Installation Instructions

PARTS



- A. Top rail
- B. Bottom rail
- C. Railing support brackets (RSBs)
- D. Balusters*
- E. Post sleeve*
- F. Post sleeve cap*
- G. Post sleeve skirt*
- H. TrexExpress[™] Designer Series Railing Assembly Tool*
- * Item not included in Designer Railing Kit

NOTE: Architectural Baluster cannot be used with Designer Series Railing.

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NOTE: Position of bottom rail lip is not a structural component. It is recommended that it be consistently installed either inside or outside.

RAILING STYLES:

Standard



Cutting post sleeves is **NOT** required.

A. Pressure-treated post or Trex Post Mounts with Trex post sleeve

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- B. Top rail
- C. Bottom rail
- D. Trex Designer standard balusters

Contemporary



Cutting post sleeves is **NOT** required. Follow instructions for standard Designer installation, using metal balusters for square balusters.

- A. Pressure-treated post or Trex Post Mounts with Trex post sleeve
- B. Top rail
- C. Bottom rail
- D. Trex Designer contemporary balusters

Installation Instructions

HOW TO INSTALL STANDARD RAILING



All Trex Designer Series Railing[®] uses the same application for attaching posts to the rim joists. Posts may be pressure-treated wood or a Trex Railpost[™].

1

2" x 8" (5.1 cm x

20.3 cm)

min.

1" (2.5 cm) min.

5-1/8" (13 cm) min.

Read all instructions **BEFORE** installation.

Installing Posts

- » Post span = maximum 6' (1.83 m) on center.
- » Attach post using 1/2" (1.3 cm) carriage bolts.
- » Minimum joist size is 2" x 8" (5.1 cm x 20.3 cm).
- » Top bolt must be 1" (2.5 cm) from top of joist.
- » Bottom bolt must be 5-1/8" (13 cm) from top bolt.

NOTES:

- » Blocking can be added for extra strength.
- » Trex does not endorse notching any post when it is required to perform as a guardrail system.

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. **Cutting post sleeves** is NOT required.



Installing Railing Support Brackets (RSBs)

Option 1: Without TrexExpress[™] Designer Series Railing Assembly Tool



- 3a. For 36" (91.4 cm) height, mark 4" (10.2 cm) and 35-1/2" (90.2 cm) from deck surface OR for 42" (106.7 cm) height, mark 4" (10.2 cm) and 41-1/2" (105.4 cm) from the deck surface.
- 3b. Place RSBs on marks, center on posts and secure with 2" (5.1 cm) wood screws (provided). Brackets should be aligned so top part of bracket aligns with mark.

NOTE: Place both top and bottom RSBs flat side UP.

Option 2: With TrexExpress[™] Designer Series Railing Assembly Tool



- 3c. Place RSBs in template. Place both top and **bottom RSBs flat side UP**. Secure template on post sleeve with tape or rubber band, with bottom of template resting on post sleeve skirt. If post sleeve skirts are not used, place 1-1/4" (3.2 cm) shim under tool for proper bracket location. 3d. Secure RSBs with 2" (5.1 cm) wood screws
- (provided) and remove template.

HOW TO INSTALL STANDARD RAILING/CONTINUED

Measuring and **Cutting Railings**

4. Measure and cut top and bottom rails to fit between posts. Leave 1/16" (0.15 cm) gap at each end for cold weather expansion.



Assembling Rails with Balusters



5. Place bottom rails on their sides, lip sides facing up. Using TrexExpress[™] Designer Series Railing Assembly Tool, set balusters in designated slots.

NOTE: Using two assembly tools and overlapping these will allow you to span the entire length of the railing section for a 6' (1.83 m) span.

Insert balusters into top rail's channels, align bottom rails parallel to top rails with balusters at equal distance from both ends.

NOTE: If assembly tool is not available, maximum spacing for balusters is 5" (12.7 cm) on center or 3-5/8" (9.2 cm) between balusters.

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Have Questions? 1-800-BUY-TREX

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

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Securing Balusters to Bottom Rail



6. Move TrexExpress[™] Designer Series Railing Assembly Tool to bottom rail and hold balusters in contact with rail lip. Secure balusters to bottom rail with 2" (5.1 cm) 16 gauge finishing nails through underside of bottom rail.

NOTE: For added stability, drill pilot holes and use #8 - 2" (5.1 cm) screws to secure balusters.

Securing Balusters to Top Rail



7. Slide TrexExpress[™] Designer Series Railing Assembly Tool to top rail and check alignment of balusters. Secure balusters with 2" (5.1 cm) 16 gauge finishing nails through side of rail.

NOTE: For added stability, drill pilot holes and use #8 - 2" (5.1 cm) screws to secure balusters or nail thru both sides of the top rail. **ALWAYS** hold nail gun perpendicular to baluster to be sure the nail drives securely into baluster.

Installation Instructions

HOW TO INSTALL STANDARD RAILING/CONTINUED

Attaching Foot Blocks



Finishing Post

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10. Posts and post sleeves can be trimmed but this is not a requirement. Make sure tops of posts are level.

Secure post caps with construction-grade adhesive.

Clean-up any excess adhesive before drying.

8. Measure distance from deck surface to top of channel in bottom rail, approximately 3-1/2" - 4" (8.9 cm - 10.2 cm). Secure foot blocks with 2" (5.1 cm) 16 gauge finishing nails through side of bottom rail.

NOTE: 2" (5.1 cm) screws can also be used. Pre-drilling would be required.

NOTE: Foot blocks are required every 18" (45.7 cm) for Designer Series Railing.

Securing Railings to Posts



9. Place assembled railing section on RSBs on posts and secure top rail with two 1-1/2" (3.8 cm) screws.

Secure bottom rail with screws through top of rail and into the outermost hole in RSBs.

Bottom rail can also be secured to posts with 16 gauge finishing nails, toenailed from bottom of rail and 1" (2.5 cm) in from the posts.

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HOW TO INSTALL CONTEMPORARY RAILING



- 1. Installing Posts See instructions on page 2.
- 2. Installing Post Sleeve Skirts and Post Sleeves See instructions on page 2.
- 3. Installing Railing Support Brackets (RSBs) See instructions on page 2.
- 4. Measuring and Cutting Railings See instructions on page 3.

Attaching Foot Blocks

NOTE: Foot blocks should be secured to bottom rail before attaching bottom rail to posts.

Option 1: If using Contemporary Balusters for Foot Blocks



5a. Measure and cut round balusters for foot blocks every 18" (45.7 cm). Secure baluster connectors to bottom rails and deck for mounting balusters.



Option 2: If using Designer Balusters for Foot Blocks



5b. Measure and cut square balusters for foot blocks every 18" (45.7 cm). Secure foot blocks with 2" (5.1 cm) 16 gauge finishing nails through side of bottom rail.

NOTE: 2" (5.1 cm) screws can also be used. Pre-drilling would be required.

Installing Bottom Rail



6. Secure bottom rail with screws through top of rail and into the outermost hole in RSBs.

Bottom rail can also be secured to posts with 16 gauge finishing nails, toenailed from bottom of rail and 1" (2.5 cm) in from the posts.

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Installation Instructions

HOW TO INSTALL CONTEMPORARY RAILING/CONTINUED

DETERMINING NUMBER OF BALUSTERS AND SPACING

Number of balusters needed Length of rail _____" ÷ 4.5 = _____balusters

- » If number is odd, balusters will be centered.
- » If number is even, balusters will be offset 2-1/4" (5.7 cm) from center.

Installing Baluster Connectors



7. Place baluster connectors 4-1/2" (11.4 cm) on center and secure to top and bottom rails with screws.

Connecting Balusters to Bottom Rail



8. Lower each baluster down onto connectors on bottom rail.

Installing Top Rail



9. Lower top rail with connectors between posts onto RSBs and then secure balusters on connectors. Secure top rail with two 1-1/2" (3.8 cm) screws up through bottom of rail into RSBs.

Finishing Posts



10. Posts and post sleeves can be trimmed but this is not a requirement. Make sure tops of posts are level. Secure post caps with construction-grade adhesive. Clean-up any excess adhesive before drying.

HOW TO INSTALL STANDARD STAIR RAILING

NOTE: Trex rails meet major building codes for use as a guardrail system. Local municipalities may require a graspable handrail on stairways. Trex offers an ADA code-compliant handrail system. Check with your local building code officials for local requirements.

Installing Posts for Stair Railing

1. In most cases, a railpost or post sleeve longer than 39" (99.1 cm) is required for the lower stair rail sections to accommodate stair angle. Both top



and bottom posts need to be installed on outside corners (nose) of stair treads.

NOTE: Posts, post sleeve skirts, and post sleeves are installed per standard Designer railing instructions. See page 2.



- 2. Determine length and angle of top and bottom rail. Set railings on the nose of the stair tread and mark line at each intersection.
 - Cut rails on marks and place in position on supports. (Supports can be made from scrap material.)

NOTE: Allow a minimum clearance of 1" (2.5 cm) from stair treads.

NOTE: Check local building codes for railing height requirements.

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Installing Bottom RSBs on Upper and Lower Posts





3. Position bottom rail between posts and set to proper height from stair tread. Support on blocks cut from scrap materials. Mark both posts where underside of the bottom rail intersects.

interlock into bottom bracket on upper stair post.

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Installation Instructions

HOW TO INSTALL STANDARD STAIR RAILING/CONTINUED



5. Position one RSB centered on lower post with top of bracket aligned with mark on post, flat side UP, and secure with two 2" (5.1 cm) screws. Using a second RSB, turn upside down and interlock into bottom bracket on lower stair post.

Installing Top Rail RSBs on Upper and Lower Posts

- 6. Determine height of top rail from bottom rail and while holding top rail in place, and parallel to bottom rail, mark posts where underside of rail intersects.
- 7. Follow Steps 4-5 to install top rail RSBs on upper and lower posts.

Measuring and Cutting Balusters



8. Measure and cut balusters to proper height and angle of stairs.

Assembling Rails with Baluster



9. Insert and space balusters in top rails, then align bottom rails at parallel angle to top rails with balusters spaced the same and in contact with bottom rail lip.

NOTE: Maximum spacing is 5" (12.7 cm) on center or 3-5/8" (9.2 cm) between balusters.

Securing Balusters to Top and Bottom Rail



10. Secure balusters to top rail with 2" (5.1 cm) 16 gauge finishing nails through side of rail. Secure balusters to bottom rail with 2" (5.1 cm) finishing nails through underside of bottom rail.

HOW TO INSTALL STANDARD STAIR RAILING/CONTINUED



11. Measure and determine angle to cut foot blocks. Secure with 2" (5.1 cm) 16 gauge finishing nails through side of bottom rail.

NOTE: 2" (5.1 cm) screws can also be used. Pre-drilling would be required.

NOTE: Foot blocks are required every 18" (45.7 cm).

Mounting Rails on Posts



12. Place assembled railing section on RSBs on posts and secure top rail with two 1-1/2'' (3.8 cm) screws. Secure bottom rail with screws through outermost holes in RSBs.

Bottom rail can also be secured to posts with 16 gauge finishing nails, toenailed through the side of rail into the posts, 1-1/2" (3.8 cm) from bottom of rail and 1" (2.5 cm) from the post.

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Finishing Posts

- grade adhesive.
- 13. Posts and post sleeves can be trimmed but this is not a requirement. Make sure tops of posts are level. Secure post caps with construction-



Clean-up any excess adhesive before drying.

HOW TO INSTALL CONTEMPORARY STAIR RAILING

- 1. **Installing Posts for Stair Railing** See instructions on page 7.
- 2. **Measuring and Cutting Railings** See instructions on page 7.
- 3-5. Installing Bottom RSBs on Upper and Lower Posts See instructions on page 7.
- 6-7. Installing Top RSBs on Upper and Lower Posts See instructions on page 8.

Installing Foot Blocks

Option 1: If using Contemporary Balusters for Foot Blocks

8a. Measure and cut round balusters for foot blocks every 18" (45.7 cm). Secure baluster connectors to bottom rail and stair treads for mounting balusters.

Option 2: If using Designer Balusters for Foot Blocks

8b. Measure and cut square balusters for foot blocks every
18" (45.7 cm). Secure foot blocks with 2" (5.1 cm) 16 gauge finishing nails through sides of bottom rail.

NOTE: 2" (5.1 cm) screws can also be used. Pre-drilling would be required.



18"

(45.7 cm)

8b

Installing Bottom Rail



9. Secure bottom rail with screws through top of rail and into the outermost hole in RSBs.

Bottom rail can also be secured to posts with 16 gauge finishing nails, to enailed from bottom of rail and 1" (2.5 cm) in from the posts.

DETERMINING NUMBER OF BALUSTERS AND SPACING

Number of balusters needed

- Length of rail _____" ÷ 5.5 = _____balusters
 - » If number is odd, balusters will be centered.
 - » If number is even, balusters will be offset 2-3/4" (7 cm) from center.

HOW TO INSTALL CONTEMPORARY STAIR RAILING/CONTINUED

Installing Stair Baluster Connectors



10. Place stair baluster connectors 5-1/2" (14 cm) on center and secure to top and bottom rails with screws.

NOTE: Stair baluster connectors are sold separately. Black 3/4" (1.9 cm) Stair Baluster Connectors Part number: **BK075SCON**

Connecting Balusters to Bottom Rail



11. Lower each baluster down onto connectors on bottom rail.

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Installing Top Rail

12. Lower top rail with connectors between posts onto RSBs and then place balusters on connectors. Secure rail sections with screws up through bottom of rail into RSBs.

Finishing Posts

13. Posts and post sleeves can be trimmed but this is not a requirement. Make sure tops of posts are level. Secure post caps with constructiongrade adhesive. Clean-up any excess adhesive before drying.



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Installation Instructions



NOTES
