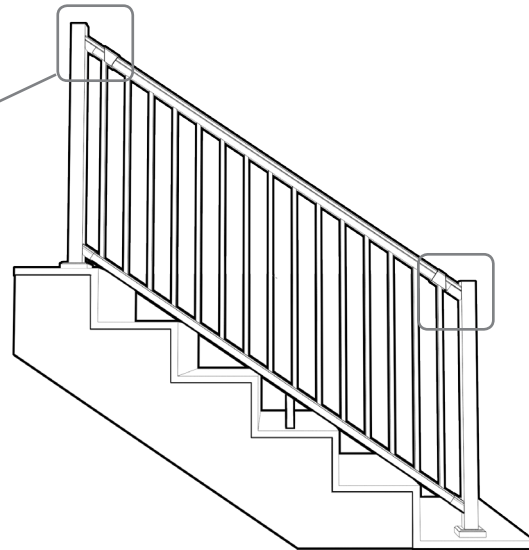
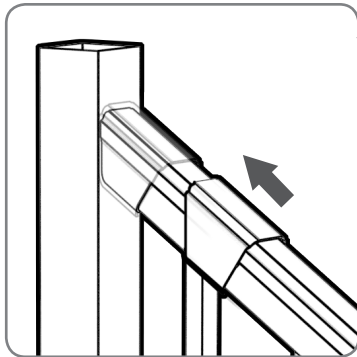
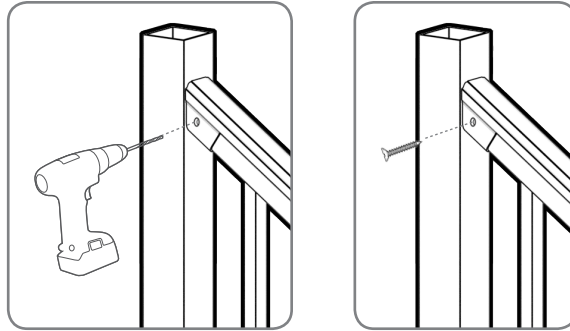
- Slide the Top Bracket Covers onto each end of the Top Rail.
- Place the Top Rail on the Insert and inside the Top Brackets.
- Snap the Top Rail over the Insert, making sure the Top Rail fully engages the Insert.



11

Fasten Bracket to Top Rail and Install Top Bracket Cover

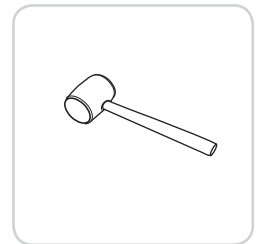
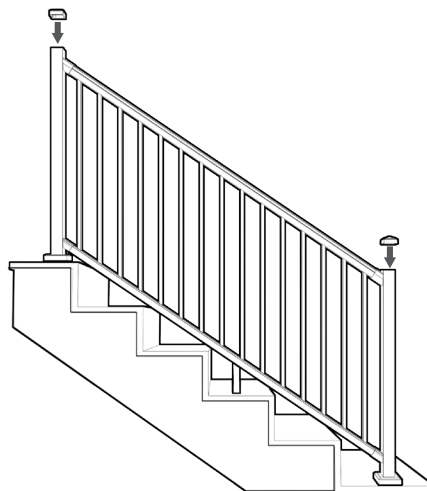
- Using the holes on the side of the Top Brackets, pre-drill 1/8" holes into the Top Rail on both sides.
- Fasten both Top Brackets to Top Rail using provided 3/4" flat head screws.
- Slide the Top Bracket Covers on each end over to cover the Top Rail ends and the Top Brackets.



12

Install Post Caps

- Use a Rubber Mallet to secure the Post Caps onto the Posts.





CPG Building Products LLC
894 Prairie Avenue • Wilmington, OH 45177
www.timbertech.com • 1.800.307.7780
www.AZEK.com • (877) ASK-AZEK (877) 275-2935

TIMBERTECH.COM
AZEK.COM