RAILING
TREX TRANSCEND RAILING

NOTES:

» TREX TRANSCEND RAILINGS ARE DESIGNED TO BE INSTALLED OVER THE DECKING FRAME OR ON INSIDE OF RIM JOIST. NOTCHING OF PRESSURE-TREATED POSTS OR POSTS INSTALLED ON OUTSIDE OF RIM JOIST ARE NOT ALLOWED.

» All Trex Transcend railing lengths are manufactured at ON CENTER dimensions (spanning from center of each post): 67-5/8” (1718 mm) for 6’ (1.83 m) on center, and 91-5/8" (2353 mm) for 8’ (2.44 m) on center. Note that railings are designed to be slightly longer that required to allow for very slight play in post placement – some minimal trimming may be required. IT IS VERY IMPORTANT TO MEASURE FIRST.

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PARTS

A. Crown or Universal
B. Universal
C. Trex railing support bracket (RSB)
D. TrexExpress™ Railing Assembly Template*
E. Rail gaskets
F. Balusters
G. Post sleeve cap*
H. Post sleeve skirt*
I. Post sleeve - 4” x 4” (102 mm x 102 mm) or 6” x 6” (152 mm x 152 mm) post sleeve)**
J. Trex decking
K. Trex fascia
L. Code-approved wood joist - 2” x 8” (51 mm x 203 mm)
M. Code-approved wood rim joist - 2” x 8” (51 mm x 203 mm) or larger
N. Adjustable foot block
O. Baluster spacer

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Baluster Options

- Standard
- Colonial
- Round Aluminum
- Square Aluminum

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Trex Transcend Glass Panel Parts List

P. Panel support molding
Q. Tempered glass panel*
R. Trex panel support molding spacer
S. Weatherstripping

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* Item not included in the Transcend railing kits.
** Both 4” x 4” (102 mm x 102 mm) and 6” x 6” (152 mm x 152 mm) post sleeves are designed to fit over 4x4 pressure-treated post.
TREX TRANSCEND
RAILING CONFIGURATIONS

**Standard Crown**

Cutting post sleeves is NOT required.
A. Pressure-treated post or Trex post mounts with Trex Transcend post sleeve
B. Crown rail
C. Universal bottom
D. Trex balusters
See page 40 for “How to Install Standard Railing”.

**Cocktail**

Post sleeves WILL NEED TO BE CUT.
A. Pressure-treated post with Trex Transcend post sleeve
   **NOTE:** Only for use with 4” x 4” (102 mm x 102 mm) post sleeve.
   » Trex post mounts cannot be used with Transcend cocktail design.
B. Deck board top rail. **NOTE:** Contour and Escapes cannot be used.
C. Universal top rail
D. Universal bottom
E. Trex balusters
See page 42 for “How to Install Cocktail Railing”.

**Traditional**

Cutting post sleeves is NOT required.
A. Pressure-treated post or Trex post mounts with Trex Transcend post sleeve
B. 2” x 4” (51 mm x 102 mm) lateral top rail
C. Universal top rail
D. Universal bottom
E. Trex balusters
See page 43 for “How to Install Traditional Railing”.

**Round Aluminum**

» Follow desired railing style instructions found above, substituting correct baluster spacer for type of baluster being used.
» Refer to detailed instructions for added steps when using round and square aluminum balusters. See page 44.

**Square Aluminum**

**Glass Panel**

Cutting post sleeves is NOT required.
A. Pressure-treated post with Trex Transcend post sleeve or Trex post mounts.*
B. Crown rail (use universal rail if building cocktail or traditional design with glass inserts)
C. Universal bottom
D. Tempered glass panel (NOT included in kit)
See page 45 for “How to Install Standard Glass Panel Railing”, page 47 for “How to Install Cocktail Style Glass Panel Railing” (**NOTE:** Trex Post Mounts cannot be used with this railing configuration), and page 48 for “How to Install Traditional Style Glass Panel Railing”.
**NOTE:** Glass panels are NOT recommended in stair applications.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL STANDARD RAILING
TREX TRANSCEND

Read all instructions BEFORE installation.

Important: Post sleeves are NOT to be cut for this design style.

Installing Pressure-Treated Posts

» Posts are to be installed 6’ (1.83 m) or 8’ (2.44 m) on center to accommodate appropriate railing length.

» Attach posts using 1/2” (130 mm) carriage bolts.

» Minimum joist size is 2” x 8” (51 mm x 203 mm).

» Top bolts must be 1” (25 mm) from tops of joists.

» Bottom bolts must be 5-1/8” (130 mm) from top bolts.

NOTE: Blocking can be added for extra strength.

Installing Post Sleeve Skirts and Post Sleeves

2. Slide post sleeve skirt over post and down to rest on decking surface. Slide post sleeve over post and position inside post sleeve skirt.

NOTE: Shims can be used to plumb post sleeves.

Installing Railing Support Brackets (RSBs)

Option 1: Without TrexExpress railing template

3a. Mark 5-1/2" (140 mm) and 35-1/16" (891 mm) from deck surface OR for 42" (1067 mm) height, mark 5-1/2” (140 mm) and 41-1/16” (1043 mm) from the deck surface.

3b. Place RSBs directly under marks, center on posts, and secure with 2” (51 mm) wood screws (provided with post sleeve). Place top RSBs flat side UP, bottom RSBs flat side DOWN.

Option 2: With TrexExpress railing template

3c. Place RSBs in template. Place top RSBs flat side UP, bottom RSBs flat side DOWN. Secure template on post with tape or rubber band, with bottom of template resting on post skirt.

3d. Secure RSBs with 2” (51 mm) wood screws (provided in railing kit) and remove template.

NOTES: Special steps are necessary when using 6” x 6” (152 mm x 152 mm) plastic TrexExpress template.

» Cut off 1/2” (13 mm) from the bottom (blue arrows up) of the tool BEFORE first use.

» Position top RSBs ONLY, 6”(152 mm) higher for 42” (1067 mm) rail height.

» Secure RSBs with 2-1/2” (64 mm) wood screws (provided with post sleeve) and remove template.
**HOW TO INSTALL STANDARD RAILING/CONTINUED**

**TREX TRANSCEND**

**Cutting Railings**

4. Measure between posts and cut rails to same length.

**NOTES:**

» If using optional rail gaskets, subtract 1/16” (1.5 mm) from each end.
» Attach baluster spacers to railing before cutting to allow for cleaner cut and less work.
» When measuring, cut equal lengths from each side of railing and baluster spacer to ensure equal spacing of balusters per each railing section.
» In some cases, the gasket can be attached before tightening railing to RSB.
» If gaskets are tight, use a small flat head screwdriver to compress tabs of gasket if they are stuck outside rail.

**Attaching Bottom Rail (Universal Rail), Adding Weep Holes, and Foot Block**

**NOTE:**

» FOOT BLOCKS COME WITH SPECIFIC INSTRUCTIONS ON HOW TO ATTACH THESE TO RAILINGS—ALSO REFER TO THESE INSTRUCTIONS AS WELL.

5a. Center foot block in universal rail channel or on bottom rail and attach. **DO NOT** extend foot block.

5b. Lift bottom rail so RSBs are in the channel and attach with self-tapping screws (provided).

5c. Center and drill 5/16” (8 mm) weep holes through bottom rail channel to allow for water drainage. Holes should be placed between first two balusters on each side and approx. 2’ (610 mm) spans along length of rail.

**NOTE:** To determine weep hole locations, temporarily place lower baluster spacer beside lower rail and mark inside of channel in locations accordingly.

5d. Telescope foot block down and screw through opposite sides. Place screw plugs.

**Placing Baluster Spacers and Balusters**

6. Cut baluster spacers the same length as rails, equally spaced so holes line up.

7. Snap baluster spacer into bottom rail. Place inverted baluster spacer on top of first baluster spacer. Place balusters in baluster spacer holes.

**Attaching Top Rail – Crown Rail**

8. Place crown rail on RSBs with balusters in rail channels. Attach top rail to RSB with two self-tapping screws (provided).

9. Slide baluster spacer up and snap into top rail. Place optional top rail gaskets on each end of rail.

**Attaching Post Caps**

10. Secure post caps with silicone or PVC adhesive.

**NOTE:** Clean-up any excess adhesive before drying.
HOW TO INSTALL COCKTAIL RAILING
TREX TRANSCEND

Important: ONLY use with 4” x 4” (102 mm x 102 mm) post and post sleeve. Cutting post and post sleeve ONLY apply to the Cocktail style railing.

1. Installing Pressure-Treated Posts
   See instructions on page 40.

Cutting Post and Post Sleeve
1a. Mark and cut post and post sleeve measuring from deck surface:
   » 36-3/16” (919 mm) for 36” (914 mm) height.
   » 42-3/16” (1072 mm) for 42” (1067 mm) height.

2. Installing Post Sleeve Skirts and Post Sleeves
   See instructions on page 40.

3. Installing Railing Support Brackets (RSBs)
   See instructions on page 40.

4. Cutting Railings
   See instructions on page 41.

5. Attaching Bottom Rail (Universal Rail), Adding Weep Holes, and Foot Block
   See instructions on page 41.

6-7. Placing Baluster Spacers and Balusters
   See instructions on page 41.

   [Diagram of Cocktail Railing]

   Attaching Inverted Universal Rail as Top Rail

8. Place inverted universal rail onto RSBs with balusters in channel. Attach universal rail to RSBs with two self-tapping screws (provided).

9. Place deck boards (DO NOT use Escapes deck boards for top rail) over universal rails. Attach boards on each post with Trex-recommended composite screws (quantity of 2 per each board end). Secure boards to universal rails from underside of railing into bottom of decking board, with 2” (51 mm) pan-head screws (not provided) at an angle every 16” (406 mm) on center.

   IMPORTANT NOTES:
   » If using Select decking, USE maximum length 1-3/4” (44 mm) screw and NOT 2” (51 mm) screw.
   » Screws that are used for attachment of decking board to railing MUST be attached at angle to prevent screw from penetrating through the top of decking board.

10. Slide baluster spacers up and snap into universal rails.

   NOTE: If necessary, cut tips off rail gaskets prior to installation.

11. Use scarf cut for posts where two deck boards meet.

   NOTES:
   » If installing in weather below 40°F (4.5°C), leave 1/8” (3 mm) gap between deck boards.
   » Deck boards can overhang end of last post maximum 1/2” (13 mm).
1. **Installing Pressure-Treated Posts**  
   See instructions on page 40.

2. **Installing Post Sleeve Skirts and Post Sleeves**  
   See instructions on page 40.

3. **Installing Railing Support Brackets (RSBs)**  
   See instructions on page 40.

4. **Cutting Railings**  
   See instructions on page 41.

5. **Attaching Bottom Rail (Universal Rail), Adding Weep Holes, and Foot Block**  
   See instructions on page 41.

6-7. **Placing Baluster Spacers and Balusters**  
   See instructions on page 41.

**Attaching Inverted Universal Rail as Top Rail**

8. Place inverted universal rail onto RSBs with balusters in channel. Attach universal rail with two self-tapping screws (provided).

9. Measure between posts and cut 2” x 4” (51 mm x 102 mm) to length.

10. Place 2” x 4” (51 mm x 102 mm) on universal rail. Attach board to rail with 2” (51 mm) pan-head screws (not provided) every 16” (406 mm) on center.

   Pre-drill a pilot hole and toenail 2-1/2” (64 mm) screw at each end of 2” x 4” (51 mm x 102 mm) into post on back side of rail (side not facing decking).

11. Slide baluster spacer up and snap into universal rail.

   **NOTE:** If necessary, cut tips off rail gaskets prior to installation.

12. **Attaching Post Caps**  
   See instructions on page 41.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
**NOTE:** Older style crown and universal rails have “flippers” on the inside of the channels. Using **EXTREME CAUTION**, remove/cut these flippers on each side to allow for the fit of the aluminum baluster adaptor strip.

1. **Installing Pressure-Treated Posts**  
   See instructions on page 40.

2. **Installing Post Sleeve Skirts and Post Sleeves**  
   See instructions on page 40.

3. **Installing Railing Support Brackets (RSBs)**  
   See instructions on page 40.

4. **Cutting Railings**  
   See instructions on page 40.

5. **Attaching Bottom Rail (Universal Rail) and Foot Block**  
   See instructions on page 41.

**Installing Aluminum Baluster Adaptor Strip and Baluster Spacers**

6. After bottom rail is fully installed, place aluminum baluster adaptor strip into channel of bottom rail, ensuring that it’s fully seated into the channel. When rail lengths are non-standard, the baluster adaptor strip will need to be cut 2-1/2” (64 mm) shorter than the rail to allow clearance for the RSB’s on each end.

6a. Center and drill 5/16” (8 mm) weep holes through bottom rail channel and adaptor strip to allow for water drainage. Holes should be placed between first two balusters on each side and approx. 2’ (610 mm) spans along length of rail.

**NOTE:** To determine weep hole locations, temporarily place lower baluster spacer beside lower rail and mark inside of channel in locations accordingly.

7. Snap baluster spacer into bottom rail. Place inverted baluster spacer on top of first baluster spacer.

**Attaching Top Rail, Aluminum Baluster Adaptor Strip, and Balusters and Bottom Baluster Spacer**

8. Place crown or rail on RSBs with balusters in rail channels. Attach top rail to RSB with two self-tapping screws (provided).

9. After top rail is fully installed, place aluminum baluster adaptor strip into channel of top rail, ensuring that it’s fully seated into the channel.

10. Working at slight angle, press baluster through both baluster spacers and into bottom aluminum baluster adaptor strip, ensuring balusters are tight. Once balusters are seated into aluminum baluster adaptor strip of bottom rail, maneuver baluster into upper rail aluminum baluster adaptor strip. Some force will be needed to press balusters into place and level these.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL ROUND OR SQUARE ALUMINUM BALUSTERS/CONTINUED

**TIP:** Ensure balusters are level prior to attempting to slide baluster spacer up. This will allow for the baluster spacer to move up freely and snap into upper rail. Use of a rubber mallet to gently tap balusters in level is recommended.

11. Slide baluster spacer up and snap into top rail. Place optional top rail gaskets on each end of rail.

HOW TO INSTALL STANDARD GLASS PANEL RAILING

**NOTES:** Read all instructions BEFORE installation.

» You must purchase the 1/4” (6 mm) tempered glass panels. See dimensions below.

» Glass panels **ONLY** for use with maximum 6’ (1.83 m) on center post spacing.

» **NOT** recommended for stair applications.

**TEMPERED GLASS PANEL DIMENSIONS**

» **36” (914 mm) high rail:** 1/4” x 30” x 63-1/2” max. (6 mm x 762 mm x 1613 mm)

» **42” (1067 mm) high rail:** 1/4” x 36” x 63-1/2” max. (6 mm x 914 mm x 1613 mm)

1. **Installing Pressure-Treated Posts**  
   See instructions on page 40.

2. **Installing Post Sleeve Skirts and Post Sleeves**  
   See instructions on page 40.

3. **Installing Railing Support Brackets (RSBs)**  
   See instructions on page 40.

4. **Cutting Railings**  
   See instructions on page 41.

5. **Attaching Bottom Rail (Universal Rail), Adding Weep Holes, and Foot Block**  
   See instructions on page 41.

**Attaching Weatherstripping and Positioning Panel**

6. Push black-edged trim onto upper and lower edges of panel. Be sure trim runs entire length of glass. Extra trim can be cut with razor blade or scissors.

7. Position panel with weatherstripping into lower rail channel. Center panel between posts with about 2” (51 mm) of air space on each side of panel.
HOW TO INSTALL STANDARD GLASS PANEL RAILING/CONTINUED

Attaching Top (Crown) Rail
8. Place top rail over RSB brackets and glass panel. Secure rail to RSBs with 1-1/2” (38 mm) self-drilling screws (provided).

**NOTE:** Avoid hitting glass panel while using the drill.

Attaching Panel Support Molding

10. Cut Transcend baluster spacer into four lengths equal to distance between the glass panel and posts. Cut slowly and one at a time, to avoid chipping.

11. Snap spacer into bottom and top rail to hide brackets and create a seamless look.

12. **Attaching Post Caps**
    See instructions on page 41.

HOW TO ATTACH COCKTAIL STYLE GLASS PANEL RAILING

**TEMMERED GLASS PANEL DIMENSIONS**

» **36” (914 mm) high rail:**
  1/4” x 30” x 63-1/2” max.
  (6 mm x 762 mm x 1613 mm)

» **42” (1067 mm) high rail:**
  1/4” x 36” x 63-1/2” max.
  (6 mm x 914 mm x 1613 mm)

1. **Installing Pressure-Treated Posts**
   See instructions on page 40.

**NOTE:** If installing glass with cocktail rail design, rail posts and post sleeves must be cut.

**NOTES: Read all instructions BEFORE installation.**

» You must purchase the 1/4” (6 mm) tempered glass panels. See dimensions at right.

» Glass panels **ONLY** for use with maximum 6’ (1.83 m) on center post spacing.

» **NOT** recommended for stair applications.

» Trex post mounts cannot be used for this application.
HOW TO ATTACH COCKTAIL STYLE GLASS PANEL RAILING/CONTINUED
TREX TRANSCEND

1a. Cutting Post and Post Sleeve
See instructions on page 42.

2. Installing Post Sleeve Skirts and Post Sleeves
See instructions on page 40.

3. Installing Railing Support Brackets (RSBs)
See instructions on page 40.

4. Cutting Railings
See instructions on page 41.

5. Attaching Bottom Rail (Universal Rail) and Foot Block
See instructions on page 41.

6-7. Attaching Weatherstripping and Positioning Panel
See instructions on page 45.

Attaching Top Rail

8. Cut deck boards to appropriate length of railing span, remembering to include extra space on each side of the deck board to allow for attachment to the post. Decking boards must cover 1/2 of the pressure-treated post to allow this to be fastened later. If you include extra decking material on each side this can be cut off later if need be.

9. Place inverted deck board (place top side of deck board down) on clean, flat surface. (DO NOT use Escapes deck boards for top rail.)

10. Place universal rail (orient this properly so when flipped over, the universal rail will accept the baluster spacer and balusters), on the deck board, centered in both directions to allow final attachment to post.

11. Secure deck board to universal rail with 2" (51 mm) pan head screws (not provided) approximately every 16" (406 mm) on center at an angle. (DO NOT overtighten. Attach from underside of railing into bottom of decking board.)

IMPORTANT NOTES:
- If using Select decking, USE maximum length 1-3/4" (45 mm) screw and NOT 2" (51 mm) screw.
- Screws that are used for attachment of decking board to railing MUST be attached at angle to prevent screw from penetrating through top of decking board.

12. Place inverted universal rail with deck board attached onto RSB’s with glass panel in the channel. Attach universal rail to RSB’s with two self-tapping screws (provided).

13. Attach deck board to post (ensure that screws are attached to wood post) with Trex recommended composite screws (quantity of 2 per each board end).

14. Attaching Panel Support Moldings
See instructions on page 46.

HOW TO ATTACH TRADITIONAL STYLE GLASS PANEL RAILING
TREX TRANSCEND

NOTES: Read all instructions BEFORE installation.
» You must purchase the 1/4” (6 mm) tempered glass panels. See dimensions below.
» Glass panels ONLY for use with maximum 6’ (1.83 m) on center post spacing.
» NOT recommended for stair applications.

TEMPERED GLASS PANEL DIMENSIONS

» 36” (914 mm) high rail:
  1/4” x 30” x 63-1/2” max.
  (6 mm x 762 mm x 1613 mm)

» 42” (1067 mm) high rail:
  1/4” x 36” x 63-1/2” max.
  (6 mm x 914 mm x 1613 mm)

1. Installing Pressure-Treated Posts
   See instructions on page 40.

2. Installing Post Sleeve Skirts and Post Sleeves
   See instructions on page 40.

3. Installing Railing Support Brackets (RSBs)
   See instructions on page 40.

4. Cutting Railings
   See instructions on page 41.

5. Attaching Bottom Rail (Universal Rail) and Foot Block
   See instructions on page 41.

6-7. Attaching Weatherstripping and Positioning Panel
   See instructions on page 45.

Attaching Top Rail

8. Cut 2” x 4” (51 mm x 102 mm) to same length of the inverted Universal rail.

9. Place inverted 2” x 4” (51 mm x 102 mm) (place top side down) on clean, flat surface.
10. Place universal rail (remembering to orient this properly so that when flipped over, the universal rail will accept the baluster spacer and balusters), on the 2” x 4” (51 mm x 102 mm), centered.
11. Secure 2” x 4” (51 mm x 102 mm) to universal rail with 2” (51 mm) pan head screws (not provided) approximately every 16” (406 mm) on center.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO ATTACH TRADITIONAL STYLE GLASS PANEL RAILING/CONTINUED
TREX TRANSCEND

12. Place inverted universal rail with 2” x 4” (51 mm x 102 mm) attached onto RSB’s with glass panel in the channel. Attach universal rail to RSB’s with two self-tapping screws (not provided).
13. Pre-drill a pilot hole and toenail 2-1/2” (64 mm) screw at each end of the 2” x 4” (51 mm x 102 mm) into post on back side (side not facing decking).

14. Attaching Panel Support Moldings
   See instructions on page 46.

15-16. Hiding Brackets
   See instructions on page 46.

17. Attaching Post Caps
   See instructions on page 41.

HOW TO INSTALL ON-AN-ANGLE RAILING
TREX TRANSCEND (CROWN AND UNIVERSAL RAILING)

NOTE: Trex railing brackets are designed to be installed up to a 45° angle.

- Small angles (1° - 30°). Both 4” x 4” (102 mm x 102 mm) or 6” x 6” (152 mm x 152 mm) post sleeves work well.
- Large angles (31° - 45°). USE ONLY 6” x 6” (152 mm x 152 mm) post sleeves when installing on flat side.
- 45° angles using 4” x 4” (102 mm x 102 mm) post sleeves MUST use Transcend Bird’s Mouth brackets.

NOTE: Railing will be installed on corner of posts.

- Using 6” x 6” (152 mm x 152 mm) post sleeves at 45° angles. Brackets are installed off-center and use 45° Transcend gaskets.
- Railing gaskets are designed to fit at 0°, 22.5°, and 45° angles. Gaskets are labeled with appropriate angle dimension.
HOW TO INSTALL CROWN AND UNIVERSAL BIRD’S MOUTH RAILING
TREX TRANSCEND

NOTES:
» Use with 4” x 4” (102 mm x 102 mm) post sleeve ONLY.
» Gaskets are only designed for use with Transcend crown and universal railing.

Read all instructions BEFORE installation.

PARTS

Mark Posts
1. Measure and mark 4” (102 mm) and 33-9/16” (852 mm) up from top of post skirt. For a 42” (1067 mm) rail, top mark is 39-9/16” (1005 mm) on post.

NOTE: Without skirt, add 1-1/2” (38 mm) to measurements.

Attaching Adaptors
Snap adaptors into RSBs.

Pre-Drill Bottom and Top RSBs

2. Position RSBs with adaptor (flat side DOWN) for lower rail, mark and pre-drill screw holes with 1/8” (3 mm) drill bit on post.
3. Position RSBs with adaptor (flat side UP) for top rail, mark and pre-drill screw holes with 1/8” (3 mm) drill bit on post.

Measuring and Cutting Rails

4. Measure from corner-to-corner between posts. Mark 45° cuts on rails with template on assembly tool. Center of “V’s” is the distance from corner-to-corner for posts.

NOTE: Subtract 1/16” (1.6 mm) from each end to accommodate rail gaskets.

Attaching Top and Bottom RSBs

5. Attach RSBs with adaptors to posts with wood screws (provided).

NOTES:
» Drill at slight inward angle to drill holes on marks.
» Lay cut lower rail into position on decking surface between the posts before attaching the lower RSB. There may be some difficulty attaching the lower rail if you fail to do this.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL CROWN AND UNIVERSAL BIRD’S MOUTH RAILING/CONTINUED
TREX TRANSCEND

Installing Railings to RSB’s
6. Attach with self-tapping screws (provided).

Using Miter Box Saw to Cut Rails
1. Place 2” x 4” (51 mm x 102 mm) on edge behind the rail to allow for complete cut.
2. Angle blade to 45°.
3. Set stop on saw so blade travels half the depth of rails. Several test cuts can be made on scrap material to accurately set the stop.
4. “V” cut both sides of the rail.

NOTE: Transcend’s crown and universal rails will require different stop settings.

HOW TO INSTALL CROWN AND UNIVERSAL STAIR RAILING
TREX TRANSCEND

Read all instructions BEFORE installation.

NOTE: All Transcend railings and gaskets work ONLY WITH STAIR SLOPES OF 32°-37°.

Installing Posts, Post Sleeve Skirts, and Post Sleeves for Stair Rails
1. Install posts, post sleeve skirts, and post sleeves according to standard Transcend railing instructions. See page 40.
   » 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.
   » Make sure top and bottom posts for stairs are installed at nose of each tread.

Measuring and Cutting Railings
2. Set railing along the nose of the stair treads and mark line at each intersection. Cut rails on marks.

NOTE: If using railing gaskets, subtract 1/16” (1.6 mm) maximum, from each end and cut.
Positioning RSBs on BOTTOM Post

3. Position bottom rail between posts and slide TrexExpress railing assembly template into position with bottom rail outline on template aligned with end of bottom rail. Allow a minimum clearance of 1” (25 mm) from stair tread. Secure template with rubber bands. Remove rail.

Attaching RSBs to BOTTOM Post

4. Attach upper and lower RSBs to bottom post, **flat side UP**, with wood screws provided. Remove template and place a second RSB, turned upside down, and interlock on each bracket.

Positioning RSBs on UPPER Post

5. Position pre-cut bottom rail between posts. Slide TrexExpress railing assembly template into position, aligning bottom rail outline on template with end of bottom rail. Use rubber bands to hold template in place. Remove rail.

Attaching RSBs on UPPER Posts

6. Attach upper and lower RSBs to top post, **flat side DOWN**. Remove template. Take second RSB, turn upside down and interlock into each bracket.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
Complete Stair Rails Installation
7. Install foot blocks prior to installing lower rail. Refer to “How to Install Universal Railing Foot Blocks”. For stair application, cut top section of foot block at an angle to match rail, pre-drill, and fasten.

Install top and bottom railings, balusters, and baluster spacers according to previous instructions based on the style railing that is installed.

Attaching Optional Gaskets

8. Stair railing gaskets are designed to fit at slopes of 32° to 37°. Gaskets are labeled in order to ensure correct location.

Attaching Post Caps
9. Secure post caps with silicone or PVC adhesive.

NOTE: Clean up any excess adhesive before drying.
**TREX REVEAL RAILING**

**NOTES:**

- REVEAL RAILINGS ARE DESIGNED TO BE ATTACHED WITH POSTS INSTALLED AT A CLEAR SPAN OF 6' (1.83 M) OR 8' (2.44 M).
- IF INSTALLING AT EXACT SPAN LENGTHS OF 6' (1.83 M) OR 8' (2.44 M), AND USING POST-TO-POST CONFIGURATION, THE BOTTOM RAIL WILL NOT NEED TO BE CUT, BUT THE TOP RAIL WILL NEED TO BE MEASURED (MAKING SURE BALUSTERS LINE UP VERTICALLY) AND CUT.
- IF INSTALLING AT EXACT SPAN LENGTHS OF 6' (1.83 M) OR 8' (2.44 M), AND USING CROSSOVER POST CONFIGURATION (SPANS FROM ONE CROSSOVER POST TO ANOTHER CROSSOVER POST), BOTH THE BOTTOM RAIL AND TOP RAIL WILL NOT NEED TO BE CUT.
- IN ADDITION, AT ALL FINAL END POST CONFIGURATIONS, TOP RAIL WILL NEED TO BE MEASURED (MAKING SURE BALUSTERS LINE UP VERTICALLY) AND CUT.
- FOR ODD SPAN LENGTHS, BOTH TOP RAIL AND BOTTOM RAIL WILL NEED TO BE MEASURED (MAKING SURE BALUSTERS LINE UP VERTICALLY) AND CUT. ENSURE THAT BALUSTERS ARE SPACED WITH AN EQUAL DISTANCE ON EACH SIDE OF THE POST.
- WHEN RAILINGS ARE CUT TO ODD SPANS, ALL SPANS GREATER THAN 5' (1.52 M) (EXAMPLE: 8' (2.44 M) SPAN CUT INTO ONE 5' (1.52 M) SPAN AND ONE 3' (0.91 M) SPAN) WOULD REQUIRE FOOT BLOCK UNDER 5' (1.52 M) SPAN SINCE SMALLER FIXED BALUSTER IS NO LONGER CENTERED.)

**PARTS**

- A. Reveal top rail and crowned cover
  - 6' (actual length 73.5" [1867 mm])
  - 8' (actual length 97.5" [2477 mm])
- B. Reveal bottom rail and flat cover
  - 6' Rail (actual length 71.5" [1816 mm])
  - 6' Cover (actual length 70.0" [1778 mm])
  - 8' Rail (actual length 95.5" [2426 mm])
  - 8' Cover (actual length 94.0" [2388 mm])
- C. Reveal upper rail bracket and cover
- D. Reveal lower rail bracket and cover
- E. Reveal balusters (square or round)
- F. Reveal center baluster (square or round)
- G. Reveal foot block**
- H. Reveal post skirt or post sleeve skirt*
- I. Reveal post*
  - 2.5"
  - 36" (actual length 37" [940 mm])
  - 42" (actual length 43" [1092 mm])
  - or Trex 4x4 post sleeve*
  - 36" (actual length 39" [991 mm])
  - 42" (actual length 45" [1143 mm])
- J. Reveal crossover post*
  - 36" (actual length 34.5" [876 mm])
  - 42" (actual length 40.5" [1029 mm])
- K. Reveal post cap or post sleeve cap*
- L. Trex decking
- M. Trex Fascia
- N. Code-approved wood joist 2" x 8"
  - (51 mm x 203 mm) or larger
- O. Code-approved wood rim joist 2" x 8"
  - (51 mm x 203 mm) or larger
- P. Crossover bracket cover (supplied with crossover post)

**DETERMINING BALUSTERS NEEDED**

<table>
<thead>
<tr>
<th>Baluster Type</th>
<th>Per 6' Section</th>
<th>Per 8' Section</th>
<th>Per 6' Stair Section</th>
<th>Per 8' Stair Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square</td>
<td>15</td>
<td>20</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Round</td>
<td>15</td>
<td>20</td>
<td>13</td>
<td>17</td>
</tr>
</tbody>
</table>

**NOTE:** THIS IS AN OVERVIEW OF ALL RAILING COMPONENTS FOR REVEAL HORIZONTAL APPLICATIONS – REFER TO DETAILED INSTRUCTIONS FOR SPECIFIC RAILING CONFIGURATIONS.

- Item not included in Reveal Railing kits. Both 4" x 4" (102 mm x 102 mm) and 6" x 6" (152 mm x 152 mm) post sleeves are designed to fit over 4x4 pressure-treated post.
- Required ONLY for All Clear Span Applications over 6' (1.83 m) when smaller fixed baluster is fully centered, or unsupported spans greater than 5' (1.52 m) (example: 8' (2.44 m) span cut into one 5' (1.52 m) span and one 3' (0.91 m) span would require foot block under 5' (1.52 m) span since smaller fixed baluster is no longer centered). Included with 8' (2.44 m) railing kits.

**NOTE:** If installing 42" (1067 mm) railing, and using pressure-treated posts with Trex post sleeves, ensure that a longer pressure-treated post is used along with longer post sleeve, both cut to a height of 46" (1168 mm) from decking surface.
LOCATION AND INSTALLATION OF POSTS
TREX REVEAL

IMPORTANT NOTES:

» EACH POST MUST BE ATTACHED AS SHOWN TO ENSURE A CODE-COMPLIANT AND SAFE INSTALLATION.

» ALWAYS REFER TO YOUR LOCAL BUILDING CODE OFFICIAL PRIOR TO INSTALLING ANY RAILING SYSTEM TO ENSURE ALL CODE AND SAFETY REQUIREMENTS ARE MET. TREX CANNOT BE HELD RESPONSIBLE FOR IMPROPER OR NON-RECOMMENDED INSTALLATIONS.

» WHEN INSTALLING REVEAL POSTS ON ACQ OR CCA SURFACES, USE AN APPROPRIATE ISOLATION BARRIER BETWEEN POST AND SURFACE (CONTACT LOCAL BUILDING CODE OFFICIAL IF NEEDED).

» FOR INSTALLING STANDARD REVEAL POST AND/OR REVEAL CROSSOVER POSTS, SEE BELOW.

» FOR PRESSURE-TREATED POSTS, POST SLEEVES, AND SKIRTS, SEE DETAILED INSTRUCTIONS PROVIDED WITH REVEAL RAILING KITS.

» ALL REVEAL STAIR INSTALLATIONS REQUIRE THE USE OF 53” (1346 MM) STAIR POST, MEASURED AND CUT TO APPROPRIATE LENGTH IF NECESSARY.

» IF CROSSOVER STAIR POST IS REQUIRED, USE STAIR POST (AGAIN CUT TO APPROPRIATE LENGTH IF NECESSARY) AND USE SWIVEL CROSSOVER BRACKET.

TOOLS AND MATERIALS NEEDED

» Drill and/or screw gun

» 1/2” (13 mm) drill bit for wood

» Blocking - 2” x 8” (51 mm x 203 mm) pressure-treated Southern Yellow Pine or equivalent

» Qty: 36 (per post) - 3” pressure-treated compatible wood screws

CODE APPROVED POST APPLICATIONS

<table>
<thead>
<tr>
<th>POST SIZE</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>2.5” (64 mm)</td>
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<td></td>
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<tr>
<td>2.5” 2.5 (64 mm x 64 mm) Post (IRC)</td>
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<td>Acceptable</td>
<td>(Code Approval not Applicable)</td>
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<tr>
<td>IRC Compliant</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>IBC Compliant</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

Installing Standard Reveal Posts and/or Reveal Crossover Posts on Pressure-Treated Wood Framing (Corner Post Installation)

1. Install 2” x 8” (51 mm x 203 mm) cross bracing frame in between joists at 7-1/4” (184 mm). Attach a total of 12 – 3” (76 mm) pressure-treated compatible screws (not provided).

2. Install two 2” x 8” (51 mm x 203 mm) boards as blocking under post location. Securely attach blocking using a total of 24 – 3” (76 mm) pressure-treated compatible screws (not provided).

**NOTE:** TO ENSURE THE BLOCKING IS FULLY SECURE, USE THE AMOUNT OF SCREWS INDICATED ABOVE.

**TIP:** USE TWO ADDITIONAL SCREWS TO “SANDWICH” BLOCKING BOARDS TOGETHER FOR EASIER ATTACHMENT TO FRAMING.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
LOCATION AND INSTALLATION OF POSTS/CONTINUED
TREX REVEAL

Line Post Installation

3. Install two 2” x 8” (51 mm x 203 mm) cross bracing frames in between joists at 7-1/4” (184 mm). Attach a total of 12 – 3” (76 mm) pressure-treated compatible screws (not provided).

4. Install two 2” x 8” (51 mm x 203 mm) boards as blocking under post location. Securely attach blocking using a total of 24 – 3” (76 mm) pressure-treated compatible screws (not provided).

5. **NOTE:** Rim joist removed to show proper attachment of hardware.

**NOTE:** Metal backplate is only required for 2.5” (64 mm) post in IRC installations. (Consult local code official for more information.)

Insert the (2) stainless steel barrier strips under the mounting bolt holes. Use composite shims or similar material (not provided) if posts are not plumb. Ensure that post is placed on decking surface so that it clears the rim joist and there is enough clearance on the underside blocking for the back plate to be installed.

Attach posts using four 3/8” x 6” (10 mm x 152 mm) hex cap bolts, washers, and nuts, along with using aluminum back plate on underside of blocking (back plate only required for 2.5” (64 mm) posts). This back plate MUST be installed under the decking to ensure this will meet code compliance. Reference Trex SKU part number ALPOSTHWDECK for required hardware and aluminum plate.

Installing Pressure-Treated Posts, Post Sleeves, and Skirts

6. Attach posts using 1/2” (13 mm) carriage bolts.
   - Minimum joist size is 2” x 8” (51 mm x 203 mm).
   - Top bolts must be 1” (25 mm) from top of joists.
   - Bottom bolts must be 5-1/8” (130 mm) from top bolts.

**NOTE:** Blocking can be added for extra strength.

7. Slide post sleeve skirt over post and down to rest on decking surface. Slide post sleeve over post and position inside post sleeve skirt.

**NOTE:** Shims can be used to plumb post sleeves.

**IMPORTANT NOTE:**
   - **IF INSTALLING 42” (1067 MM) RAILING AND USING PRESSURE-TREATED POSTS WITH TREX POST SLEEVES, ENSURE THAT A LONGER PRESSURE-TREATED POST IS USED ALONG WITH LONGER POST SLEEVE, BOTH CUT TO A HEIGHT OF 46” (1168 MM) FROM DECKING SURFACE.**

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
BRACKET HARDWARE – HORIZONTAL APPLICATIONS (INCLUDING HORIZONTAL SWIVEL BRACKETS)  
TREX REVEAL

HORIZONTAL RAILING HARDWARE

AA. Lower rail bracket  
BB. Lower rail bracket cover  
CC. Upper rail bracket cover  
DD. Upper rail bracket

FOOT BLOCK COMPONENTS

EE. Foot block base  
FF. Foot block support

HORIZONTAL SWIVEL HARDWARE

GG. Swivel base  
HH. Horizontal swivel bracket top rail  
II. Horizontal swivel bracket top rail cover  
JJ. Horizontal swivel bracket bottom rail cover  
KK. Horizontal swivel bracket bottom rail  
LL. Swivel base cover
HOW TO INSTALL HORIZONTAL RAILING
TREX REVEAL

Attach Brackets Using Reveal Posts

TIP: Use a clamp to help hold brackets in place while fastening with screws.

1a. When using 2" (51 mm) post, for both post-to-post and post-to-crossover-post configurations, measure 1-1/2" (38 mm) up from top of post base plate (or 1-7/8" [48 mm] from decking surface). Mark with light line.

1b. When using 2-1/2" (64 mm) post, measure 1-3/8" (35 mm) from top of post base plate or 1-7/8" (48 mm) from decking surface. Mark with light line.

2. Center lower bracket on post above the marked line and attach using two self-tapping screws (provided).

3. Measure up 32-5/8" (829 mm) for 36" (914 mm) tall railing or 38-5/8" (981 mm) for 42" (1067 mm) tall railing from top of lower rail bracket. Mark with a light line.

4. Center upper bracket on post below marked line and attach using three self-tapping screws (provided).

NOTE: Upper bracket is not required on crossover post configuration.

Attach Brackets Using Pressure-Treated Posts and Post Sleeves

TIP: Use a clamp to help hold brackets in place while fastening with screws.

5. Measure 1-7/8" (48 mm) up from deck surface to bottom of bracket. Slide skirt up to allow for proper measurement, then push skirt back down onto surface of decking BEFORE ATTACHING BRACKET. Mark with light line.

6. Center lower bracket on post above the marked line and attach using two 2" (51 mm) wood screws (provided).

7. Measure up 32-5/8" (829 mm) for 36" (914 mm) tall railing or 38-5/8" (981 mm) for 42" (1067 mm) tall railing from top of lower rail bracket. Mark with a light line.

8. Center upper bracket on post below marked line and attach using three 2" (51 mm) wood screws (provided).

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL HORIZONTAL RAILING/CONTINUED
TREX REVEAL

How to Measure and Cut Bottom and Top Railings (WHEN REQUIRED)

1. Position bottom and top rails between posts and align with bottom bracket. Align the center baluster slot in both rails with the middle of the span between posts.* This will allow an equal number of baluster holes on each side of center slot. Mark bottom rail and top rail at each end (ensure both rails are centered between posts).

* In some cases due to odd railing spans, the center baluster may need to be offset in one direction to ensure there is enough room at both post locations for balusters to be placed, review this BEFORE cutting any railings to ensure all balusters are equally spaced.

Cutting Bottom Rail and Bottom Rail Cover

2. Cut each end of bottom rail 1/4" (6 mm) shorter than mark on each end to allow for fit into bottom rail brackets.

TIP: CUT ALUMINUM WITH A NON-FERROUS METAL BLADE.
Cutting Top Rail
Option 1:
For Post-to-Post Configuration

5a. Cut each end of top rail 1/4" (6 mm) shorter than mark to allow for fit into top rail brackets.

5b. Top rail must be cut differently on each side of the rail. Railing side that attaches to standard post should be cut 1/4" (6 mm) shorter than the mark to allow for fit into top rail bracket. Railing side that attaches to the crossover post should be cut 3/4" (19 mm) LONGER than the mark to allow for fit into the crossover post bracket.

Cutting Top Rail
Option 2:
For Post-to-Crossover-Post Configuration

5c. Cut each end of top rail 3/4" (19 mm) LONGER than the mark to allow for fit into the crossover post bracket on each side.

Cutting Top Rail Insert and Cover

6. Slide rail insert out and cut 3/4" (19 mm) FROM EACH SIDE of insert, then slide back inside rail and center.
7. Mark and cut top rail cover same length as top rail for all top rail configurations.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
Attaching Center Baluster to Bottom Rail

8. Attach shorter, center baluster in center slot in bottom rail using two #8 x 1-1/4” (32 mm) screws (provided).

Attaching Bottom Rail Cover and Bottom Rail to Brackets

9. Attach “flat” bottom rail cover to bottom rail by first centering cover on bottom rail (this will allow gap on each end of bottom rail for placement into brackets). Align cover on one side of 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 rail. In some cases, a rubber mallet may facilitate the fastening using GENTLE tapping.

10. Set bottom rail into bottom brackets. Tabs on brackets will be inside of bottom rail (not shown when railing is attached). To ensure fit into tab, measure and mark 1/2” (13 mm) out from side of post. 

11. Attach bottom rail to bottom bracket by fastening through marked measurement on top of rail into tab on bottom bracket using one self-tapping screw each side (provided).

NOTE: Pre-drilling is recommended (7/64” [2.8 mm] drill bit) for attachment of railing to bracket.

Installing Remaining Balusters into Bottom Rail

12. Place remaining balusters into holes in lower rail by snapping fully into place. In some cases, a rubber mallet may facilitate the fastening using GENTLE tapping.
13. Working from one end of upper rail, snap balusters into upper rail working down length of rail. Fasten center baluster into center slot using two #8 x 1-1/4” (32 mm) screws (provided).

14. For post-to-post configuration, fasten upper rail to each bracket by installing screws diagonally through upper rail into bracket using two self-tapping screws each side (provided).

**NOTE:** Pre-drilling is recommended (7/64” [2.8 mm] drill bit) for attachment of railing to post.

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

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

**NOTE:** Pre-drilling is recommended (7/64” [2.8 mm] drill bit) for attachment of railing to bracket.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
17. Attach corresponding bracket covers over opening in upper and bottom rails.
18. Attach provided post skirt to bottom of posts when using Reveal posts.

19. Attach post caps to Reveal posts (use of rubber mallet may be required for secure attachment).
20. Attach post caps to post sleeves using external grade PVC construction adhesive.
21. For crossover post configuration, attach crossover post cap to crossover post.
HOW TO INSTALL HORIZONTAL SWIVEL BRACKETS
TREX REVEAL

Attach Swivel Bracket Base using Reveal Posts
TIP: Use a clamp to help hold brackets in place while fastening with screws.

1a. When using 2" (51 mm) post, for both post-to-post and post-to-crossover-post configurations, measure 1-1/2" (38 mm) up from top of post base plate (or 1-7/8" [48 mm] from decking surface). Mark with light line.

1b. When using 2.5" (64 mm) post, measure 1-3/8" (35 mm) from top of post base plate (or 1-7/8" (48 mm) from decking surface). Mark with light line.

2. Center lower bracket on post above the marked line and attach using four self-tapping screws (provided).

3. Measure up 32-5/16" (821 mm) for 36" (914 mm) tall railing or 38-5/16" (973 mm) for 42" (1067 mm) tall railing from top of lower rail bracket. Mark with a light line.

4. Center upper bracket on post below marked line and attach using four self-tapping screws (provided).

NOTE: Upper bracket is not required on crossover post configuration.

Attach Brackets Using Pressure-Treated Posts and Post Sleeves
TIP: Use a clamp to help hold brackets in place while fastening with screws.

5. Measure 1-7/8" (48 mm) up from deck surface to bottom of bracket. Slide skirt up to allow for proper measurement, then push skirt back down onto surface of decking BEFORE ATTACHING BRACKET. Mark with light line.

6. Center lower bracket on post above the marked line and attach using four 2" (51 mm) wood screws (provided).

7. Measure up 32-5/16" (821 mm) for 36" (914 mm) tall railing or 38-5/16" (973 mm) for 42" (1067 mm) tall railing from top of lower rail bracket. Mark with a light line.

8. Center upper bracket on post below marked line and attach using four 2" (51 mm) wood screws (provided).
HOW TO INSTALL HORIZONTAL SWIVEL RAILING
TREX REVEAL

NOTES:

» WHEN USING REVEAL HORIZONTAL SWIVEL BRACKETS BOTH BOTTOM AND TOP RAILS WILL NEED TO BE MEASURED AND CUT TO APPROPRIATE LENGTHS.

» HORIZONTAL SWIVEL BRACKETS CAN BE USED UP TO A 50° ANGLE FOR REVEAL RAILINGS.

» WHEN USING HORIZONTAL SWIVEL BRACKETS VERY IMPORTANT TO LAY OUT LOCATION AND ORIENTATION OF POSTS AND SWIVEL BRACKETS BEFORE INSTALLING SWIVEL BRACKETS.

» WHEN RAILINGS ARE CUT TO ODD SPANS, ALL SPANS GREATER THAN 5’ (1.52 M) (EXAMPLE: 8’ (2.44 M) SPAN CUT INTO ONE 5’ (1.52 M) SPAN AND ONE 3’ (0.91 M) SPAN) WOULD REQUIRE FOOT BLOCK UNDER 5’ (1.52 M) SPAN SINCE SMALLER FIXED BALUSTER IS NO LONGER CENTERED).

How to Measure and Cut Bottom and Top Railings

1. With brackets in correct swivel location, measure distance from inside of bracket to inside of bracket.

   ENSURE THAT BEFORE CUTTING, BALUSTERS HOLES ON BOTH BOTTOM AND TOP RAIL LINE UP. ALSO MAKE SURE CENTER BALUSTER SLOT IS AS CLOSE TO THE MIDDLE OF THE SPAN AS POSSIBLE. In some cases due to odd railing spans, the center baluster may need to be offset in one or the other direction to ensure there is enough room at both post locations for balusters to be placed.

2. Cut bottom rail to the measurement between the bottom swivel brackets.

3. Slide rail insert out and cut 3/4” (19 mm) FROM EACH SIDE of insert, then slide back inside rail and center.

4. Mark and cut bottom rail cover 1-1/2” (38 mm) shorter than bottom rail.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL HORIZONTAL SWIVEL RAILING/CONTINUED
TREX REVEAL

Cutting Top Rail
Option 1:
For Post-to-Post Configuration

5a. Cut top rail to the measurement between the top swivel brackets. For standard-post-to-standard-post configurations this would be same dimensions as that of the bottom rail.

Cutting Top Rail
Option 2:
For Post-to-Crossover-Post Configuration

5b. When going from standard-post-to-crossover-post, measurement must be taken from inside of top horizontal swivel bracket to inside lip of crossover bracket (which is attached to top of crossover post).

Cutting Top Rail Insert and Cover

6. Slide rail insert out and cut 3/4” (19 mm) FROM EACH SIDE of insert, then slide back inside rail and center.
7. Mark and cut top rail cover same length as top rail for all top rail configurations.

8. Attaching Center Baluster to Bottom Rail
See instructions on page 61.

9. Attaching Bottom Rail Cover and Bottom Rail to Brackets
See instructions on page 61.

10. Installing Remaining Balusters into Bottom Rail
See instructions on page 61.

11. Attach Upper Railings
See instructions on page 62.

12. Attachment of Bracket Covers, Skirts, and Caps
See instructions on page 63.

13. Attachment of Foot Block (Required ONLY for All Clear Span Applications Over 6’ [1.83 m])
See instructions on page 67.
HOW TO INSTALL FOOT BLOCKS – HORIZONTAL RAILING
TREX REVEAL

Attachment of Foot Block (Required ONLY for All Clear Span Applications Over 6’ [1.83 m])

1. To ensure correct location, place foot block under center of bottom rail. Mark to provide placement location of base.
2. Place base (smaller side facing down) on decking surface. Attach base of foot block using one screw at an angle through base and into decking.

NOTE: Pre-drilling is recommended (1/8” [3 mm] drill bit) for attachment of base.

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

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
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

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
BRACKET HARDWARE - STAIR APPLICATIONS (INCLUDING STAIR SWIVEL BRACKETS, STAIR CROSSOVER BRACKET, AND COMPOUND SWIVEL BRACKETS) / CONTINUED

TREX REVEAL

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
IMPORTANT NOTES:

» ALL REVEAL STAIR INSTALLATIONS REQUIRE THE USE OF 53” (1346 MM) 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’ (1.83 M) OR 8’ (2.44 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’ (1.83 M) OR 8’ (2.44 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.

* 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.

Installing Standard Reveal Stair Posts, Reveal Stair Crossover Posts, or Pressure-Treated Post, Post Sleeves, and Skirts

1. Make sure 53” (1356 mm) 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 page 58 for details.

3. 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 pressure-treated post instructions on page 58 for details.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POSTS 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!

1. Lay bottom stair rail on steps beside posts. Position bottom rail at least 1” (25 mm) above nose of stair tread.

TIP: Use a 1” (25 mm) 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 90º 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 90º 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 POSTS AND POST SLEEVES/CONTINUED

TREX REVEAL

Installing Upper Fixed Stair Brackets

4. Measure up required dimension for 36” (914 mm) tall railing or 42” (1067 mm) 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).

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

Installing Upper Stair Swivel And Compound Swivel Brackets

6. Measure up required dimension for 36” (914 mm) tall railing or for 42” (1067 mm) 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.
ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POSTS AND POST SLEEVES/CONTINUED

TREX REVEAL

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" (6 mm) 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.

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 POSTS 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.

When using Stair Swivel and Compound Swivel Brackets:
5c. 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. 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.

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.

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
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 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" (6 mm) 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 POSTS 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” (6 mm) 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.

10a. Cut each end of top stair rail along with rail insert 1/4” (6 mm) 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 Stair Crossover Swivel 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” (6 mm) 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.

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).

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
ATTACHING STAIR BRACKETS (FIXED STAIR, STAIR SWIVEL, AND COMPOUND SWIVEL) TO REVEAL POSTS AND PRESSURE-TREATED POSTS AND POST SLEEVES/CONTINUED
TREX REVEAL

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
15. 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 POSTS 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.

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” [2.8 mm] 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).

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
1. Measure opening between posts (gates can be customized to fit nearly any opening up to 48 inches wide).
2. Subtract 1-7/8” (48 mm) from above measurement. This will allow for proper gapping and location of gate.
3. Identify top and bottom of panel.

**NOTE: The posts only fit one direction.**

4. Lay panel on a flat non-marring surface. Place posts on top of panel. Place posts so that width measurement from Step 2 is to the outside of each post.

5. Adjust posts so that cut marks do not fall on a baluster. Make sure distance from first baluster to post is the same on both sides. Mark cut locations on panel.

**NOTE: If widths do fall on a baluster, cut baluster flush at top and bottom prior to cutting panel.**

6. Cut panel using a reciprocating saw (equipped with a metal blade).

7. Insert posts into panel.

**NOTE: Make sure top and bottom of panel orientation is correct.**
8. Secure posts to panel with four #8-18 short self-tapping screws (provided) in each location.

9. Attach shorter side of hinge to the gate.

**NOTE:** Refer to instructions included in hardware package. Be sure to use correct fasteners for aluminum. See chart below.

10. Place gate in opening on blocks. Sweep between bottom of gate and top of deck cannot exceed 4” (102 mm) per IRC/IBC code regulations. Ensure bottom gate posts will be high enough to clear skirts on bottom of deck posts.

11. Make sure posts are plumb and gate is level. Attach longer side of hinges to post using appropriate hardware for type of post installed. Install hinge cover.

**NOTE:** Both wood and aluminum screws are included in hardware kit. (Refer to chart under Step 9.)

12. After determining location and height of hinge and hasp, install per instructions included with hardware kit.

13. Ensure proper operation of gate. Hinge tension is adjustable (check hardware kit instructions for more detail).

14. After gate installation, place blocks under gate for support. Use a rubber mallet to install cap onto gate post. Repeat for other gate post cap. Snap all hinge covers into place.

**NOTE:** Use of non-Trex hardware is not recommended and could result in serious injury or death.

---

**MINIMUM FASTENER SIZE**

<table>
<thead>
<tr>
<th>SCREWS</th>
<th>Type</th>
<th>Length</th>
<th>No.</th>
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</thead>
<tbody>
<tr>
<td>Wood Screw</td>
<td>2-1/2”</td>
<td>#9</td>
<td></td>
</tr>
<tr>
<td>Metal Screw</td>
<td>2”</td>
<td>#8-18</td>
<td></td>
</tr>
</tbody>
</table>

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**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
TREX SELECT RAILING

NOTES:
» All Trex Select Railing lengths are manufactured at ON CENTER dimensions (spanning from center of each post): 67-5/8" (1718 mm) for 6' (1.83 m) on center, and 92-5/8" (2353 mm) for 8' (2.44 m) on center. Note that railings are designed to be slightly longer that required to allow for very slight play in post placement – trimming may be required. IT IS VERY IMPORTANT TO MEASURE FIRST.

PARTS

A. Select top rail
B. Select bottom rail
C. Select brackets
D. Select bracket covers
E. Select balusters
F. Adjustable foot block
G. Post sleeve cap*
H. Post sleeve skirt*
I. Post sleeve - 4" x 4" (102 mm x 102 mm) or 6" x 6" (152 mm x 152 mm) post sleeve)**
J. Trex decking
K. Trex fascia
L. Code-approved wood joist - 2" x 8" (51 mm x 203 mm)
M. Code-approved wood rim joist - 2" x 8" (51 mm x 203 mm) or larger

* Item not included in the Select railing kits.
** Both 4" x 4" (102 mm x 102 mm) and 6" x 6" (152 mm x 152 mm) post sleeves are designed to fit over 4x4 pressure-treated post.

NOTE: Pictorial representations shown may only show one style of railing, while others may also be used. Review detailed instructions to determine what railing styles and combinations can be used.

NOTE: If installing 42" (1067 mm) railing, use longer posts sleeves and measure accordingly to ensure a proper cut (DO NOT CUT POST SLEEVES TO ACTUAL 42" – THESE NEED TO BE LONGER TO ALLOW FOR POST CAPS TO FIT).

DETERMINING BALUSTERS NEEDED

<table>
<thead>
<tr>
<th>Baluster Type</th>
<th>Per 6' OC Section</th>
<th>Per 8' OC Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Horizontal Application)</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>(Stair Application)</td>
<td>11</td>
<td>15</td>
</tr>
</tbody>
</table>

NOTE: If installing 42" (1067 mm) railing, use longer posts sleeves and measure accordingly to ensure a proper cut (DO NOT CUT POST SLEEVES TO ACTUAL 42" – THESE NEED TO BE LONGER TO ALLOW FOR POST CAPS TO FIT).
HOW TO INSTALL TREX SELECT RAILING
TREX SELECT

Read all instructions BEFORE installation.

Important: Post sleeves are NOT to be cut for this design style.

Installing Pressure-Treated Posts

» Select Railing Kits are designed for posts to be installed at maximum of 6’ or 8’ (1.83 m or 2.44 m) ON CENTER depending on the length being used. (NOTE: Smaller spans are allowed).

» Attach posts using 1/2” (13 mm) carriage bolts.

» Minimum joist size is 2” x 8” (51 mm x 203 mm).

» Top bolts must be 1” (25 mm) from tops of joists.

» Bottom bolts must be 5-1/8” (130 mm) from top bolts.

NOTE: Blocking MUST be added for extra strength.

Installing Post Sleeve Skirts and Post Sleeves

2. Slide post sleeve skirt over post and down to rest on decking surface. Slide post sleeve over post and position inside post sleeve skirt.

NOTE: Shims can be used to plumb post sleeves.

Cutting Railings

3a. Position bottom and top rails between posts, ensuring baluster holes are lined up and spaced evenly.

3b. Also allow for a minimum of 1-9/16” (40 mm) on each end of rail for bracket placement AND baluster clearance. Mark rails at intersection of rail and post.

3c. Cut each end of both bottom and top rails 1/4” (6 mm) shorter than mark on each end to allow for fit into brackets.

NOTE: After cutting, this still allows enough space for bracket placement.

Attaching Foot Block to Bottom Railing

NOTE: REFER TO DETAILED INSTRUCTIONS INCLUDED WITH FOOT BLOCK PRIOR TO INSTALLATION OF RAILING SECTION AS THESE INCLUDE OTHER REQUIRED STEPS FOR PROPER INSTALLATION

4. Invert the bottom railing. Center foot block on bottom rail and attach. DO NOT extend foot block.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
Assembling Railing Section

5a. On clean flat surface lay bottom railing on its side. Make sure to allow enough room for installation of balusters and top rail. Place a scrap piece of 1" (25 mm) decking board running parallel to bottom rail for support when installing balusters.

5b. Insert balusters into bottom rail slots as far as they will go, allowing the balusters to also rest on the decking board.

5c. Attach top rail to balusters, feeding each baluster into required slots. Start on one end and work towards the other.

5d. To help temporarily secure the railing section together, place a ratchet strap around the top and bottom rail and tighten until snug. **DO NOT OVERTIGHTEN AS YOU CAN BEND THE RAILING.**

Installing Railing Section to Posts

6a. Using scrap material (i.e. 2x4s, decking boards, etc.) cut at least three support blocks at 3-3/4" (95 mm) in height. Place one each on decking surface beside each post and one near center of span.

6b. Slide brackets on each end of both top and bottom railing.

6c. Lift secured railing section up, and CENTER this section in between the spanned posts on pre-positioned support blocks.

**NOTE:** To help stabilize railing section, use a quick-grip clamp (or other type of clamp) and clamp the first baluster to post sleeve. **(DO NOT OVERTIGHTEN CLAMP.)**

6d. Install bottom bracket (both sides) to post using four #8-10 x 2" (51 mm) screws per bracket (*provided*).

6e. Install top bracket (both sides) to post using four #8-10 x 2" (51 mm) screws per bracket (*provided*).

6f. Install bottom bracket (both sides) to railing using four #10 x 1" (25 mm) screws per bracket (*provided*).

6g. Install top bracket (both sides) to railing using four #10 x 1" (25 mm) screws per bracket (*provided*).
Attaching Bracket Covers and Post Caps

7a. Snap bracket covers over each bracket.
7b. Secure post caps with silicone or PVC adhesive.

**NOTE:** Clean-up any excess adhesive before drying.
HOW TO INSTALL 45° ADAPTOR – HORIZONTAL APPLICATIONS ONLY
TREX SELECT

Read all instructions BEFORE installation.

PARTS

1. Measure, cut, and assemble railing sections as per instructions shown on pages 82-84.

   ![Top bracket](image1)
   ![Bottom bracket](image2)
   ![45° bracket](image3)
   ![45° bracket](image4)

2. Locate placement of railing section so that this lines up with horizontal railing heights.
3. Install 45° angle bracket onto post using provided hardware.
4. Install foot block to bottom railing as stated in previous instructions. See page 82.
5. Assemble railing section as stated in previous instructions. See page 83.
6. Install railing section to post as stated in previous instructions. See page 83. However use longer screws that were provided with adaptor to attach brackets thru adaptor into posts.
7. Install brackets to railing as stated in previous instructions. See page 83.
8. Attach bracket covers and post caps as stated in previous instructions. See page 84.
HOW TO INSTALL TREX SELECT STAIR RAILING
TREX SELECT

Read all instructions BEFORE installation.

NOTE: All Select railings work ONLY WITH STAIR SLOPES OF 32°-37°.

Installing Posts, Post Sleeve Skirts, and Post Sleeves for Stair Rails
1. Install posts, post sleeve skirts, and post sleeves according to standard Select railing instructions.
   - 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.
   - Make sure top and bottom posts for stairs are installed at nose of each tread.

Measuring and Cutting Railings

2. Set bottom stair railing along the nose of the stair treads, ensuring the baluster holes are spaced evenly. Also allow for a minimum of 1-9/16” (40 mm) on each end of rail for bracket placement AND baluster clearance. Use clamp to hold bottom stair rail in place.

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

4. Position top rail onto balusters and ENSURE that balusters are parallel with post. Mark both bottom and top stair rail at each intersection. Mark the side of each railing to ensure that proper angle is cut for attachment.

5. Cut each end of both bottom and top stair rails 1/4” (6 mm) shorter than mark on each end to allow for fit into bottom rail brackets.

NOTE: Top rail is shown inverted.

Cutting Balusters on Angle (OPTIONAL)
6a. In order for balusters to seat properly (depending on the angle of the stair railing), the balusters may need to be trimmed to match the angle of the bottom and top railing.

6b. Set bottom railing on nose of stair treads and set baluster at 90° on the outside of the railing, mark and measure the angle.

NOTE: Measure, mark, and cut a scrap board to ensure you have proper angle BEFORE cutting balusters on angle.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
6c. Cut the **VERY END** of baluster, both top and bottom, making sure that point to point measurement of the baluster remains at either 32” (813 mm) for 36” (914 mm) rail heights or 38” (965 mm) for 42” (1067 mm) rail heights.

**Attaching Foot Block to Bottom Railing**

> **REFER TO DETAILED INSTRUCTIONS INCLUDED WITH FOOT BLOCKS PRIOR TO INSTALLATION OF STAIR RAILING SECTION AS THESE INCLUDE OTHER REQUIRED STEPS FOR FOOT BLOCK INSTALLATION.**

7a. For stair applications, cut the section of foot block at an angle to match rail. Refer to foot block instructions for specific information on how to do this.

7b. Place scrap deck board at nose of stair tread, and place foot block on top of scrap board near the nose of the tread. Position bottom stair rail on stair tread and mark the underside of the bottom stair rail for location of foot block.

7c. Invert bottom rail. Center foot block on bottom rail and attach at marked position. **DO NOT** extend foot block.

8a. Slide bottom stair brackets on bottom rail on each side. Top bracket must have tab on bracket facing up. Bottom bracket must have tab facing down.

8b. Assemble a few of the balusters into the bottom and top railings (make sure balusters are setting at 90°) and set this on scrap material clearing the stair treads to determine where bracket locations need to be. Remember 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.

8c. After locating appropriate position for railing section, remove top rail and balusters and attach bottom stair bracket (both sides) to post using four #8-10 x 2” (51 mm) screws per bracket (**provided**). Foot block can be extended at this time.
HOW TO INSTALL TREX SELECT STAIR RAILING/CONTINUED

TREX SELECT

Install Balusters
9. Slide balusters into bottom rail.

Attachment of Top Rail to Post
10a. Slide top stair brackets on top rail on each side. Top bracket must have tab on bracket facing up. Bottom bracket must have tab facing down.
10b. Place top rail onto balusters, allowing the top rail to rest on the surface of the balusters.
10c. Attach top stair bracket (both sides) to post using four #8-10 x 2” (51 mm) screws per bracket (provided).

Attachment of Bottom and Top Brackets to Rails
11a. Install bottom stair bracket (both sides) to railing using four #10 x 1” (25 mm) screws per bracket (provided).
11b. Install top stair bracket (both sides) to railing using four #10 x 1” (25 mm) screws per bracket (provided).

Attaching Bracket Covers and Post Caps
12a. Snap bracket covers over top rail bracket.
12b. Snap bracket covers over bottom rail bracket.
12c. Secure post caps with silicone or PVC adhesive.

NOTE: Clean-up any excess adhesive before drying.

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
TREX ALUMINUM ADA COMPLIANT HANDRAIL

STAIR APPLICATION

ADA Handrail Guidelines

1. ADA handrails can be installed using various design applications such as those for stairs, ramps, and horizontal applications. Designs include options for straight and 90° wall returns, 90° corners, and adjustable angles. Choose which is best for your needs before installing. (Refer to railing profile page for more detailed parts list.)

2. The handrail system top rail should be 34” (864 mm) to 38” (965 mm) above the surface. However, verifying height requirements with local building code officials before installing is important as codes vary in different areas.*

3. Maintain a minimum clearance of 1-1/2” (38 mm) between the handrail and any obstructions above or behind the handrail.

4. The end loop return at all landings must extend 12” (305 mm) past the end of the ramp or stair application.*

5. The slope of the handrail for the ramp should not exceed 1” (25 mm) rise over a 12” (305 mm) run.

6. The maximum recommended span between supports is 6’ (1.83 m) on center. Thus placement of posts is critical when installation of railing is being considered.*

7. Rails are designed to have a tight fit into other connecting components. It is critical to line these up in the correct orientation BEFORE connecting parts together. If it is necessary to shift or move a component on a rail, wrap with a protective cloth to prevent scratching as you may need to use a wide-mouth wrench to correct this.

8. At any straight location where internal connector is used, it is CRITICAL to locate these as close to a wall mount as possible.

9. If using metal posts, pre-drill all locations for bracket attachment. (ALWAYS use a drill bit slightly SMALLER in diameter than the screw being used for attachment.)

10. All elbow components can be cut down to allow for tighter angles. Cut a maximum of 2” (51 mm) on each side if this is required.

*Rear to the American Disabilities Act for detailed information in regards to handrail requirements.

SAFETY NOTES

» When cutting metal, ALWAYS wear proper safety eyewear (as well as any other proper safety wear).

» Remove all burrs from cut ends before installation.

» Use of a non-ferrous metal blade is recommended.
### ADA RAILING PROFILES

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA Hand Rail</td>
<td>BK, BZ, WT</td>
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<tr>
<td>1.385&quot; (35 mm) diameter</td>
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<tr>
<td>ADA Wall Return</td>
<td>BK, BZ, WT</td>
</tr>
<tr>
<td>ADA Wall Mount</td>
<td>BK, BZ, WT</td>
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<tr>
<td>ADA Corner Mount*</td>
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<tr>
<td>ADA Internal Connector</td>
<td></td>
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<tr>
<td>ADA Handrail Return</td>
<td>BK, BZ, WT</td>
</tr>
</tbody>
</table>

*Can only be used with metal post horizontal applications.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA 90° Elbow</td>
<td>BK, BZ, WT</td>
</tr>
<tr>
<td>ADA 36°, 34°, and 31° Elbows</td>
<td>BK, BZ, WT</td>
</tr>
<tr>
<td>ADA 5° Elbow</td>
<td>BK, BZ, WT</td>
</tr>
<tr>
<td>ADA Collar</td>
<td>BK, BZ, WT</td>
</tr>
<tr>
<td>ADA End Cap</td>
<td>BK, BZ, WT</td>
</tr>
</tbody>
</table>

### COLORS
- BK  Charcoal Black
- BZ  Bronze
- WT  White

### HARDWARE

#### Rail to Bracket Attachment
- Short Metal Screw (#10 x 5/8" [16 mm])

#### Bracket to Metal Post Attachment
- Long Metal Screw (#12 x 1-1/4" [32 mm])

#### Bracket to Wood Post/Post Sleeve Attachment
- Wood Screw (8-10 x 2" [51 mm])

**NOTE:** If attaching brackets to 6x6 posts/post sleeves, use 8-10 x 2-1/2" (64 mm) wood screws (not included).

**NOTE:** Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.
HOW TO INSTALL TREX ALUMINUM ADA COMPLIANT HANDRAIL

90° Wall Return

1. If required, cut railing to proper length based on location of wall return(s) or attachment to other components.
2. If desired, collar ring can be used to hide seam of wall return to rail. Slide this over rail BEFORE inserting rail into wall return.
3. Slide rail onto wall return until it is fully inserted and seam is hidden under collar (if collar is being used).
4. Attach wall return to post using specific hardware provided (see chart on previous page), ENSURING wall return is at proper angle of alignment to post. (Wall return is designed to have tight fit into rail, thus location of attachment is critical.) If using metal posts, pre-drill post prior to attachment of wall mount.

Wall Mount

NOTE: Refer to Rail-to-Rail Connections section if connecting two or more rails together to make continuous straight run.

1. If required, cut railing to proper length based on location of wall mount(s) or attachment to other components.
2. Attach wall mount to post using specific hardware provided (see chart on previous page), ENSURING wall mount is at proper angle of alignment to angle of rail. If using metal posts, pre-drill post prior to attachment of wall mount.

TIP: To help with angled attachment, place one screw into bottom hole of bracket and pivot wall mount to position required.

3. Attach rail to wall mount using specific hardware provided (see chart on previous page).
4. Attach end cap to railing.

Rail-to-Rail Connections/Internal Connector

NOTE: When rail-to-rail straight connections are use for longer spans, posts must be installed 6’ OC max. In addition, a wall mount MUST be used at each seam of rail-to-rail connections as close to center of wall mount as possible. If collar is used, this can be offset slightly to allow for the collar to fit.

1. If required, cut railing to proper length.
2. If desired, collar ring can be used to hide seam between rails. Slide this over rail BEFORE inserting rails into internal connector.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
4. Slide second rail over opposite end of internal connector, until this is touching metal spacer screw.
5. Remove metal spacer screw using #2 square head screwdriver.
6. Push second rail further over internal connector until this fits in the collar (if used) or fits tightly against rail.
7. Attach wall mount to post per previous instructions.
8. Attach rail to wall mount per previous instructions.
9. Use end caps where required.
HOW TO INSTALL TREX ALUMINUM ADA COMPLIANT HANDRAIL

Elbows (90°, 36°, 34°, 31°, 5°)

1. If required, cut railing to proper length based on location of elbows and other components being used.
2. If desired, collar ring can be used to hide seam of elbow to rail. Slide this over rail BEFORE inserting rail into elbow.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
4. Slide appropriate angled elbow onto opposite end of internal connector, until this is touching metal spacer screw.
5. Remove metal spacer screw using #2 square head screwdriver.
6. Push elbow further over internal connector until this fits in the collar (if used) or fits tightly against rail.
7. Attach wall mount to post per previous instructions.
8. Attach rail to wall mount per previous instructions.

Handrail Return 180°

1. If required, cut railing to proper length based on location of elbow used as well and other components being used.
2. If desired, collar ring can be used to hide seam of handrail return to rail. Slide this over rail BEFORE inserting rail into elbow.
3. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
4. Slide appropriate angled elbow onto opposite end of internal connector, until this is touching metal spacer screw.
5. Attach wall return to lower end of handrail return (longer side), ENSURING wall return is at proper angle of alignment to post. (Wall return is designed to have tight fit into rail, thus location of attachment is critical.)
6. Slide opposite end of handrail return onto internal connector, until this is touching metal spacer screw.
7. Push handrail return further over internal connector until this fits in the collar (if used) or fits tightly against elbow.
8. Attach wall return to post per previous instructions.
9. Attach rail to wall mount per previous instructions.
10. Use end caps where required.

Corner Mount

1. Corner mount can ONLY BE USED ON METAL POSTS and only for horizontal applications, such as stair landings.
2. Pre-drill metal post and install corner post to metal post using specific hardware provided (see chart on page 90).
3. If desired, collar ring can be used to hide seam of elbow to rail. Slide this over rail BEFORE inserting rail into elbow (not shown in picture above).
4. Slide internal connector into rail end until metal spacer screw is touching either end of rail or the collar, if this was used.
5. Slide appropriate angled elbow onto opposite end of internal connector, until this is touching metal spacer screw.
6. Remove metal spacer screw using #2 square head screwdriver.
7. Push elbow further over internal connector until this fits in the collar (if used) or fits tightly against rail.
8. Install elbow to corner mount using specific hardware provided (see chart on page 90).

NOTE: Construction methods are always improving. Please refer to www.trex.com for the most up-to-date installation requirements.