TREX® SIGNATURE® STAIR RAILING
Installation Instructions

BRACKET HARDWARE - STAIR APPLICATIONS
(INCLUDING STAIR SWIVEL BRACKETS, STAIR CROSSOVER BRACKET, AND COMPOUND SWIVEL BRACKETS)
TREX SIGNATURE

FIXED BRACKET - STAIR HARDWARE
AA. Bottom Stair Bracket and Cover - Lower Rail
BB. Top Stair Bracket and Cover - Lower Rail
CC. Fastener Pack
DD. Bottom Stair Bracket and Cover - Upper Rail
EE. Top Stair Bracket and Cover - Upper Rail

SWIVEL BRACKET - STAIR HARDWARE
FF. Swivel Top Rail Bracket and Cover - Stair
GG. Swivel Bottom Rail Bracket and Cover - Stair
HH. Fastener Covers
II. Fastener Pack

COMPOUND SWIVEL BRACKET - STAIR HARDWARE
JJ. Compound Swivel Top Rail Bracket and Cover - Stair
KK. Compound Swivel Bottom Rail Bracket and Cover - Stair
LL. Fastener Covers
MM. Fastener Pack

SWIVEL CROSSOVER BRACKET KIT - STAIR HARDWARE
NN. Swivel Crossover Bracket - Stair
OO. Post-to-Bracket Fasteners

NOTE: Construction methods are always improving. Please ensure you have the most up-to-date installation instructions by visiting: trex.com
**TREX® SIGNATURE® STAIR RAILING**
Installation Instructions

**HOW TO INSTALL STAIR POSTS AND STAIR RAILING**
**TREX SIGNATURE**

**IMPORTANT NOTES:**
- FOR A 6’ OR 8’ STAIR RAIL, POST TO POST SPAN WILL BE LESS THAN 6’ OR 8’. PRIOR TO INSTALLING STAIR POSTS CALCULATE POST TO POST SPAN USING A MAXIMUM STAIR RAIL LENGTH REQUIRED AND THE ANGLE (32°-37°) AT WHICH THE STAIR RAILS WILL BE INSTALLED. DO NOT INSTALL STAIR POSTS AT 6’ OR 8’ SPAN, AS STAIR RAILINGS WILL THEN BE TOO SHORT.
- TREX SIGNATURE POSTS CANNOT BE USED WITH TREX SIGNATURE TRADITIONAL OR TREX SIGNATURE COCKTAIL STAIR DESIGNS, ONLY PRESSURE-TREATED POST/POST SLEEVES CAN BE USED. REFER TO DETAILED INSTRUCTIONS FOR MORE INFORMATION.
- All Trex Signature stair installations require the use of 53” (134.6 cm) stair post, measured and cut to appropriate length if required.
- If crossover stair post is required, use stair post (again cut to appropriate length if required) and use swivel crossover bracket.
- Trex Signature Stair fixed brackets are designed to work only with stair slopes of 32°-37°.
- For smaller (less than 32°) or larger angles (greater than 37°), use the Trex Signature Stair Swivel brackets.
- Trex Signature Compound swivel stair brackets are designed for flared stair designs.
- At all final end post configurations, top stair rail will need to be measured (making sure balusters line up vertically) and cut.
- For odd span lengths, both bottom and top stair rails will need to be measured (making sure balusters line up vertically) and cut. Also, ensure that balusters are spaced with equal distance on each side of the post.
- Rails that do not require cutting must be oriented in the correct direction to ensure balusters are spaced properly when installed in brackets. On both bottom and top stair railings, baluster hole closest to the end of each stair rail is to be installed at the top of the stair section. Ensure that both bottom and top rails are correct and balusters line up vertically before INSTALLING.
- Foot Blocks for stairs are sold separately and recommended for use in Signature Cocktail and Signature Traditional applications.

**Installing Standard Trex Signature Stair Posts, Trex Signature Stair Crossover Posts, or Pressure-treated Post, Post Sleeves and Skirts**

1. Make sure 53” (135.6 cm) posts are used for all stair posts.
2. If Trex Signature stair posts are used, install at nose of stair tread directly under required blocking. See Trex Signature horizontal post instructions.

**Installing Pressure-Treated Posts**
- PLEASE REFER TO LOCAL BUILDING CODE REQUIREMENTS PRIOR TO ATTACHING PRESSURE TREATED POSTS.
- PRESSURE TREATED POSTS MUST BE INSTALLED ON INSIDE OF STAIR STRINGER AND AT NOSE OF STAIR TREAD.
- POST TO POST SPAN WILL BE LESS THAN 6’ OR 8’. PRIOR TO INSTALLING POSTS CALCULATE POST TO POST SPAN USING A MAXIMUM RAIL LENGTH REQUIRED AND THE ANGLE (32°-37°) AT WHICH THE RAILS WILL BE INSTALLED. DO NOT INSTALL STAIR POSTS AT 6’ OR 8’ SPAN, AS STAIR RAILINGS WILL THEN BE TOO SHORT.
- In most cases, a post and post sleeve longer than 39” (991 mm) will be needed on the lower section of stair rail to accommodate stair angle.
ATTACHING FIXED STAIR BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES
TREX SIGNATURE

NOTES:
» All Trex Signature fixed stair brackets work ONLY with stair slopes of 32°-37°.
» Illustrations shown are representations when using Trex Signature post, but same rules apply if using pressure-treated posts and post sleeves.
» Use a clamp to help hold stair brackets in place while fastening with screws.

IMPORTANT NOTE:
» BEFORE ATTACHING ANY UPPER BRACKETS MAKE SURE PROPER RAILING HEIGHTS ARE ACHIEVED. RAILING HEIGHTS AND UPPER BRACKET HEIGHTS MAY NEED TO BE ADJUSTED, HOWEVER, DO NOT REDUCE HEIGHTS BASED ON YOUR RAILING CODE REQUIREMENTS. MEASURE CAREFULLY AS DIMENSION HEIGHTS MAY NEED TO BE ADJUSTED!

1. Lay bottom stair rail on steps beside posts. Position bottom rail at least 1” (2.5 cm) above nose of stair tread.

Tip: Use a 1” (2.5 cm) deck board as a spacer board and clamp rails to post. Mark where lower brackets are to be attached to both posts. Mark at underside of railing location.

Installing Lower Fixed Stair Brackets

2. Center lower stair bracket on post above the marked line and attach using two self-tapping screws (provided). In some cases it may be difficult to attach the stair bracket on the lower stair post. A 90° cordless drill is recommended to attach screws in this area.

3. Position bottom stair rail along the nose of the stair treads. Ensure that before cutting, balusters holes are centered in between the posts and also allow for clearance for attachment to brackets. On top stair post location, mark UNDERSIDE of lower rail. On bottom stair post location mark TOPSIDE of lower rail at angled intersection of the bracket.

How to Measure Bottom Stair Railing (WHEN REQUIRED)

4. Cut each end of the bottom stair rail, rail insert, and bottom rail cover 1/4” (0.6 cm) shorter than the mark on each end to allow for fit into bottom stair rail brackets.

NOTE: Railing does not need to be cut at angle. Brackets are designed to allow for railing to be installed with standard straight cut.
ATTACHING FIXED STAIR BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

5. Attach “flat” bottom stair rail cover to bottom stair rail. Align cover on one side of the bottom rail in slot on side of rail. Then starting from one end of rail snap cover onto opposing slot working down the length of the rail. In some cases, GENTLE tapping with a rubber mallet may facilitate fastening.

Attaching Foot Block (where recommended)
Recommended for all spans over 6’ for Signature Cocktail and Signature Traditional applications).

6. Temporarily set bottom rail in bottom brackets, and place foot block towards the nose of the stair tread along the side of the bottom rail. Mark location of angle on foot block and cut on mark. Then place foot block under the center of the bottom rail. Mark placement location of the base. Remove lower rail.

7. Place base (smaller side facing down) on decking surface. Pre-drill using a 3/16” bit. Attach base of foot block using one screw at an angle through base and into decking.

8. After attached, use a rubber mallet along with scrap piece of wood to tap foot block until it locks into place.

9. Set bottom stair rail into bottom stair rail brackets. Attach bottom stair rail to bottom stair bracket using two self-tapping screws (provided) on each side of bracket.

Installing Upper Fixed Stair Brackets and Measuring Upper Rail

IMPORTANT NOTE:
BEFORE CUTTING ANY TOP RAILS, MAKE SURE THAT ALL BALUSTER HOLES LINE UP PARALLEL WHEN MEASURING!

10. Place two balusters into lower rail at each end closest to post.
ATTACHING FIXED STAIR BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

TREX SIGNATURE

11. Position top stair rail onto balusters ensuring balusters are fully seated in top rail (position to side of post) and ENSURE that balusters are parallel with post.

12. Mark a light line on posts at UNDERSIDE of rail to show the location of the fixed stair brackets.

13. Remove upper stair rail and center upper stair fixed bracket on post above the marked line and attach using two self-tapping screws (provided).

14. On top stair post location, mark UNDERSIDE of upper rail. On bottom stair post location mark TOPSIDE of upper rail at angled intersection inside the bracket.

**Cutting Top Stair Rail Cover, and Attachment of Top Stair Rail Cover**

15. Cut each end of top stair rail along with rail insert 1/4” (0.6 cm) shorter than mark to allow for fit into top stair rail bracket.

**NOTE:** Railing does not need to be cut at angle. Brackets are designed to allow for railing to be installed with standard straight cut.

16. Mark and cut top rail cover same length as top rail for all top rail configurations.
ATTACHING FIXED STAIR BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

TREX SIGNATURE

17. Attach “crowned” upper stair rail cover to upper stair rail by aligning cover on one side of rail. Then starting from one end of stair rail, snap cover onto opposing slot working down length of stair rail. GENTLE tapping with a rubber mallet may facilitate the fastening.

Installing Balusters into Bottom Stair Rail

18. Place balusters into holes in lower stair rail by snapping fully into place. In some cases, GENTLE tapping with a rubber mallet may facilitate fastening.

21. Attach corresponding bracket covers over opening in upper and bottom rails.

22. Attach provided post skirt to bottom of posts when using Trex Signature posts.

19. Working from one end of upper stair rail, snap balusters into upper stair rail working down length of rail.

20. Attach top stair rail to top stair bracket (all types) using two self-tapping screws (provided) on each side of stair bracket.

23. Attach post caps to Trex Signature posts (use of rubber mallet may be required for secure attachment).


Attachment of Stair Bracket Covers, Skirts, and Caps

NOTE: Construction methods are always improving. Please ensure you have the most up-to-date installation instructions by visiting trex.com.
ATTACHING STAIR SWIVEL/COMPOUND SWIVEL BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES
TREX SIGNATURE

NOTES:
» Illustrations shown are representations when using Trex Signature posts, but same rules apply if using pressure-treated posts and post sleeves.
» Use a clamp to help hold stair brackets in place while fastening with screws.

IMPORTANT NOTE:
» BEFORE ATTACHING ANY UPPER BRACKETS, MAKE SURE PROPER RAILING HEIGHTS ARE ACHIEVED. RAILING HEIGHTS AND UPPER BRACKET HEIGHTS MAY NEED TO BE ADJUSTED, HOWEVER, DO NOT REDUCE HEIGHTS BASED ON YOUR RAILING CODE REQUIREMENTS. MEASURE CAREFULLY AS DIMENSION HEIGHTS MAY NEED TO BE ADJUSTED!

1. Lay bottom stair rail on steps beside posts. Position bottom rail at least 1” (2.5 cm) above nose of stair tread.

Tip: Use a 1” (2.5 cm) deck board as a spacer board and clamp rails to post. Mark where lower brackets are to be attached to both posts. Mark at underside of railing location.

Installing Lower Stair Swivel and Compound Swivel Brackets

2. Center lower stair swivel bracket on post above the marked line and attach using four self-tapping screws (provided). In some cases it may be difficult to attach the stair bracket on the lower stair post. A 90° cordless drill is recommended to attach screws in this area.

3. With brackets in correct swivel locations, measure distance from inside of swivel bracket to inside of swivel bracket. Ensure that before cutting, balusters holes are parallel and centered in between the posts and also allow for clearance for attachment to brackets. Mark bottom stair rail at each intersection.

How to Measure Bottom Stair Railings (WHEN REQUIRED)

Cutting Bottom Stair Rail, Bottom Stair Rail Cover, and Attachment of Bottom Stair Rail Cover

4. Cut each end of the bottom rail, rail insert, and bottom rail cover at the mark on each end to allow for fit into bottom stair rail brackets.

NOTE: Railing does not need to be cut at angle. Brackets are designed to allow for railing to be installed with standard straight cut.
ATTACHING STAIR SWIVEL/COMPOUND SWIVEL BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

5. Attach “flat” bottom stair rail cover to bottom stair rail. Align cover on one side of the bottom rail in slot on side of rail. Then starting from one end of rail snap cover onto opposing slot working down the length of the rail. In some cases, GENTLE tapping with a rubber mallet may facilitate fastening.

6. Attaching Foot Block (where recommended)
See instructions on page 4.

7. Set bottom stair rail into bottom stair rail brackets. Attach bottom stair rail to bottom stair bracket using two self-tapping screws (provided) on each side of bracket.

Installing Upper Brackets and Measuring Upper Stair Rail–Stair Swivel and Compound Swivel

IMPORTANT NOTE: BEFORE CUTTING ANY TOP RAILS MAKE SURE THAT WHEN MEASURING, ALL BALUSTER HOLES LINE UP PARALLEL!

8. Place two balusters into lower rail at each end closest to post.

9. Position top stair rail onto balusters ensuring balusters are fully seated in top rail (position to side of post) and ENSURE that balusters are parallel with post.

Installing Upper Stair Swivel and Compound Swivel Brackets

10. Clamp brackets to side of rail with brackets in correct swivel location/angle (this is important to ensure correct location of swivel brackets).

11. Mark a light line on posts at UNDERSIDE of where swivel bases (positioned correctly) meets the posts.
ATTACHING STAIR SWIVEL/COMPOUND SWIVEL BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

TREX SIGNATURE

12. Remove upper stair rail from balusters and center upper stair swivel bracket on post above the marked line and attach using four self-tapping screws (provided).

13. Cut top rail along with rail insert to the measurement between the top stair swivel brackets. For standard post to standard post configurations this would be same dimensions as that of the bottom stair rail.

14. Mark and cut top rail cover same length as top rail for all top rail configurations.

15. Attach “crowned” upper stair rail cover to upper stair rail by aligning cover on one side of rail. Then starting from one end of stair rail, snap cover onto opposing slot working down length of stair rail. GENTLE tapping with a rubber mallet may facilitate fastening.

Installing Balusters into Bottom Stair Rail

16. Place balusters into holes in lower stair rail by snapping fully into place. In some cases, GENTLE tapping with a rubber mallet may facilitate fastening.

Attaching Upper Stair Rails

17. Working from one end of upper stair rail, snap balusters into upper stair rail working down length of rail.

18. Attach top stair rail to top stair bracket (all types) using two self-tapping screws (provided) on each side of stair bracket.
ATTACHING STAIR SWIVEL/COMPOUND SWIVEL BRACKETS AND RAILS TO POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/CONTINUED

ATTACHING CROSSOVER SWIVEL BRACKETS ON SIGNATURE POSTS

1. Follow previous instructions for installation of lower stair rail into either fixed or swivel brackets.
2. Place two balusters into lower stair rail at each end of post.
3. Position top stair rail onto balusters ensuring balusters are fully seated in top rail (position to side of post) and **ENSURE** that balusters are parallel with post.
4. Follow previous instructions marking and installation of either fixed or swivel bracket where this is required.

**Attaching Stair Crossover Swivel Bracket to Post**

5. Insert stair crossover swivel bracket into post.

**NOTE:** Keep the bracket cover on when inserting this into post, this will cover the screw attachment area.
ATTACHING CROSSOVER SWIVEL BRACKETS TO POSTS/CONTINUED

TREX SIGNATURE

6. Determine location/height of the stair crossover swivel bracket by aligning the angle of this with the fixed brackets (or compound swivel brackets) already installed (posts can be cut if necessary).

7. Once location/height is determined, center and pre-drill two holes (using a drill bit slightly smaller than that of self-tapping screw diameter) on opposite sides of post, approx. 1/4” (0.6 cm) from top of post. Drill through the post and into the stair crossover swivel bracket on each side.

NOTE: Slightly countersink pre-drilled holes to allow for flat head screw to seat flush on the post. This will allow cover to fit over screw heads.

8. Attach stair crossover swivel bracket to post with two self-tapping screws (provided). Slide cover over post to hide screws.

ATTACHING RAILS IN CROSSOVER POST APPLICATIONS

TREX SIGNATURE

Cutting Top Stair Rail and Insert
For Stair Post-to-Stair Crossover Post Configuration

When Using Fixed Stair Brackets:

9a. Top stair rail along with rail insert must be cut differently on each side of the rail. Railing side that attaches to standard post should be cut 1/4” (0.6 cm) shorter than the mark to allow for fit into top rail bracket. Railing side that attaches to the crossover post should be cut directly on the mark to allow for fit into the crossover post bracket.

When using Upper Stair Swivel and Stair Crossover Swivel Brackets:

9b. When going from standard stair post to stair crossover post, measurement must be taken from inside of top horizontal stair swivel bracket to inside lip of stair crossover bracket. Crossover post will need to be modified to have swivel crossover bracket installed.
ATTACHING RAILS IN CROSSOVER POST APPLICATIONS CONTINUED

TREX SIGNATURE

Cutting Top Stair Rail and Rail Insert
For Stair Crossover Post-to-Stair Crossover Post Configuration

10. Cut each end of the top stair rail along with rail insert on the mark line to allow for fit into the crossover post bracket on each side.

Cutting Top Stair Rail Cover, and Attachment of Top Stair Rail Cover

11. Mark and cut top rail cover same length as top rail for all top rail configurations.

Installing Balusters into Bottom Stair Rail

13. Place balusters into holes in lower stair rail by snapping fully into place. In some cases, GENTLE tapping with a rubber mallet may facilitate fastening.

Attaching Upper Stair Rails

14. Working from one end of upper stair rail, snap balusters into upper stair rail working down length of rail.

15a. For stair post-to-post configuration, attach top stair rail to top stair bracket (all types) using two self-tapping screws (provided) on each side of stair bracket.

15b. For stair crossover post configuration, fasten upper stair rail to swivel crossover post bracket by installing screws diagonally through crossover stair bracket into upper rail using two self-tapping screws (provided) on each side.

12. Attach “crowned” upper stair rail cover to upper stair rail by aligning cover on one side of rail. Then, starting from one end of stair rail, snap cover onto opposing slot working down length of stair rail. GENTLY tapping with a rubber mallet may facilitate fastening.
ATTACHING RAILS IN Crossover POST APPLICATIONS/CONTINUED

TREX SIGNATURE

Attachment of Skirts and Caps
16. Attach provided post skirt to bottom of posts when using Trex Signature posts.

17. Attach post caps to Trex Signature posts (use of rubber mallet may be required for secure attachment).

18. Attach post caps to post sleeves using external grade PVC construction adhesive (apply adhesive on the inside self-centering/corner tabs).

HOW TO INSTALL COCKTAIL STAIR RAILING
TREX SIGNATURE

» THE DECK BOARD USED IN TREX SIGNATURE COCKTAIL RAILING WILL NEED TO TERMINATE AT THE TOP OF THE POST AS SHOWN ABOVE. THE DECK BOARD WILL HAVE TO BE TOENAILED INTO THE SIDE OF THE POST IN THESE AREAS USING 2 APPROPRIATE COMPOSITE DECKING SCREWS – PRE-DRILLING IS RECOMMENDED.

» Do Not use Enhance for top board.

Installing Pressure-treated Posts, Post Sleeves, and Skirts to Use with Trex Signature Railing
1. See instructions on page 2.

Installing Brackets
2. Follow previous stair instructions for the installation of desired brackets, making sure that all dimensions are calculated before installation, and ensuring deck board is placed in correct location.
See instructions on pages 3 and 4 for fixed stair brackets and 7-10 for swivel stair brackets.

Cutting Bottom Stair Rail and Cover
3. See instructions on page 3 for fixed stair brackets and pages 7-9 for swivel stair brackets.

Installing Foot Block (where recommended)
4. See instructions on page 4.

Attachment of Bottom Stair Rail
5. See instructions on page 4 for fixed stair brackets and page 8 for swivel stair brackets.

How to Measure Top Stair Railings (WHEN REQUIRED)
6. See instructions on page 4 for fixed stair brackets and page 8 for swivel stair brackets.
HOW TO INSTALL COCKTAIL STAIR RAILING/CONTINUED
TREX SIGNATURE

Cutting Top Stair Rail and Rail Insert When using Fixed Stair Brackets

7a. Cut each end of top stair rail along with rail insert 1/4” (0.6 cm) shorter than mark to allow for fit into top stair rail bracket. **NOTE: THE TOP RAIL WILL NEED TO BE CUT AT APPROPRIATE ANGLE ON THE END OF THE RAIL THAT CONNECTS TO THE UPPER FIXED BRACKET, SO THAT WHEN THE RAIL IS INSTALLED IT SITS FLUSH WITH THE END OF THE BRACKET AS SHOWN.**

Cutting Post and Post Sleeve and Attaching Deck Board to Top Rail

11. Cut post and post sleeves at proper angle so these are flush with the top of the top brackets and/or top rail cover. BE CAREFUL NOT to CUT brackets.

Cutting Top Stair Rail Cover, and Attachment of Top Stair Rail Cover

8. **See instructions on page 9.**

Installing Balusters into Bottom Stair Rail

9. **See instructions on page 9.**

Attaching Upper Stair Rails

10. **See instructions on page 9.**

NOTE: Pre-drilling before attachment is recommended.
14. Use scarf cut for posts where two deck boards meet.

NOTES:
» Leave 1/8” (3 mm) gap between deck boards.
» Deck boards can overhang end of last post maximum 1/2” (13 mm).

15. Where deck board terminates at top of post horizontal deck board, PREDRILL and toenail two approved composite deck screws as shown into post, being careful to avoid hitting stair bracket.

Attachment of Bracket Covers and Skirts

NOTE: Top Bracket Covers are not attached in this configuration.
HOW TO INSTALL TRADITIONAL STAIR RAILING/CONTINUED

TREX SIGNATURE

Cutting Top Stair Rail and Rail Insert When Using Fixed Stair Brackets
8a. See instructions on page 5.

Cutting Top Stair Rail and Rail Insert When Using Swivel Compound Stair Brackets and Measuring Upper Rail
8b. See instructions on page 9.

Installing Balusters into Bottom Stair Rail When Using Fixed Stair
9a. See instructions on page 5.

Installing Balusters into Bottom Stair Rail When Using Swivel and Compound Swivel Brackets
9b. See instructions on page 9.

Attaching Upper Stair Rails When Using Fixed Stair Brackets
10a. See instructions on page 6.

Attaching Upper Stair Rails When Using Swivel Compound Stair Brackets
10b. See instructions on page 9.

Attaching 2 x 4 to Top Rail

11. Place 2 x 4 beside top rail. Mark and cut (both ends need to be cut on an angle for proper fit).

12. Place 2 x 4 on Trex Signature top stair rail.

13. Secure 2 x 4 to top rail using Trex Signature Cocktail Bracket (sold separately). Ensure that there is a bracket at each end of the railing section, then space brackets approximately every 24” and attach with 4 screws provided.

NOTE: Pre-drilling before attachment is recommended.

14. Pre-drill a pilot hole and toenail 2-1/2” (6.4 cm) screw at each end of 2 x 4 into post on back side of rail (side not facing decking).

Attachment of Lower Stair Bracket Covers, Skirts, and Caps Fixed Bracket
15a. See instructions on page 6.

Attachment of Lower Stair Bracket Covers, Skirts, and Caps Swivel or Compound Swivel Bracket
15b. See instructions on page 10.

NOTE: Top Bracket Covers are not attached in this configuration.