TimberTech®
BY AZEK®

Installing TimberTech Composite Decking with CONCEALoc® Hidden Clip Fasteners

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To access this information on the website click here. https://www.timbertech.com/resources/deck-building/install-timbertech-azek-decking/

DISCLAIMER

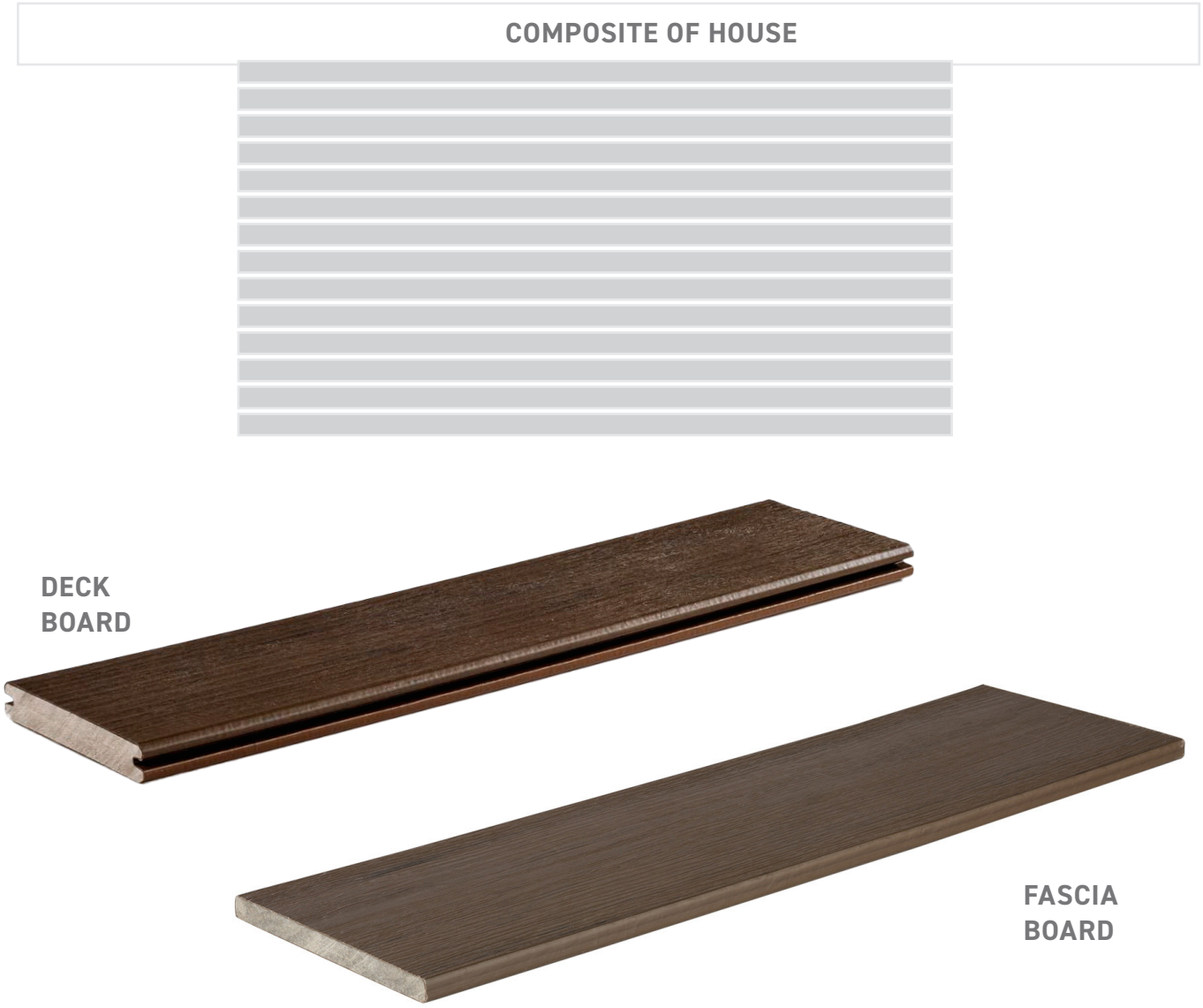
TimberTech® Advanced PVC and Composite decking should be installed using the same good building principals used to install wood or composite decking and in accordance with the local building codes and the Installation Guidelines found at the website below. AZEK Building Products LLC, its affiliates, successors, and assigns accepts no liability or responsibility for the improper installation of this product. TimberTech Advanced PVC and Composite decking may not be suitable for every application, and it is the sole responsibility of the installer to be sure that TimberTech Advanced PVC and Composite decking is fit for the intended use. Since all installations are unique, it is also the installer's responsibility to determine specific requirements for each Deck application. TimberTech recommends that all applications be reviewed by a licensed architect, engineer, or local building official before installation. Prior to your purchase, TimberTech also recommends that you review the full Installation Guidelines for more details regarding installation as well as information on care and maintenance, storage and handling, reference to warranty coverage, and other important product information. Installation Guidelines can be found at: https://www.timbertech.com/resources/installation-help/

Design Assumptions

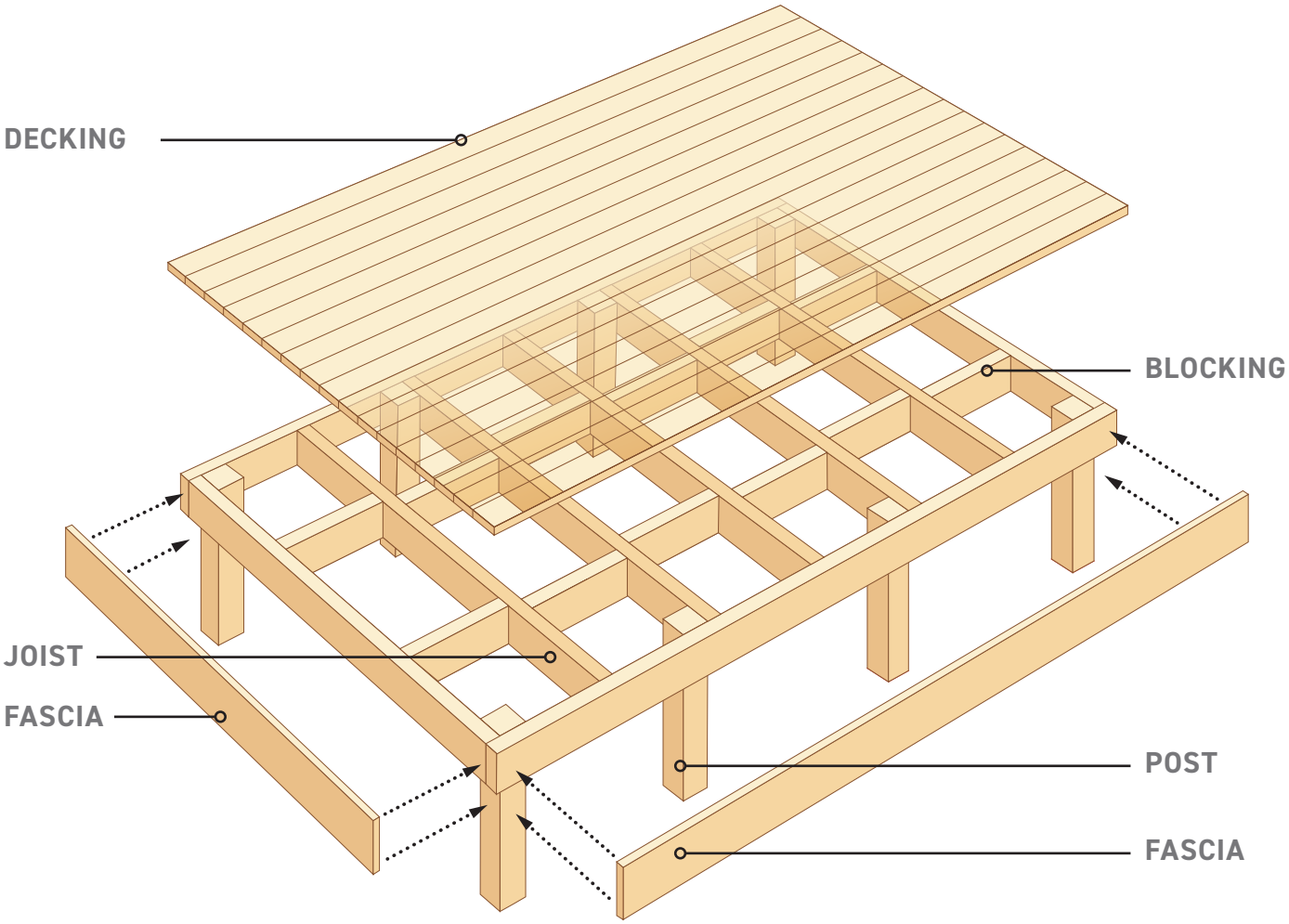
This guide assumes the use of grooved 5.36" Composite boards and 5.5" Composite boards and 3/16" spacing in a straight, edge-to-edge pattern.

The fascia boards will be installed flush with the deck boards to cover the ends.

Your railing will be installed on top of the deck boards after the boards are installed.



Deck Components



Considerations and Tools

ESTIMATED TIME: 3 Hours*

RECOMMENDED MAN-POWER: 1 - 2 People

PRE-REQUISITE 1: Secured framing, properly attached to the house
PRE-REQUISITE 2: A confirmed deck design

STEPS:

1. Cutting TimberTech Composite Deck Boards
2. Where to Start Laying Boards
3. Install TimberTech Composite Decking
4. Fascia Fastening Best Practices

TOOLS NEEDED:

- Safety glasses
- Power Miter Saw
- Jig Saw
- Cordless Driver
- Measuring Tape
- Carpenter Square
- Deck spacer or spacing tool (optional)
- Hammer
- Pneumatic Gun (optional)

FASTENERS:

- CONCEALoc® Hidden Clip Fasteners
- TOPLoc™ Fascia Color Matched Screws
- Cortex® fasteners, or a minimum **#8 x 2-1/2" stainless steel or other high-quality coated composite deck fasteners. Cortex® cannot be used with scalloped deck boards from the Terrain, Prime+, Prime Collections.

Many other tools are available that can be used for installation. All tools should be used per applicable manufacturers' instructions.

* Estimated based on a 12' x 12' deck
Time will vary depending on the size of deck and complexity of the build.

**For salt water coastal applications, we suggest using the above minimum fastener requirements in 316 stainless steel.

NOTE! Do not move forward until you've confirmed your frame is structurally sound.

STEP ONE Cutting Deck Boards

POWER MITER SAW

For cutting Composite boards. Use a miter saw with a fine-toothed, carbide-tipped finish trim blade (12" 100-tooth minimum or 10" 80-tooth minimum).

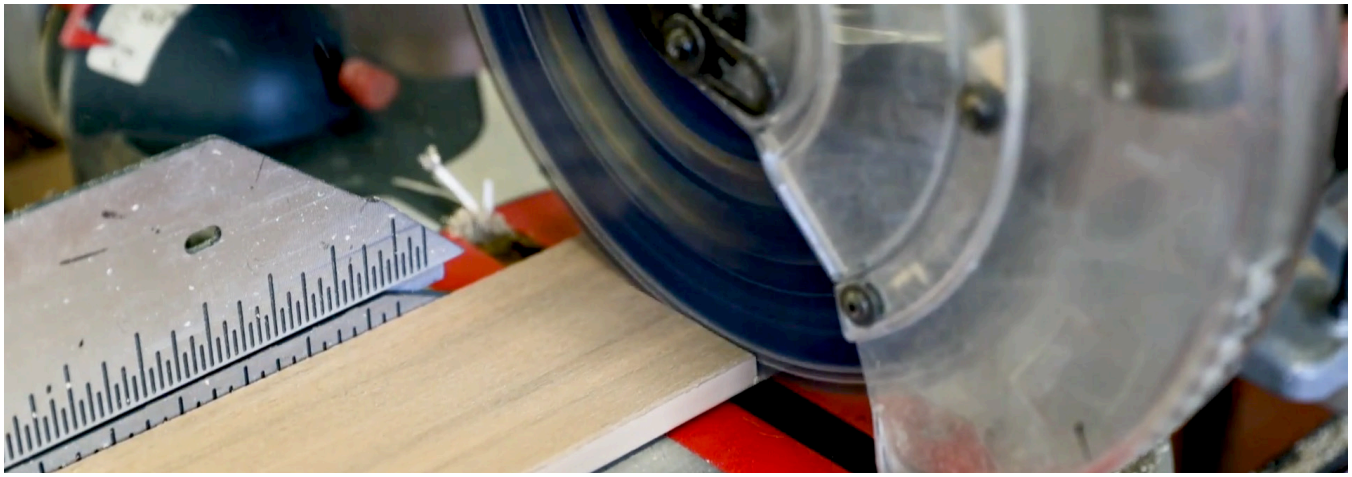
HAND-HELD ELECTRIC CIRCULAR SAW

For cutting Composite boards. Use an electric circular saw with a 60-tooth, fine-finish blade.

ELECTRIC JIG SAW

For cutting around rail posts and other obstructions. Use a jig saw with a fine-tooth blade.

NOTE! Do not use any cordless saws.



Best Practices For Cutting Composite Deck Boards

- For best results a miter saw with a fine-toothed, carbide-tipped finish trim blade (12"-100 tooth minimum) works well for cutting.
- As with any wood or alternative decking product, always be sure to cut the factory ends of your board for a clean and square finish.
- Cut deck boards with the grain facing upward.
- If using a hand-held circular saw, be sure to use a saw guide for clean, square cuts.
- Cut boards one at a time.
- For best results, cut boards before installing/fastening or chipping can occur.
- Do not cut boards to length after fastening or chipping can occur.
- While using any saw, cut slowly or chipping can occur.
- As always, measure twice and cut once.
- Do not use battery-powered saws, as chipping can occur.

NOTE! Always wear the proper safety glasses (PPE)

Best Practices for Fastening Deck Boards

Due to the durability of TimberTech Composite deck products, a high-quality fastener is recommended. See page 5 for recommended fasteners. As always, you should try the fastener in a sample board before using on your deck. As you install each deck board, make sure:

- Each fastener is in full contact with the edge of the deck board.
- The screw is holding the fastener down tight to the joists.
- You install one fastener and one screw at each joist.
- A cordless drill or pneumatic gun work best for installing CONCEALoc fasteners with TimberTech Composite.

CORDLESS DRILL

PNEUMATIC GUN OPTION
(FOR FASTER INSTALLATION)

CONCEALOC FASTENER CLIP & PROVIDED FASTENERS

NOTE! TimberTech does not recommend any fastener that is not explicitly stated in the TimberTech Decking Installation Guide. Use of any alternative fastener does not void the TimberTech warranty; however, if a decking failure is caused by using one of these alternative fastening methods, any corresponding claims will be denied.

Best Practices for Fastening Deck Boards

FASTENER POSITION
Always position fastener screw hole with the center of the joist.

FASTENER APPLICATION
Drive screw at a 45° angle while applying pressure. The connection point of the next grooved board will be against the fasteners within the curvature of the CONCEALoc hidden fastener clip.

SPACING BETWEEN BOARDS
Spacing between boards should be 3/16". The use of a spacer could add efficiency and help maintain proper spacing.

Follow proper spacing & gapping. Side-to-side board gapping must be a minimum of 1/8" to a maximum 3/16". Allow a 3/16" minimum gap where the board meets any adjoining structure or post. Follow proper butt joint gapping guidelines for TimberTech Composite deck boards. For specific applications such as California WUI, see installation guides or call customer service for information.

STEP TWO Determine Where to Start Laying Boards

The design and size of your deck will determine the number of boards required to install TimberTech Composite decking.

SCENARIO 1

Deck plan includes all full-width boards (no partial/cut/ripped down boards). You may want to start at the house and work outward for ease.

SCENARIO 2

Deck plan will require cutting/ripping down a board or boards. You may want to start away from the home and work inward so the off-sized board is closer to the house/hidden.

EXPANSION AND CONTRACTION

TimberTech deck boards will experience expansion and contraction with changes in temperature. Expansion and contraction are most significant where extreme temperature changes occur. Be sure to fasten the deck boards according to the gapping requirements noted in the following table.

BUTT JOINT GAPPING REQUIREMENTS		
32°F & Below	**33 to 74°F**	**75°F & Above**
3/16" gap	1/8" gap	1/32" gap

Ripping of boards may be required. Cutting a board along its horizontal edge, or "ripping", may be required to achieve full coverage of the framing.

STEP THREE

Install TimberTech Composite Decking

TO INSTALL FIRST AND LAST GROOVED BOARD USING TOP DOWN FASTENING

Pre-drilling is required for TimberTech Composite:

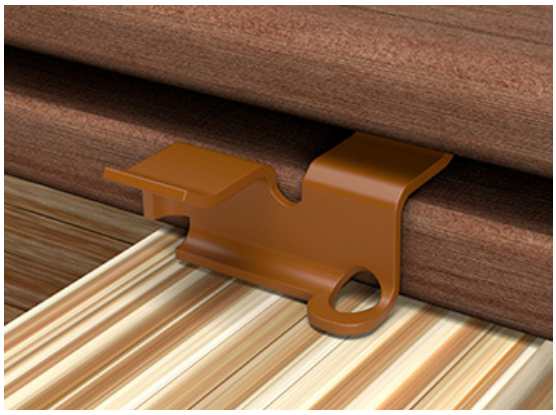
- When within 1-1/2" of the ends of the board.
- Temperatures below 45°F.
- Always when using Cortex. This is to avoid end splitting, screw shear and surface distortion.
- Fasten no closer than 3/4" from the end and outside edge of each board, using two screws per joist including end joints.
- The ends of the boards must fall on a joist. Always double joists at butt seams. Do not toe screw deck boards as this will cause splitting.
- Always install fasteners perpendicular to board surface and drive flush. Do not overdrive or splitting and mushrooming will occur.

Pre-drill as defined below based on your selected fastener.

- Pre-drill with a 5/32" drill bit for TOPLoc fasteners or a #8 x 2-1/2" stainless steel or other high-quality coated composite deck screw.
- Cortex installations require a 3/16" pre-drill at all fastener locations or mushrooming will occur.
- Pre-drill through deck board only—not into joist.

STEP THREE Install TimberTech Composite Decking

1. INSERT FASTENER
Insert the CONCEALoc fastener into the grooved edge of the deck board. Press it downward to engage the teeth into the top of the groove.



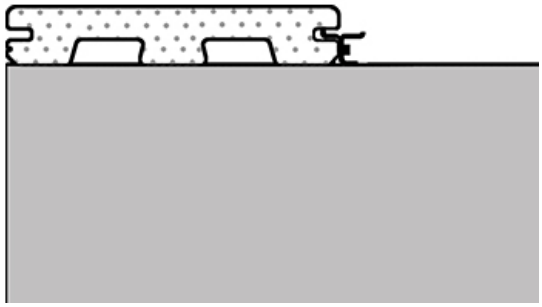
2. DRIVE SCREW
Drive the screw at a 45-degree angle in the center of the joist while applying downward pressure to the clip to maintain clip engagement.

3. CONFIRM
Drive clip until it is flush against the joist.

STEP THREE Install TimberTech Composite Decking

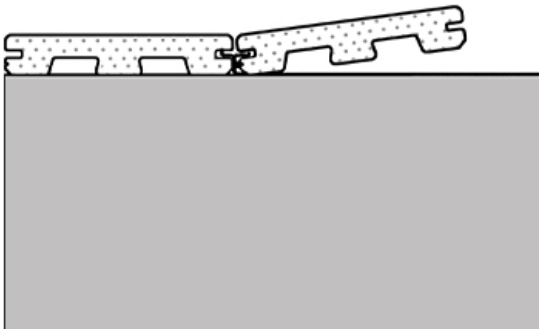
1. FASTEN BOARD

Ensure fastener is in theproper position, secured tightly to the joist, and the board is firmly in place.



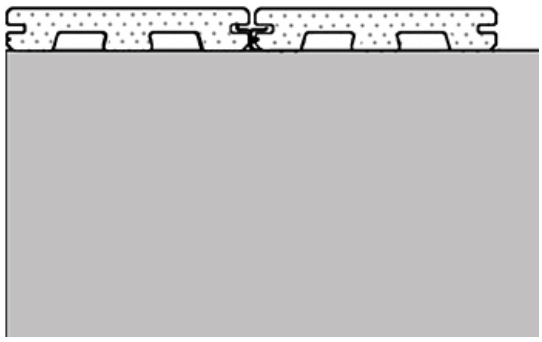
2. CHECK YOUR BOARD

Place the next board into position against the fasteners. Raise the outer edge of the board being installed and slide it onto the fastener until the board contacts the spacer tab.



3. SECURE YOUR BOARD

When properly installed, the inserted board should be in contact with the bent-forward spacer tab at the left end of the clip.



Do not use a hammer. When installing your TimberTech Composite deck, do not use a hammer or damage to the edge of the board will occur. Use a beater board such as a wooden 2x4 board at least 24" long to gently tap the TimberTech board tight to clip spacing tab if necessary. The screw will fully engage the board to the spacer tab if not already in contact.

STEP THREE

Install TimberTech Composite Decking

BEST PRACTICES FOR BUTT JOINT DETAIL

You will use **FOUR CLIPS PER JOINT; TWO ON EACH SIDE OF THE DECK BOARDS.**

- Insert the board on the right side of the splice, fully seated on a 1-1/2" joist with one full clip designated for this side.
- Each board end at the butt-joint splice has two clips, one on each side of the board, fastened to a full 1-1/2" joist / block.
- This means there are four clips at a butt-joint splice: two clips for the left side board, and two clips for the right side board, for a total of four.
- NOTE: Butt joints are not necessary for any deck where the overall length of the deck (in the direction of the planks) does not exceed 12', 16' or 20'.

For a completely fastener-free surface. Use the L-bracket or Cortex fastening system on the first and last boards. Cortex isn't compatible with Terrain, Prime, or Prime+ Collections. See the installation guide for restricted Cortex uses and other fastening options for Terrain, Prime, or Prime+ Collections.

STEP THREE Install TimberTech Composite Decking

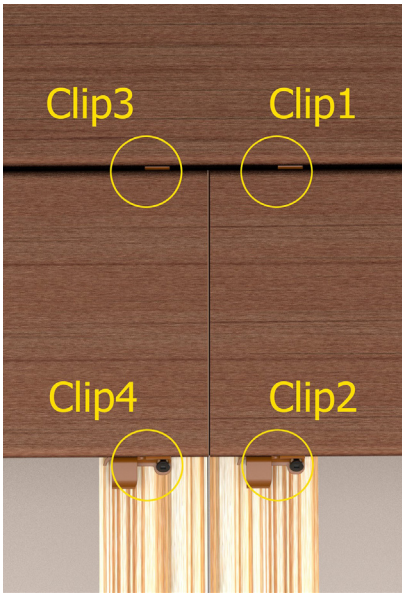
BUTT JOINT INSTALLATION

Determine where butt-joint splices will be located. You may use a 'double joist' technique or add a 'sister joist block' to create a full 1-1/2" against which each board end can rest and for proper CONCEALoc clip attachment.

FIRST
Double up your joists at butt-joint splices.

NEXT
Make sure you offset the clip on the right side of the joint 1/4" from the center line.

Four properly positioned clips are required for every butt joint as shown. They must be double joist (or block) installed to support the clips. **DO NOT** install using only 2 clips attempting to secure both boards on the butt joint with a single clip.



NOTE! The techniques shown should be used for best results. Results may vary, as expansion and contraction could still occur. Please contact TimberTech Customer Service prior to installing if you have question or concerns.

STEP FOUR Installing TimberTech Composite Fascia Boards

Due to the durability of TimberTech Composite deck products, a high-quality fastener is recommended. For best results, use:

- TOPLoc fascia fastening system featuring color-matched fasteners

For salt water coastal applications, we suggest using the above minimum fastener requirements in 316 stainless steel.

RECOMMENDED MAN-POWER:
1 - 2 People*

TOOLS NEEDED:

- Power miter saw
- Circular saw or table saw
- Quality exterior grade construction adhesive
- TOPLoc Fascia screws
- Drill
- T-tap driver bit
- Level

CORDLESS DRILL

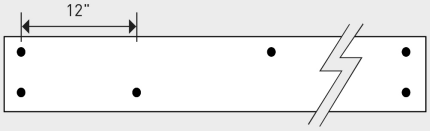
TOPLOC FASCIA DRILL BIT
Sold separately.

TOPLOC FASCIA COLOR MATCHED SCREWS

TimberTech® Fascia and Riser Boards

Using screws with proper installation of TimberTech Fascia provides the best long-term holding. TimberTech recommends the use of TimberTech TOPLoc Fascia Fasteners for best results. Refer to gapping requirements on page 3 for proper installation.

For Use with TOPloc Fascia Fasteners:
Using the TOPLoc Fascia Bit, pre-drill 2" from the top and bottom alternating a maximum of 12". It is recommended that screws are evenly spaced for the best look.



- Set fascia in place being sure to follow proper gapping requirements.
- Drive TOPLoc fascia fastener 90 degrees with the fascia surface so that the screw head is flush with the surface. Do not completely torque down screw; screw should serve as a hanging mechanism to allow for expansion and contraction in the fascia.
- Continue fastening in pattern described being sure to work left to right or right to left. This will ensure flatness in the fascia.
- If preferred, TopLoc Fascia Fasteners may be installed 2 every 12", 2" from the top and bottom.

* Minimum, based on an average 16x20 deck.
Time may vary based on the installer's skillset and quality of substructure

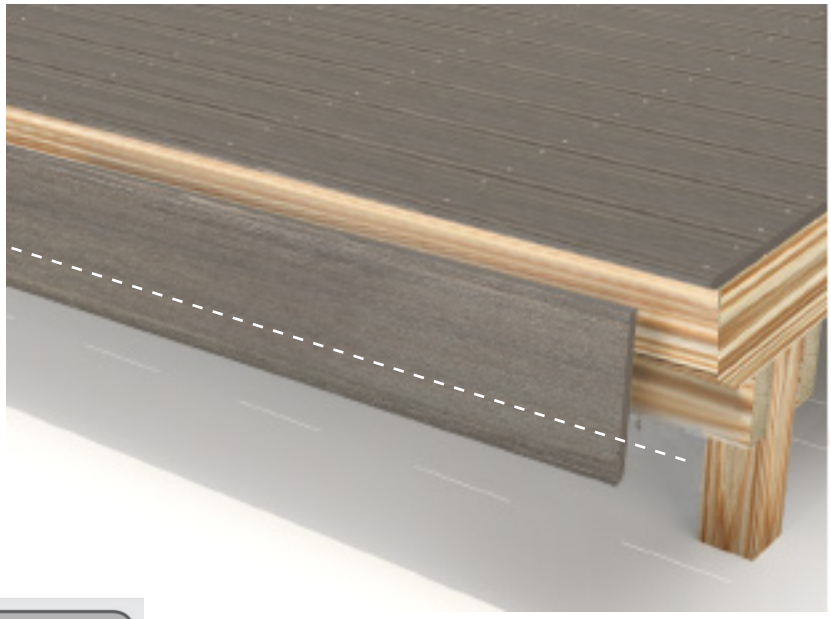
STEP FOUR

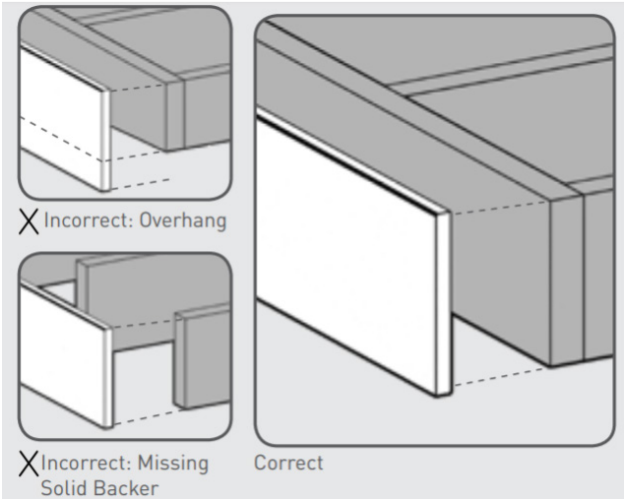
Installing TimberTech Composite Fascia Boards

Measure the length of the outside rim joist to determine length of Composite fascia board needed.

It may be necessary to rip cut the TimberTech Composite fascia board to fit the outside rim board of the deck. A slight (up to 1/2") overhang is permitted with the goal being to hide the wood rim joist.

Rip cut needed



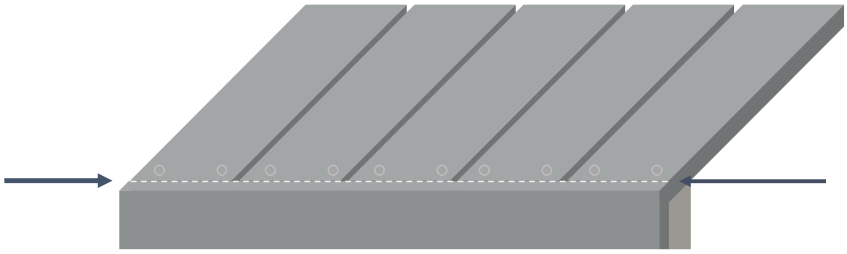


If fascia or rim board does require ripping down – make sure that the cut edge is positioned down/not up exposing the core material – place factory edge/cap stock edge up and flush with walking surface.

STEP FOUR

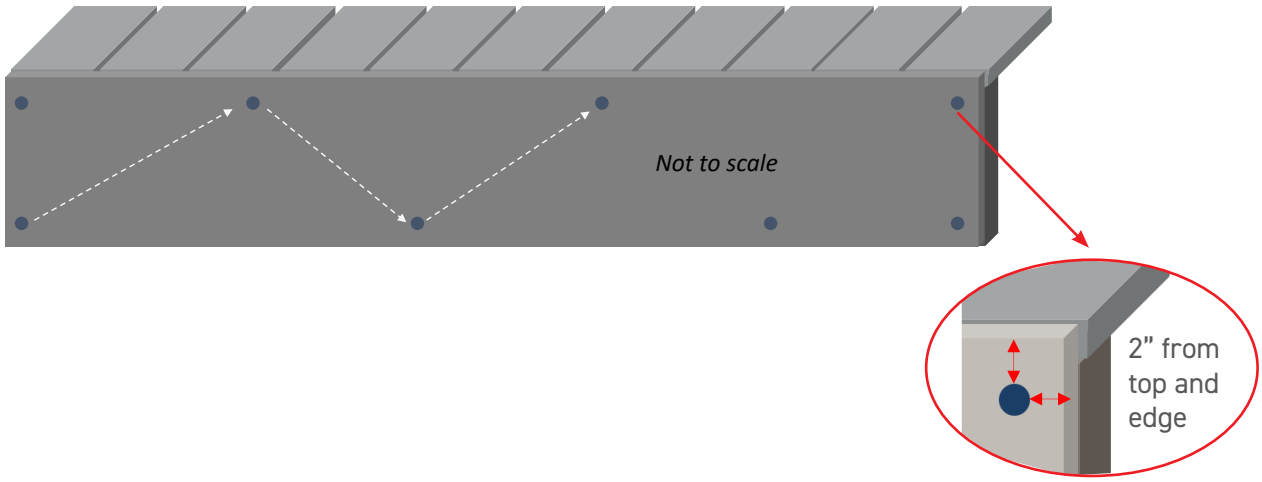
Installing TimberTech Composite Fascia Boards

1) Position the fascia board so it is flush with the top of the deck boards.



2) Pre-drill 2" from the top and bottom, alternating between the two at a maximum of 12". Do not drive screws into ends or edge of deck boards or splitting of deck board can occur.

- If preferred, TOPLoc Fascia Fasteners may be installed 2 every 12", 2" from the top and bottom.



3) Continue fastening in the pattern described as seen above, working in one direction to ensure the fascia remains flat.