**Installation Instructions** 

# Trex®

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

TREX REVEAL®

#### 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



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#### BRACKET HARDWARE - STAIR APPLICATIONS (INCLUDING STAIR SWIVEL BRACKETS, STAIR CROSSOVER BRACKET, AND COMPOUND SWIVEL BRACKETS)/continued

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





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**NOTE:** Construction methods are always improving. Please ensure you have the most up-to-date installation instructions by visiting: **trex.com** 



#### HOW TO INSTALL REVEAL STAIR POSTS AND STAIR RAILING TREX REVEAL®

#### **IMPORTANT NOTES:**

- » ALL REVEAL 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.
- » REVEAL 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 REVEAL STAIR SWIVEL BRACKETS.
- » REVEAL COMPOUND SWIVEL STAIR BRACKETS ARE DESIGNED FOR FLARED STAIR DESIGNS.
- » IF INSTALLING STAIR RAILINGS AT EXACT SPAN LENGTHS OF 6' (1.8 M) OR 8' (2.4 M)AND USING POST TO POST CONFIGURATION, THE BOTTOM STAIR RAIL WILL NOT NEED TO BE CUT\*, BUT THE TOP STAIR RAIL WILL NEED TO BE MEASURED (MAKING SURE BALUSTERS LINE UP VERTICALLY) AND CUT.
- » IF INSTALLING STAIR RAILINGS AT EXACT SPAN LENGTHS OF 6' (1.8 M) OR 8' (2.4 M), AND USING CROSSOVER POST CONFIGURATION (SPANS FROM ONE CROSSOVER POST TO ANOTHER CROSSOVER POST), BOTH THE BOTTOM AND TOP STAIR RAILS WILL NOT NEED TO BE CUT\* IF THE ANGLE IS APPROXIMATELY 34°.
- » 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.

#### Installing Standard Reveal Stair Posts, Reveal 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 Reveal stair posts are used, install at nose of stair tread directly under required blocking. See Reveal horizontal post instructions on pages 5-7 for details.



 If pressure-treated post/ post sleeves are used, posts are to be installed to the inside of the last stair stringer (rails must be over decking surface). See pressuretreated post instructions on pages 5-7 for details.



<sup>\*</sup> 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 the 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.

**Installation Instructions** 

#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES

TREX REVEAL®

#### NOTES:

- » All Reveal fixed stair brackets work ONLY with stair slopes of 32°-37°.
- » Illustrations shown are representations when using Reveal 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!



 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. Recommend using a 90° cordless drill in this area if possible to attach screws.

#### Installing Lower Stair Swivel and Compound Swivel Brackets

#### NOTE: Picture reflects lower stair swivel bracket.



3. 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. Recommend using a 90° cordless drill in this area if possible to attach screws.



#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued

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#### **Installing Upper Fixed Stair Brackets**



 Measure up required dimension for 36" (91.4 cm) tall railing or 42" (106.7 cm) tall railing, from top of lower stair rail fixed bracket. Mark with light line.



5. Center upper stair fixed bracket on post **below** the marked line and attach using two self-tapping screws (*provided*).

#### Installing Upper Stair Swivel And Compound Swivel Brackets

 Measure up required dimension for 36" (91.4 cm) tall railing or for 42" (106.7 cm) tall railing, from top of lower stair rail swivel bracket. Mark with light line.





7. Center upper stair swivel bracket on post **below** the marked line and attach using four self-tapping screws (*provided*).

### NOTE: Upper bracket is not required on crossover post configurations.

## How to Measure Bottom Stair Railings (WHEN REQUIRED)

#### When Using Fixed Stair Brackets:



1a. 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. Mark bottom stair rail at each intersection.

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Installation Instructions

#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued

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When using Stair Swivel and Compound Swivel Brackets:



1b. 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.

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

#### When using Fixed Stair Brackets:



2a. 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. 6

# When using Stair Swivel or Compound Swivel Brackets:



2b. 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.

Attachment of Bottom Stair Rail Cover and Bottom Stair Rail to Brackets



3. 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, a **rubber mallet** may facilitate the fastening using **GENTLE** tapping.



#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued

TREX REVEAL®



4. 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.

#### How to Measure Top Stair Railings (WHEN REQUIRED):

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

#### When Using Fixed Stair Brackets:

5a. Place two balusters into lower rail at each end closest to post.





5b. Position top rail onto balusters (position to side of post) and ENSURE that balusters are parallel with post. Mark top stair rail at each intersection.

# When using Stair Swivel and Compound Swivel Brackets:

5c. Place two balusters into lower rail at each end closest to post.





5d. Position top rail onto balusters (position to side of post) and ENSURE that balusters are parallel with post. With brackets in correct swivel location, measure distance from inside of swivel bracket to inside of swivel bracket. Mark top stair rail at each intersection.

Have Questions? 1-800-BUY-TREX

Installation Instructions

#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued

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Attaching Stair Crossover Swivel Bracket to Post



6. 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.



7. 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.



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



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



#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued TREX REVEAL®

Cutting Top Stair Rail and Rail Insert Option 1: For Stair-Post-to-Stair-Post Configuration

#### When Using Fixed Stair Brackets:



10a. 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.

# When using Upper Stair Swivel and Compound Swivel Brackets:



10b. 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.

#### Cutting Top Stair Rail and Insert Option 2:

For Stair-Post-to-Stair-Crossover-Post Configuration

#### When Using Fixed Stair Brackets:



11a. 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:



11b. 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).

Installation Instructions

#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued

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Cutting Top Stair Rail and Rail Insert Option 3:

For Stair-Crossover-Post-to-Stair-Crossover-Post Configuration



12a. 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

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





14. 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. A **rubber mallet** may facilitate the fastening using **GENTLE** tapping.

#### Installing Balusters into Bottom Stair Rail

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





#### ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POST AND POST SLEEVES/continued TREX REVEAL®

#### **Attaching Upper Stair Rails**

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



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- 17a. 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.
- 17b. 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.
- NOTE: Pre-drilling is recommended (7/64" [0.28 cm] drill bit) for attachment of stair railing to stair bracket.

# Attachment of Stair Bracket Covers, Skirts, and Caps





- 18. Attach corresponding bracket covers over opening in upper and bottom rails.
- 19. Attach provided post skirt to bottom of posts when using Reveal posts.





- 20. Attach post caps to Reveal posts (use of **rubber mallet** may be required for secure attachment).
- 21. Attach post caps to post sleeves using external grade PVC construction adhesive.

#### Installation Instructions

#### NOTES

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