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TimberTech Reserve Rail can be installed with a continuous Top Rail in up to 16' lengths, measured from the center of the end posts. These applications require the use of a 4” Post Sleeve, 4” Post Skirt and a 4” x4” Post as an intermediate post, as well as unique fastening procedures. This Install Guide details these unique procedures.
NOTE: IF INSTALLING POST LIGHTING, WIRING MUST BE INSTALLED PRIOR TO SECURING POSTS TO DECK/STAIR SURFACE AND INSTALLING TOP RAILS.

It is the responsibility of the installer to meet all local code requirements and obtain all required building permits. The installer should determine and implement appropriate installation techniques for each installation situation. The AZEK Company or its reseller shall not be held responsible for improper or unsafe installations.

Find install videos, written instructions and a chat link at https://www.timbertech.com/installation-help.
IMPORTANT NOTES:

- Prior to construction, check with your local regulatory agency for special code requirements in your area.
- Common railing height is 36” or 42”.
- TimberTech Railing 10’, 8’ and 6’ Rails are designed not to exceed 10’, 8’ and 6’ from center of post to center of post, respectively.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information.
- For all stair applications, maximum rail length must not exceed 91”.
- If using anything other than aluminum support rail, the maximum rail length must not exceed 91”.
- 4x4 lumber posts must be installed plumb and level with each other.
- Cut slowly, using a thin kerf, finish saw blade to avoid chipping.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- For all applications, a structural post must be used inside our Post Sleeve.
- Compatible with all Classic Composite Series Railing Infills.
COMPONENT DIMENSIONS

FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL

IMPORTANT NOTES:

- Consult your local building codes for guard and handrail requirements.
- TimberTech Railing 10’, 8’ and 6’ Rails are designed not to exceed 10’, 8’ and 6’ from center of post to center of post, respectively.
- For all other applications, consult a design professional or a TimberTech Railing representative for more information. For stair applications maximum rail length must not exceed 91”.
- 4x4 lumber posts must be installed plumb and level with each other.
- Cut slowly, using a thin kerf, finish saw blade to avoid chipping.
- Read instructions completely to get an understanding of how the product goes together and how each piece affects the other.
- For all applications, a structural post must be used inside our Post Sleeve.
- Compatible with all Classic Composite Series Railing Infills.

COMPONENTS NEEDED FOR INSTALLING ONE TIMBERTECH RAIL SECTION

(TOP RAIL NOT INCLUDED IN CLASSIC COMPOSITE SERIES)

- Top Rail (Sold Separately)
- Universal Bottom Rail
- Support Rails (1 - Aluminum Top Support Rail for 10’)
- Foot Blocks (1 in 6’ Kits, 2 in 8’ Kits, 8 in 10’ Kits)
- Composite Balusters (13 in 6’ Kits, 18 in 8’ Kits, 23 in 10’ Kits)
- Hardware Mounting Kit
- Support Block Mounting Templates
- Baluster Fastener Kit
- 2 - Post Caps (Sold Separately)
- 2 - Post Sleeves (Sold Separately)
- 2 - Post Skirts (Sold Separately)

TOOLS REQUIRED

- Miter Saw
- Drill
- 7/64” Drill Bit
- 3/16” Drill Bit
- Measuring Tape
- Caulk Gun

COMPONENTS NEEDED FOR INSTALLING ONE TIMBERTECH RAIL SECTION

(TOP RAIL NOT INCLUDED IN CLASSIC COMPOSITE SERIES)

Components needed to complete install of 10’, 8’, and 6’ rail sections

1 Universal Rail Kit = 1 Universal Rail Pack + 1 Baluster Pack

Kits only available in 36’ height.

Components included in Universal Rail Pack:

- Universal Rail Pack
- Baluster Fastener Kit
- Support Block Mounting Templates
- Foot Blocks (1 in 6’, 2 in 8’, 3 in 10’ packs)

Components included in Baluster Pack:

- Composite Balusters
- Aluminum Balusters
- 18 Balusters per Pack

Additional Components Needed for Each System

(Sold Separately):

- Top Rail
- 2 - Post Caps
- 2 - Post Sleeves
- 2 - Post Skirts

MEASURING YOUR RAILING AREA

- Measurements are from center to center of the posts. Rails are produced in 10’, 8’ and 6’ to allow for finished end cuts and angles.
- Determine how many 10’, 8’ and 6’ TimberTech Rail Sections you need and check to be sure you have all the components (and quantities) listed in the chart shown.
INSTALLING RAILING WITH BALUSTERS
FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL

1

INSTALL POST SLEEVES

- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim as needed to plumb.

IMPORTANT NOTES:

Be sure to cut Post Sleeves such that finished rail height is at least 36” high for a 36” rail application and 42” high for a 42” application.

For all rail installations, post and post covers must be plumbed and aligned with one another.

For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

TIP: To ensure that the tops of all post sleeves are level, you may use a traditional 8 ft. level or a string line to establish a common level across all post sleeves and cut at that level. Alternatively, you may use a laser level to “shoot” a level mark on each post sleeve and then cut at that mark.

39” above deck surface is optimal for 36” railing heights.

2

INSTALL LOWER SUPPORT BLOCKS

- Position template at bottom of Post Sleeve above Post Skirt.

If you do not have the template, position the top of the Support Block 4” above the deck.

For angled rail installations, align angled face of Support Block parallel to rail section.

3

CUT AND ASSEMBLE BOTTOM SUPPORT RAIL

- Cut the Bottom Support Rail to length.
- Add support blocks as required.
- Attach brackets.

For sections up to 6’:
Place one Foot Block in the center of the rail.

For sections 6’ to 8’:
Space two Foot Blocks approximately at 1/3 intervals on the rail.

For sections 8’ to 10’:
Space three Foot Blocks approximately at 1/4 intervals on the rail.
INSTALL BOTTOM SUPPORT RAIL

- Position Bottom Support Rail assembly onto Support Blocks.
- Pre-drill holes into post sleeves only.
- Attach brackets with green coated screws.

SPACE BALUSTER AND TRIM RAILS

- Measure distance between the posts at the Bottom Support Rail.
- Transfer measurement to Universal Bottom Rail. To prevent end balusters from interfering with the post sleeves, center either on a pre-drilled hole, or between two pre-drilled holes (see diagram below).
- Cut Universal Bottom Rail and Top Support Rail to length.

The space between the end baluster and post can not exceed 4”
6 INSTALLING RAILING WITH BALUSTERS
FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL

ASSEMBLE BALUSTER SECTION

- Attach Mounting Brackets at each end of the Top Support Rail (outlined in Step 3).
- Attach balusters using pre-drilled holes starting with the support rail and then the Universal Bottom Rail.

For 10’ rail sections utilizing aluminum support rail, when attaching Mounting Brackets at each end of the Top Support Rail, pre-drill using a 9/64” drill bit (instead of 7/64” bit).

7 INSTALL RAIL ASSEMBLY

- Place finished section on Bottom Support Rail.
- Align Top Support Rail to center of Posts.
- Attach brackets on Top Support Rail to posts.

NOTE: If installing a Deck Board as a Top Rail, please refer to Drink Rail Install Guide.
INSTALL TOP RAIL AND POST CAPS

- Measure and cut Top Rail (not included) to length. Trim both ends for a clean cut. If installing Deck board as Drink Rail, please refer to Drink Rail Install Guide.
- **Important:** Pre-drill 3/16” holes through the top support rail as illustrated below.
- Attach Top Rail using 1 5/8” screws, driving screws up through bottom of support rail into Top Rail.
- Attach Post caps using exterior grade caulk applied to the underside of the cap.

Caution: Screws must be 1 5/8” so they won’t go through the Top Rail on straight rail sections.
Be sure to cut Post Sleeves such that finished rail height is at least 36” high for a 36” rail application and 42” high for a 42” application.

For all rail installations, post and post covers must be plumb and aligned with one another.

For Over-the-Post applications, it is critical that Posts be of a consistent height (e.g. the tops of all post sleeves are level and on plane with each other).

**INSTALL POST SLEEVES**
- Trim Post Sleeves to desired length.
- Slide Post Sleeves and Post Skirt over post (do not force). Post sleeve will be slightly larger than the post.
- Ensure posts are square and plumb. Shim to plumb as needed.

**MEASURE SUPPORT RAILS**
- Determine measurements and angle as shown.
- Trim both the Top Support Rail and the Bottom Support Rail to those dimensions.
- Test fit rails to check for accuracy.

**TRIM RAILS**
- Transfer measurement from Bottom Support Rail to Universal Bottom Rail.
- Trim Top Rail to match Top Support Rail at appropriate angle.

This entire section of instructions is for installation of Classic Composite Series and Reserve Rail systems. Installation of the RESERVE RAIL system is identical to the Classic Composite Series, except it uses the RESERVE BOTTOM RAIL instead of the Universal Bottom Rail.
INSTALLING STAIR RAILING WITH BALUSTERS
FOR CLASSIC COMPOSITE SERIES AND RESERVE RAIL

4

DRILL BALUSTER HOLES

- Attach Balusters to Top and Bottom Support Rails and attach Brackets to Top Support Rail.

5

TRIM BALUSTERS

- Trim Baluster ends to required angle as shown.

Important: Start cut at top edge to maximize the length.

- Aluminum stair Balusters are precut to a stair angle and are not to be cut on the job site.

6

ASSEMBLE BALUSTERS

- Trim TOP of Foot Block to stair angle as well.

Tip for Universal Bottom Rail: Partially drive screws into all Balusters before driving them in completely.

Brackets must be on the side of the rail facing the stairs.
Installing Stair Railing with Balusters for Classic Composite Series and Reserve Rail

7

**Install Bottom Support Rail**

- Attach Mounting Brackets to Bottom Support Rail.
- Secure Mounting Brackets to posts.
- Wedge Foot Block under Support Rail & Attach.

- Brackets must be installed to the stair tread side of the rail.
- For sections up to 6’: Place one Foot Block in the center of the rail.
- For sections 6’ to 8’: Space two Foot Blocks approximately at 1/3 intervals on the rail.

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8

**Install Rail Assembly**

- Mark ends of support rail for position of support block.
- Rotate Rail assembly out of way to fasten Support Block.
- Secure Mounting Brackets to Posts.

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**NOTE:** If installing a Deck Board as a Top Rail, please refer to Drink Rail Install Guide.
INSTALL TOP RAIL AND POST CAPS

- If installing Deck board as Drink Rail, please refer to Drink Rail Install Guide
- Attach Top Rail using 2 5/8” screws, driving screws up through bottom of support rail into Top Rail.
- Attach Post caps using exterior grade caulk applied to the underside of the cap.

Note: Pre-drilling with a 3/16” bit is required.

#8 x 2 5/8” Coated Screws

For typical stair angles, use provided 2 5/8” Screws to fasten the Top Rail.