



Installing TimberTech <sup>®</sup> Composite Decking .....	2
Fastening Methods .....	5
TimberTech <sup>®</sup> Composite Square Shouldered Boards .....	6
Trimming a TimberTech <sup>®</sup> Composite Deck .....	7
CONCEALoc <sup>®</sup> Hidden Fasteners.....	8
Cortex <sup>®</sup> Hidden Fastening System.....	11
FUSIONLoc <sup>®</sup> Hidden Fasteners.....	13
Care and Handling .....	19
Warranty .....	20
Notes .....	21

TimberTech 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 included below. AZEK® Building Products Inc. accepts no liability or responsibility for the improper installation of this product. TimberTech Decking may not be suitable for every application and it is the sole responsibility of the installer to be sure that TimberTech 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. AZEK Building Products recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation. To get more information visit [TimberTech.com](http://TimberTech.com).

### Access Installation Resources 24/7.

Installation guides and videos are available on our web site at [www.timbertech.com](http://www.timbertech.com)

### Do you need help with your installation?

We have an excellent customer service team that is here to help you with your installation questions. If you need help you can call customer service at 1-800-307-7780 or visit [TimberTech.com](http://TimberTech.com) to view TimberTech installation videos.

## Tools Required

TimberTech boards can be installed with a minimum number of readily available tools. However, many other tools are available that can provide even greater efficiency and ease of installation. All tools should be used per applicable manufacturers' instructions. Some of the basic tool requirements:

- Cordless Driver
- Chalk Line
- Tape Measure
- Jig Saw
- Carpenter Square
- Spacing Tools
- Circular Saw
- Safety Glasses
- Drill Bits

Use the jigsaw to cut around obstructions such as posts. A power miter saw can also be very helpful during installation. For a power miter or compound power miter saw a fine finish alternate top bevel blade is also recommended. When working with TimberTech products be sure to wear proper clothing and safety equipment. Safety glasses should be used during the entire installation process.



## STOP! Read this section before you start!

Always make sure to visit [TimberTech.com](http://TimberTech.com) to ensure you are viewing the most current installation instructions, care and cleaning, technical information and more.

### Walking Surface

TimberTech boards are intended to be installed embossed side up only. The unembossed surface is not to be used as a walking surface. This applies to all TimberTech boards.

### Directional Notch

TimberTech's surface on ReliaBoard boards are directional in manner. A notch has been added to one side of the boards. When installing boards, this marked edge must be laid to the same side for the entire installation for a consistent appearance.

### Static Electricity

The buildup or generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions.

### Cantilevering

All TimberTech Composite, ReliaBoard, and can be cantilevered a maximum of 25 mm (1"). All scalloped, Terrain, Prime, and ReliaBoard, can only be cantilevered on the ends.

### Safety

Unlike traditional wood, TimberTech product is splinter-free.

### Color and Grain Patterns

TimberTech Decking is designed to mimic the look of real wood, and like real wood, there will be a slight difference in color and grain pattern from board to board. This is intentional and part of the manufacturing process, giving TimberTech decking the most realistic and wood-like appearance possible. This variation is purely aesthetic and does not or will not affect the performance of the product. ReliaBoard, is designed to naturally weather over time and the surface grain pattern will weather to a more consistent color. Most of the weathering process will be complete within the first year of the deck's life. When working with multiple units of decking, consider pulling boards randomly to mix rather than completing one unit at a time. It is always a good practice to layout deck boards in different lighting conditions/angles before final fastening.

### Note

TimberTech is NOT intended for use as columns, support posts, beams, joist stringers or other primary load-bearing members. TimberTech must be supported by a code-compliant substructure. While TimberTech products are great for deck re-boarding (removing old deck surface boards and installing TimberTech on code-compliant substructure), TimberTech boards CANNOT be installed on top of existing deck boards.

### Routing

TimberTech Decking should not be routed on the edges, ends, or sides with the exception of the start/stop boards as shown in this guide (under CONCEALoc section).

### Notching

Whenever notching a board for a post or any obstruction, the deck board must be handled carefully and be fully supported under the notched area when installed.

## Extreme Heat Warning

Be aware of excessive heat on the surface of TimberTech products from external sources, such as but not limited to, fire, hot ashes/embers, fire pits, grills, or reflection of sunlight from Low-emissivity energy-efficient window products. Low-emissivity (Low-E) glass can potentially harm TimberTech products. Low-E glass is designed to prevent passive heat gain within a structure and can cause unusual heat build-up on exterior surfaces. This extreme elevation of surface temperatures, which exceeds that of normal exposure, can possibly cause TimberTech products to melt, sag, warp, discolor, increase expansion/contraction, and accelerate weathering. Current or potential TimberTech customers that have concerns about possible damage by Low-E glass should contact the manufacturer of the product which contains Low-E glass for a solution to reduce or eliminate the effects of reflected sunlight.

## Color and Temperature

Although TimberTech products are cooler to the touch than many other deck board products in similar colors, all decking products will get hot in the sun. Additionally, the darker the decking color, the hotter it will feel.

## Excessive Construction Debris

It is important during construction, that the deck's surface stay clear from excessive build-up of dirt, sand, and dust from tile, concrete, landscape blocks, or any other masonry products. If these materials are not removed immediately, the deck surface will become difficult to clean and can potentially damage the deck's surface finish. TimberTech Decking should not be used as a work surface. If a build-up does occur please refer to the Care and Cleaning section in TimberTech Decking Care & Cleaning Guide" Also refer to C&C guide or website, [www.TimberTech.com](http://www.TimberTech.com)

## Calculating Material Requirements

To determine how much TimberTech decking material you will need, start by calculating the square footage of your deck surface by multiplying length by width. Once you know this number, divide it by the numbers provided below for 3,66 m (12') boards, 4,88 m (16') boards and 6,10 m (20') boards.

Once you know the square footage number, divide it by 5.5 for 3,66 m (12') boards, 7.3 for 4,88 m (16') boards and 9.1 for 6,10 m (20') boards.

When calculating the amount of decking you will need, it is recommended that you add roughly 10% to the total for a scrap factor.

Example: Length x Width = Total Square Footage

Square Footage ÷ by 5.5 (3,66 m (12')), 7.3 (4,88 m (16')) or 9.1 (6,10 m (20')) = Boards Needed (Round the number up)

Boards Needed + 10% (Scrap Factor) = Final Number of Boards Needed (Round the number up)



## Working With TimberTech Boards

### Expansion and Contraction

TimberTech deck boards will expand, contract, move, and gap with changes in temperature. Expansion and contraction are most significant where extreme temperature changes occur. Fastening the deck boards according to the gapping requirements noted in the following table accommodates for this movement.

It is recommended to add additional framing, tighter joist spacing (152 mm to 203 mm (6 to 8") maximum). Also, only use top-down fastening in these locations such as near glass, areas of high heat build or sunlight reflection.

Changes in length are most significant during the installation process, and should be accounted for if working in extreme temperatures. A good example would be cutting your boards during a hot afternoon, letting them sit outside overnight in the cool air and then installing them the next morning. Chances are, you will notice a certain amount of contraction. The best way to minimize this problem is to fasten your boards as soon after cutting as possible.

### Gapping Requirements For All TimberTech Boards

- Side-to-side board gapping must be minimum 3 mm to 5 mm (1/8" to 3/16") maximum
- Allow 5 mm (3/16") minimum gap where the boarding meets any adjoining structure or post. Follow these butt joint gapping guidelines for all TimberTech boards:

Butt Joint Gapping Requirements		
0°C (32° F) and below	0,5°C (33° F) to 23°C (74°F)	24°C (75° F) and above
5 mm (3/16") gap	3 mm (1/8") gap	0.8 mm (1/32") gap

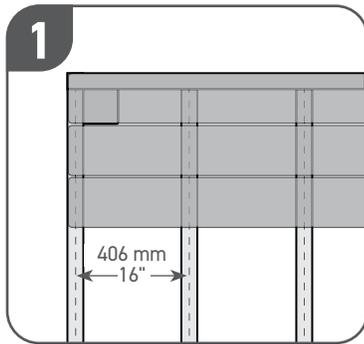
**For a Wildlife Urban Interface compliant installation per SFM Boards 12-7A-4A, the following products should be used with the side-to-side gapping below:**

- TimberTech Premier Square Shouldered Decking installed with edge to edge gap spacing of 3 mm (1/8")
- TimberTech Reserve-FR Grooved Decking installed with edge to edge gap spacing of a maximum 5 mm (3/16") [minimum 3 mm (1/8")]
- TimberTech Reserve-FR Square Shouldered Decking installed with edge to edge gap spacing of 3 mm (1/8")

## Substructure/Preparation

Follow these guidelines for best deck installation:

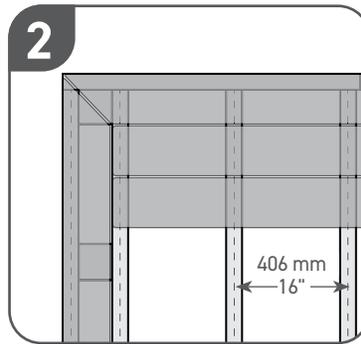
- Prior to installation, check to make sure all joists are level structurally sound, and there are no nails or screws protruding.
- As joists are installed, run string line frequently to ensure that the tops of the joists are in plane, as TimberTech Decking will conform to the contour of the joists to which it is attached. It may be necessary to shim or plane joists due to size variations in lumber. Be sure to sort and exclude any extremely crowned joists/lumber material.
- Proper joist spacing is required for proper installation. Joist spacing should never exceed 406 mm (16") on center. For a more rigid feel, 305 mm (12") may be preferred. However, all angled or commercial installations of decking require 305 mm (12") oc max.
- For best results, install solid wood blocking between each joist, placed every 1,22 m - 1,83 m (4' - 6') within the structure, can help reduce movement or twisting of the joists. Limiting joist movement can help reduce excessive gapping and also ensure more uniform finished surface of the TimberTech Deck.



**406 mm (16") BASIC INSTALLATION**

**SUBSTRUCTURE**

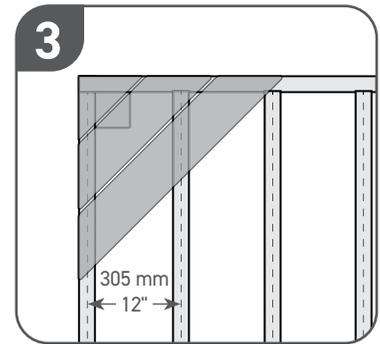
406 mm (16") on center maximum joists.  
(305 mm (12") on center for commercial applications)



**PICTURE FRAME INSTALLATION**

**SUBSTRUCTURE**

406 mm (16") on center maximum joists plus additional support for picture frame structure  
(305 mm (12") on center for commercial applications)



**DIAGONAL INSTALLATION**

**SUBSTRUCTURE**

305 mm (12") on center maximum joists  
More severe angles may require closer joist spacing.

## 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 51 mm (2") from the top and bottom alternating a maximum of 305 mm (12"). It is recommended that screws are evenly spaced for the best look.



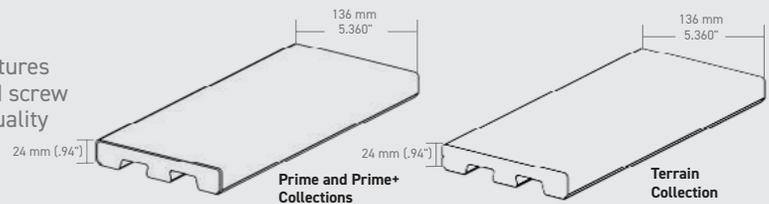
- Set fascia in place being sure to follow proper gapping requirements.
- Drive TOPLoc fascia fastener 90 degrees with the fascia surface so that the screw head is flush with the surface. Do not completely torque down screw; screw should serve as a hanging mechanism to allow for expansion and contraction 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 305 mm (12"), 51 mm (2") from the top and bottom.

## TimberTech<sup>®</sup> Square Shouldered Boards

TimberTech recommends the use of TimberTech Cortex or TOPLoc for Composite for square shouldered deck board installations. Pre-drilling is required when within 38 mm (1-1/2") of the ends of the board and for temperatures below 7° C (45 degrees Fahrenheit) to avoid splitting and screw shear. Alternate fasteners are stainless steel or high-quality coated composite deck screws.\*

\*Cortex cannot be used on boards with a scalloped bottom, such as TimberTech Terrain, Prime+, and Prime."

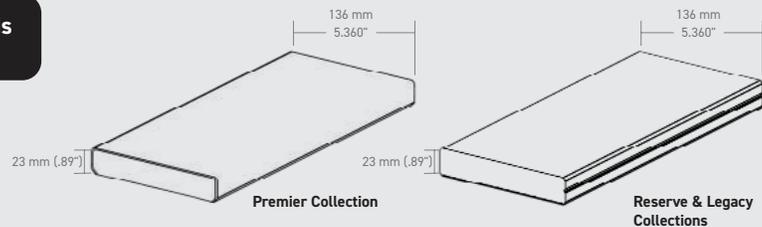
### TimberTech Composite



**Always be sure to check and cut the factory cut ends of all boards to ensure they are square.**

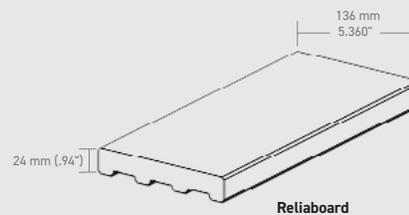
### Fastener Mushrooming:

This may occur when a non-composite deck screw is driven into the decking. It can be greatly reduced or eliminated by using a screw designed for composite lumber. When installing TimberTech decking, using TOPLoc reduces chance of mushrooming. If mushrooming occurs, we recommend pre-dimpling the board by drilling a hole slightly smaller in diameter than the screw head and as deep as the screw head before driving the screw.



**Any fastener driven through the edge of a TimberTech Composite or Reliaboard should not be used to avoid splitting of the board. TimberTech's SIDELOC Fastener is an example of this type of fastener. The use of any fastener driven through the edge of the deck board is not recommended and voids any warranty provided with TimberTech Decking.**

### TimberTech Specialty



**AZEK recommends using TimberTech fasteners with TimberTech Decking. TimberTech fasteners are specifically engineered and tested to work with TimberTech decking boards and with unique profile and material characteristics designed to deliver the best results and to minimize the risk of issues during or after installation, including but not limited to gapping, warping, board movement, oil canning, and squeaking. These types of issues are not covered by AZEK's product warranty and TimberTech/AZEK will not be financially liable in the event such issues arise.**



**Fasteners should be installed perpendicular to the deck surface and driven flush; do not overdrive or splitting will occur. Always double joists at butt seams. Do not toe screw deck boards as this will cause splitting.**

TimberTech Composite and ReliaBoard®

## Important Information

To get information on other TimberTech products, visit [TimberTech.com](http://TimberTech.com) or ask your dealer for these installation guides:

- TimberTech boards are intended to be installed embossed side up. The unembossed surface is not to be used as a walking surface. This applies to all decking surfaces.
- In areas with obstructed airflow such as roofs and on-grade applications, a minimum of 38 mm (1-1/2") sleeper system supported by and connected to the substructure over which the deck is built is required.
- To aid water run-off, the deck should slope 13 mm (1/2") for every 203 mm (8') away from the house.
- To further minimize expansion and contraction, proper ventilation and airflow should be considered.
- For best practices in climates with extreme temperature cycles, limiting the length of the deck board and avoiding affixing to the rigid length of the joist in applications such as picture framing or parting boards can help avoid movement and screw shear.

- On-grade decks must have additional provisions for drainage beneath the deck structure.
- For best practices, decking should not be installed in applications where ventilation and airflow cannot be achieved.

## Maximum Joist Spacing

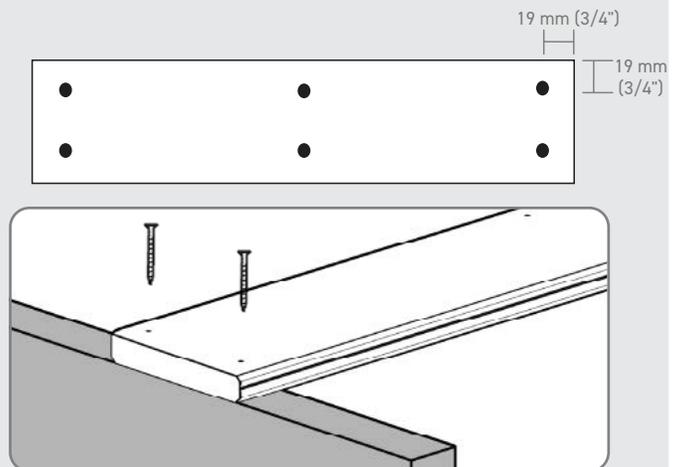
TimberTech PRO, TimberTech EDGE, and ReliaBoard			
	90° Angle	30° Angle	45° Angle
488 kg/m <sup>2</sup> 100pst	406 mm (16")	356 mm (14")	305 mm (12")

Special conditions will require an engineering inspection and/or reduced spans. Always consult local building codes.

## Square Shouldered Board Installation Instructions

- Always be sure to check and cut the factory cut ends of all boards to ensure they are square.
- Install from the outside edge of the deck and work toward the house.
- Fasten no closer than 19 mm (3/4") from the outside edge of each board, using two screws per joist including end joints.
- For gapping requirements, see page 3.
- 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-drilling is required when within 38 mm (1-1/2") of the ends of the board and for temperatures below 7° C (45 degrees Fahrenheit) to avoid end splitting and screw shear.
- TimberTech Cortex requires pre-drilling with a 6 mm (7/32") bit for ALL applications in Reserve, Legacy, and Premier Collections.

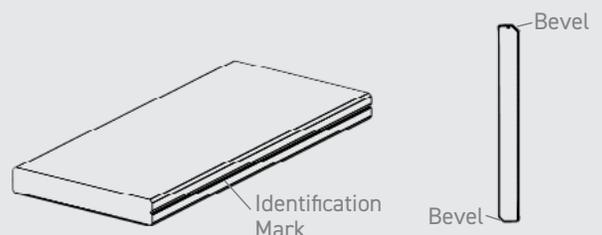
- If installed without proper 6 mm (7/32") Pre-drill, mushrooming will occur. Cortex or TOPLoc fasteners are recommended for best results.



## Directional Notch

### ReliaBoard

The surfaces of these products are directional in manner. A notch has been added to one side of the boards. When installing boards, this marked edge must be laid to the same side for the entire installation for a consistent appearance.



TimberTech Composite and ReliaBoard®

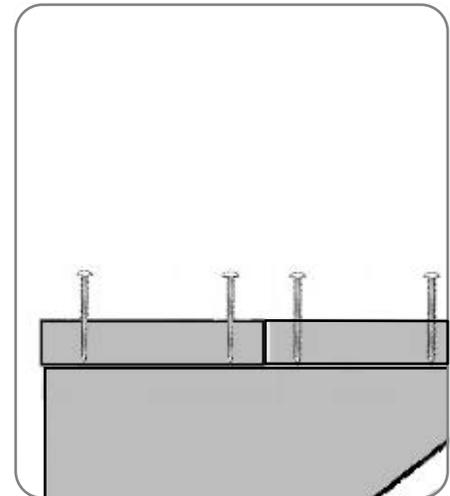
## Stair Installation

TimberTech does not recommend installing boards on steps without a riser board.

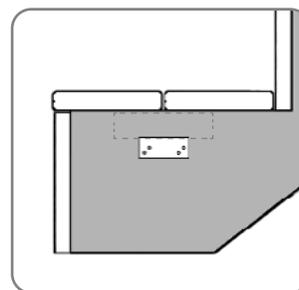
- Stairs should be constructed per local code requirements.
- Ensure the stringer step is at least the depth of two full boards plus a 3 mm to 5 mm (1/8" to 3/16") gap between boards.
- For gapping requirements, see page 3
- Ensure there is at least one stringer for support in the middle of the stair span.
- Stair landings and multi-level decks where there is a step down should use the same structural support as required on stairs.

### TimberTech Stair Stringer Spacing Chart

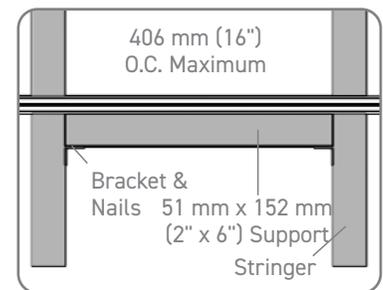
Board	Maximum Spacing
Terrain, Prime & Premier +	406 mm (16") When used as a veneer
Premier & ReliaBoard	229 mm (9")
Legacy, Reserve	254 mm (10")



General Stair Installation



Terrain, Prime, and Prime+ Collections



Front View



**Terrain, Prime, and Prime+ Collections must be used as a veneer in a stair tread application. see figure to the right.**

### Additional Terrain and Prime Components

Support	51 mm x 152 mm (2" x 6") Support
Bracket	38 mm x 51 mm (1.5" x 2.0") Simpson Strong Tie A23Z Galvanized Connecting Angles
Bracket Nails	38 mm (1-1/2") Simpson Strong-Tie N10D5HDG (4 mm (0.150") in diameter , 8 mm (0.315") in head diameter) galvanized nails

## Trimming a TimberTech Deck

### TimberTech Fascia Boards:

- For Fascia and Riser Installation, see Fastening Guide lines on page 4.

### Fascia

- All TimberTech Composite colors
- 3.66 m (12') lengths - 14 mm (9/16") thick by 305 mm (12") wide

### TimberTech Stairs and Risers:

- Use as a riser for stairs.
- Can also be used as a fascia board for a 51 mm x 203 mm (2" x 8") fascia board.
- 3.66 m (12') lengths and 14 mm (9/16") thick x 184 mm (7-1/4") wide.

### Riser

- All TimberTech Composite colors

## Important Information

CONCEALoc Hidden Fasteners were designed exclusively to install TimberTech grooved boards.



**Always be sure to check and cut the factory cut ends of all boards to ensure they are square.**

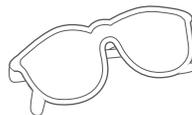
- In areas with obstructed airflow such as roofs and on-grade applications, a minimum of 38 mm (1-1/2"), sleeper system, is required.
- Sleeper system must be supported by and connected to the substructure over which the deck is built.
- To further minimize expansion and contraction, proper ventilation and airflow should be considered.
- On-grade decks must have additional provisions for drainage beneath the deck structure.
- For best practices, decking should not be installed in applications where ventilation and airflow cannot be achieved.
- Do not use CONCEALoc Hidden Fasteners or L-Bracket for stair installation.
- For gapping requirements, see page 3

## CONCEALoc Accessories

- 9 m<sup>2</sup> (100-square-foot) coverage box. Includes stainless steel clips and screws.
- Bulk Bucket – 90 m<sup>2</sup> (1,000-square-foot) coverage. Includes stainless steel clips and screws.
- CONCEALoc Gun Pail – 46 m<sup>2</sup> (500-square-foot) coverage for use with the TigerClaw pneumatic installation tool sold by FastenMaster. Includes quality coated pneumatic fasteners. Stainless steel fasteners for coastal applications available through FastenMaster. Pneumatic tool must be tuned specifically to install lightweight Advanced PVC Deck. Failure to do so can result in less than desired securing/tightness of fastener, boards lifting from joists, boards feeling loose or movement and could generate squeaking/noise.
- L-Bracket – avoid face-screwing by using the L-Bracket on first and last boards or as a butt seam clip to ensure a fastener-free surface.
- CONCEALoc Router Bit – cut a 51 mm (2") wide groove on a solid board for a perfect CONCEALoc fastener fit – even allows for cutting an installed board over a joist.
- CONCEALoc screw packs available on TimberTech.com
- If using the CONCEALoc Gun Pail with the TigerClaw Installation Gun please refer to the retail packaging for further installation guidelines.

## CONCEALoc® Hidden Fastener Installation Instructions

### TOOLS NEEDED



Safety Glasses



Router with Slot Cutting Blade (Optional)

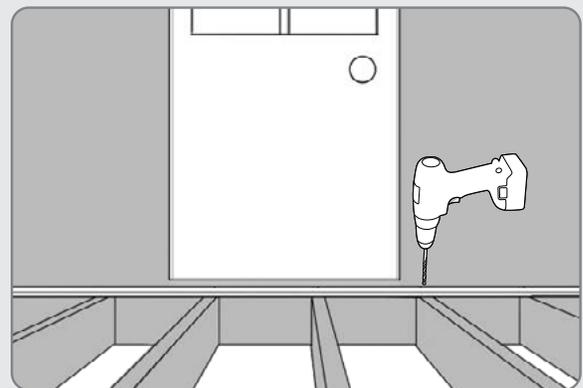


Drill

**1**

### INSTALL THE FIRST BOARD

- Pre-drill with 4 mm (5/32") drill bit and fasten outer edge of the first board at each framing support 19 mm (3/4") from the edge using TOPLoc for Composite. For a complete fastener-free surface, the L-Bracket or Cortex can be used on first and last boards. (Except Terrain, Prime, Prime+ Collections and Reliaboard.)
- For further instructions for the L-Bracket or Cortex, please refer to the instructions in the package.



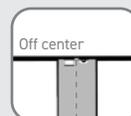
**2**

### POSITION CONCEALoc® FASTENERS

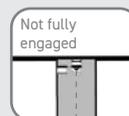
- Fully insert the CONCEALoc fastener into grooved edge of board. Screw hole should be lined up with the center of support joist.



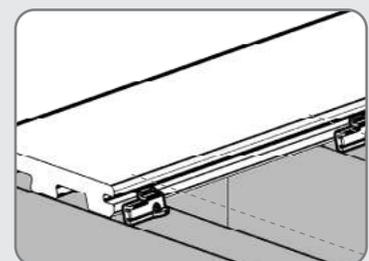
Correct



X Incorrect



X Incorrect



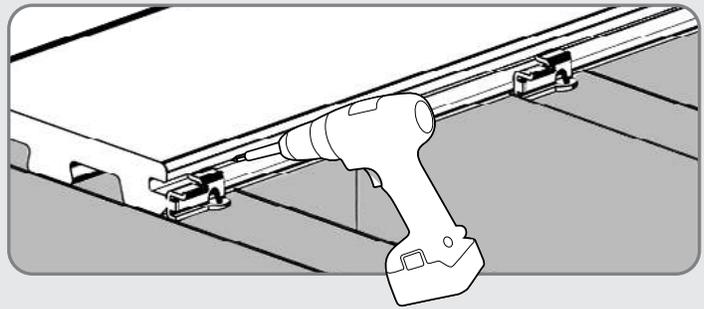
Correct



**3**

**INSTALL CONCEALoc® FASTENERS**

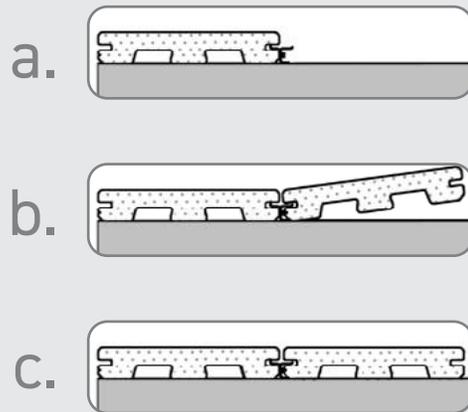
- Install provided CONCEALoc® screw at 45° angle through the fastener and into the joist while applying pressure on the fastener.
- Install one fastener and screw at each joist location. See specific and additional requirements for butt joints.
- Make sure fastener is in full contact with edge of board and the screw is holding the fastener down tight to the deck board.



**4**

**COMPLETE INSTALLATION**

- Place the next board into position against the fasteners. Slightly raise the outer edge of the board being installed and slide it onto the fastener until the board contacts the spacer tab. When properly installed the inserted board should be in contact with the bent-forward spacer tab at the left end of the clip. To achieve this use wood 51 mm x 102 mm (2" x 4") as a beater board at least 610 mm (24") in length and use it as a tamping block to bring edge of deck board into contact with spacer tab to ensure proper spacing. **Never strike the edge of decking directly with hammer as damage will occur. Always use beater board.**
- The last board will need to have the outside edge attached using the method described in Step #1. It may be necessary to rip the last board to fit.



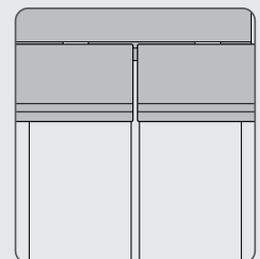
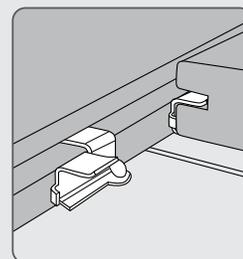
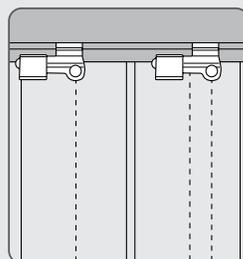
**5**

**HOW TO INSTALL AT BUTT JOINTS [UNLESS USING TIMBERTECH® L-BRACKET]**



**Joists at butt joints must be doubled up for proper fastener attachment.**

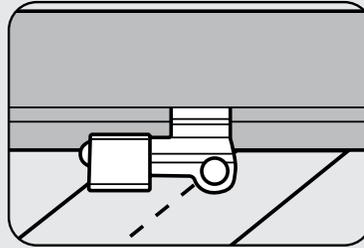
- Install fasteners as detailed below. Note that the two clips on the right are shifted approximately 6 mm (1/4") to the right of center on the joists. If this is not done the spacer tab may fall within the gap of the butt joint.



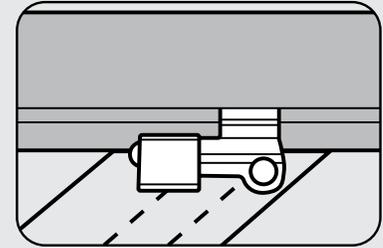
**6**

**HOW TO: INSTALL ON DIAGONAL**

- When the deck is located in a corner of the house, start with small triangular piece of decking in the corner and work your way out.
- Offset the center 13 mm (1/2") towards the long point of the joist, so screw will not exit the side of the joist when driven.



✗ Incorrect



Correct: Shift over 13 mm (1/2")

**7**

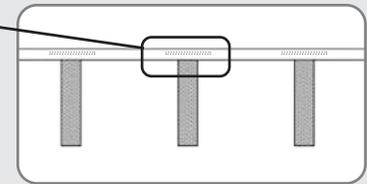
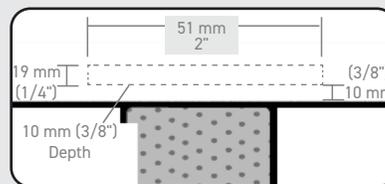
**COMPLETE INSTALLATION**

- Make two parallel cuts down the center of the board to be replaced, then remove the center piece.
- Using a small pry bar, remove the remaining pieces of decking from the tabs.
- Using a reciprocating saw, remove the tabs on the side of the board with the screw heads showing.
- Position new board into place, and carefully drive onto remaining tabs.
- Once the board is set into position, secure the loose edges with Cortex, stainless steel, or high-quality coated deck screws.

**8**

**HOW TO USE: CONCEALoc® FASTENERS WITH SQUARE SHOULDER BOARDS**

- Create a 51 mm (2") long notch on the edge of the board at every joist. Do not groove the full length of square shouldered deck boards.
- Use TimberTech's CONCEALoc Groove Cutting Router Bit or a Freud model #56-112 or Bosch model #85610M 6 mm (1/4") slot cutting bit.
- Flip the board over and start the notch 10 mm (3/8") off the bottom of the board.
- Set the depth of the cut from 11 mm to 13 mm (7/16" to 1/2") deep.



Note: Be sure to ID the side of the board that has the directional notch; the boards with IDs should be installed to the same side. See Directional Notch on page 5.

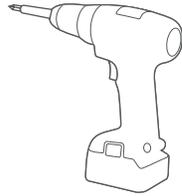


**ReliaBoard cannot be grooved. It must ONLY be face-fastened. Grooving ReliaBoard will void the warranty. Do not use CONCEALoc Hidden Fasteners or L-Brackets for stair installations.**

## Cortex® Hidden Fastening System Installation Instructions

### Suggested Drills

Corded or cordless drill



**Impact Drivers are not recommended when using TimberTech Cortex.**



### Important Information

- Pre-drilling with a 6 mm (7/32") drill bit is always required when installing Cortex in TimberTech decking.
- The Cortex Setting Tool must be used to set the Cortex screw to the proper depth.
- The Cortex fastener must be driven perpendicular to the deck surface for proper fit and ideal finished look. (DO NOT drive on angle).
- The cored hole must be free of debris or moisture. Use a smooth hammer head to set the Cortex plug.
- The interaction between the deck board, screw, and plug is essential. Use of non-Cortex Screws or plugs will nullify the warranty.
- For gapping requirements, see page 3

### Important Information

- Pre-drilling is required for installation into TimberTech decking or mushrooming and splitting will occur.
- Pre-drilling should be done with a 6 mm (7/32") drill bit to create the proper pilot hole.
- No fasteners should be installed closer than 19 mm (3/4") from the end or edge of the board.

### Restricted Cortex Uses

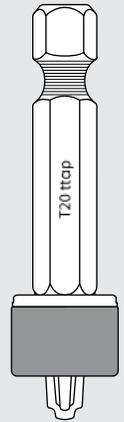
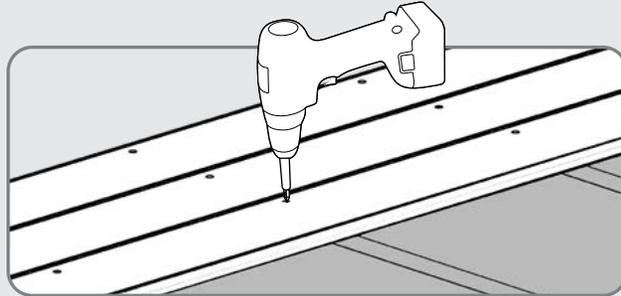
The TimberTech Cortex System is designed for traditional elevated deck surfaces. The following applications require a different fastening method:

- For framing less than 51 mm (2") in thickness, shorter Cortex screw option may be required.
- For attaching fascia and riser boards: TimberTech TOPLoc Fascia Fasteners should be used.
- Docks or decks with framing members in constant contact with saltwater.
- Deck materials with a scalloped bottom such as, but not limited to Terrain, Prime, Prime+ Collections, and Reliaboard.

1

**PRE-DRILL**

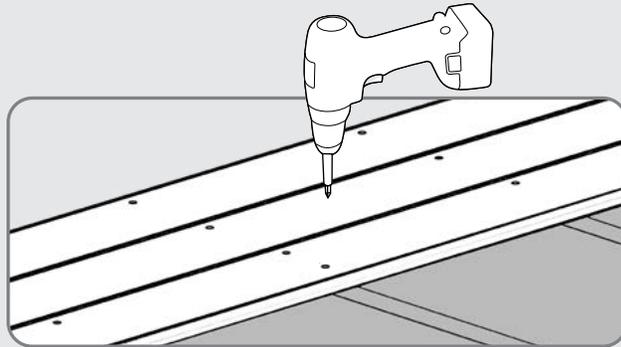
- Pre-drill deck board with a 6 mm (7/32") drill bit



2

**DRIVE SCREWS INTO JOISTS**

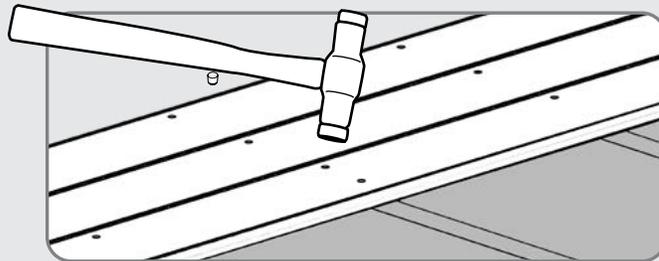
- Using Setting Tool provided, drive screw at medium or high speed until it disengages at the proper level below the deck surface.
- Drive at one continuous speed, do not slow down.
- Install two screws into decking at each joist
- Maximum spacing between each row of screws should be 406 mm (16") on center.



3

**INSTALL PLUG**

- Place plug into cored hole and gently tap flush with deck surface
- If mushrooming occurs, stop installation and call customer service at 1-800-307-7780



## FUSIONLoc® Hidden Fasteners for use with TimberTech Deck Boards

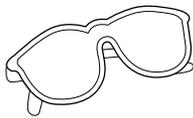
**IMPORTANT:** Deck Board must be secured tightly and in full contact with the joist after each clip is installed. Not doing so could result in issues such as an uneven deck surface, noise, and board movement caused by an improper loose attachment.

### FUSIONLoc & Accessory Installation Instructions

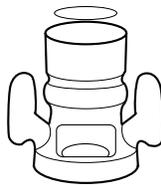
- FUSIONLoc Hidden Fasteners – packaged for 21 m<sup>2</sup> (225-square-foot) and 42 m<sup>2</sup> (450-square-foot), at 406 mm 16" O.C.. Includes Stainless Steel collated clips and collated screws.
- FUSIONLoc FiveSHOT pneumatic gun is sold separately by FastenMaster®.
- For a completely fastener-free surface, use Cortex on the first and last boards.
- Router Bit – cut the correct groove dimension on a solid plank for a perfect FUSIONLoc fastener fit; it even allows for notching an installed plank over a joist.
- FUSIONLoc can also be installed with a hand driven guide (sold separately), with screws and clips sold in 5 m<sup>2</sup> (50 Sq. Ft.) and 21 m<sup>2</sup> (225 Sq. Ft.) packs.

## FUSIONLoc® Hidden Fasteners Installation Instructions

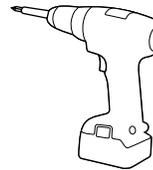
### Tools Needed



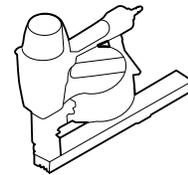
Safety Glasses



Router with Slot Cutting Blade (Optional)



Drill



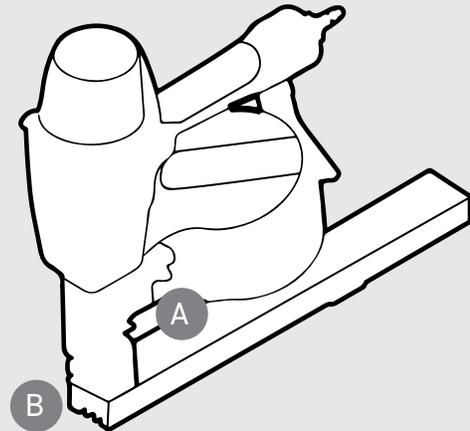
FUSIONLoc Gun

# 1

## SET UP FUSIONLOC GUN

The steps noted below must be followed to properly adjust the FUSIONLoc Gun for the varying requirements of the materials and profiles used in TimberTech Decking.

- 95-115 PSI must be maintained to properly sever the clips and drive the screws to the correct depth.
- Remove the Driver Blade Key from the back of the tool. (A)
- Use the Driver Blade Key to raise or lower the Driver Blade height. Holding the tool as you would when installing a clip, turn counterclockwise to raise the Driver Blade. (B)



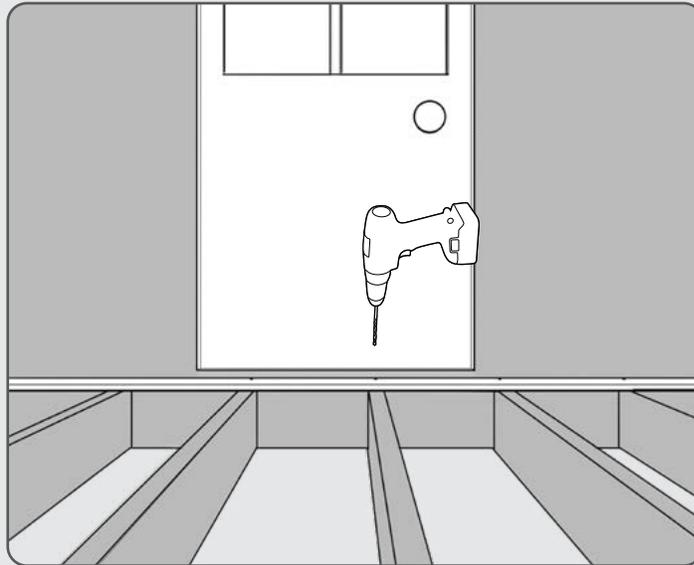
The driver blade should be set as high as it will go, while still severing the collated clip. If the clips are not severing, lower the Driver Blade height in 1/4 turn increments until clips sever.

Please use caution while operating the FUSIONLoc FiveSHOT Gun. Air hose must be disconnected during all adjustments of the driver blade and when not in use.

**2**

**INSTALL THE FIRST PLANK**

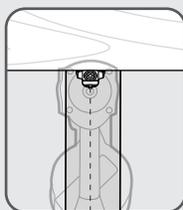
- Fasten outer edge of the first plank at each framing support 25 mm (1") from the edge using recommended fasteners. For a complete fastener-free surface, Cortex can be used on first and last boards. Note: Cortex and the L-Brackets should not be used with TimberTech Terrain or ReliaBoard.



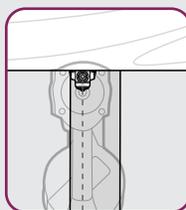
**3**

**PLACE THE FUSIONLOC GUN INTO POSITION**

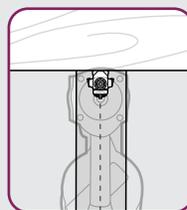
- Fully insert the FUSIONLoc fastener into grooved edge of plank.
- Center the gun on the joist and ensure that the gun is pushed flush to the plank.



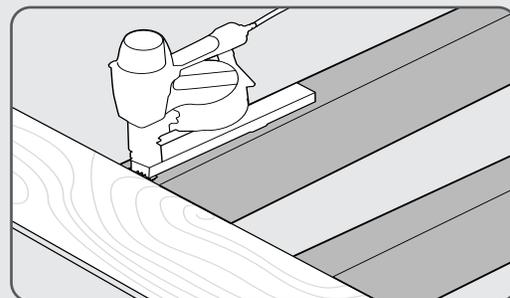
Correct



✗ Incorrect



✗ Incorrect

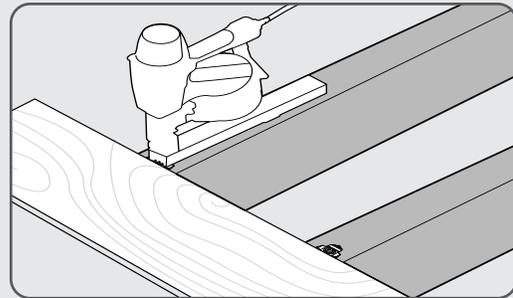


Correct

**4**

**INSTALL FUSIONLOC FASTENERS**

- Install fastener by simply positioning the FUSIONLoc Gun, then push down on the tool to engage the safety, and pull the trigger, while applying downward pressure on the deck board.
- Install one clip and screw at each joist.
- Make sure the clip is in full contact with edge of plank and the screw is holding the clip down tight to the deck board. If necessary, tighten screws using provided driver bit.
- For additional installation and troubleshooting, please see insert in FUSIONLoc gun packaging.



**Deck board must be secured tightly and in full contact with the joist after each clip is installed.**

**5**

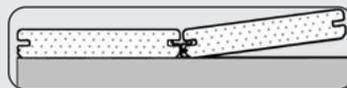
**COMPLETE INSTALLATION**

- Place the next plank into position against the clips. Slightly raise the outer edge of the plank being installed, and slide it onto the clip until the plank contacts the spacer tab. When properly installed the inserted plank should be in contact with the backside of the clip legs.
- Best practice dictates using a beater board at least 610 mm (24") in length to drive the plank further onto the clip. Proper installation yields 5 mm (3/16") spacing between deck boards.

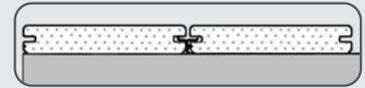
a.



b.



c.



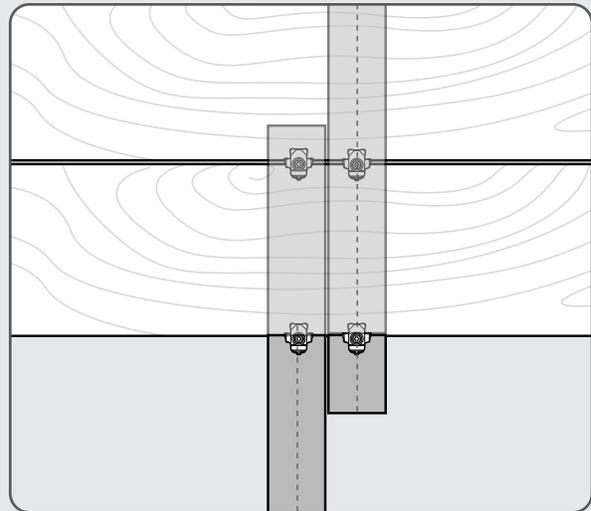
**Do not use a hammer or damage to the edge of the plank will occur.**

**When installing decking always use a beater board against the side of the deck board.**

**6**

**HOW TO INSTALL AT BUTT JOINTS**

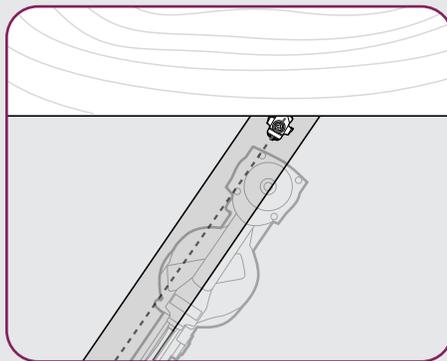
- Joists at butt joints must be doubled for proper fastener attachment.
- Install clips as detailed to the right.



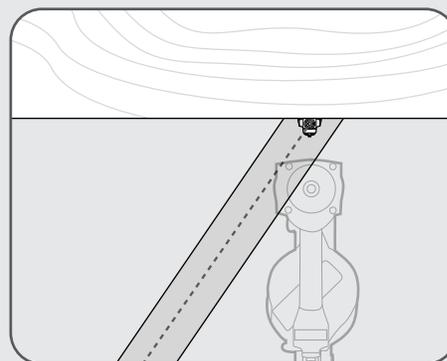
**7**

**HOW TO INSTALL ON DIAGONA**

- When the deck is located in a corner of the house, start with small triangular piece of decking in the corner and work your way out.
- Center the FUSIONLoc gun on the joist structure and install a clip.
- Ensure the clip is installed on the center of the joist for maximum purchase into framing members.



✗ Incorrect



Correct



**Deck board must be secured tightly and in full contact with the joist after each clip is installed.**



### 8a

#### HOW TO REMOVE A DECK PLANK

- First, pick the interior board to be extracted.
- Next, loosen the screw on both sides of this board using the provided TX10 Bit.
- Please note, do not attempt to withdraw the screw at this time. The head of the screw should not make contact with the decking material.
- Insert a wedge into the gap on either side of the board to be removed.
- Carefully pry the groove open in the vicinity of a loosened screw until the head of the screw is completely visible.
- Take care to not damage the deck boards on either side of the gap.
- Now, Extract the previously loosened screw.
- Repeat this process until all previously loosened screws are removed.
- You can now pry up your deck board without damage.

### 8b

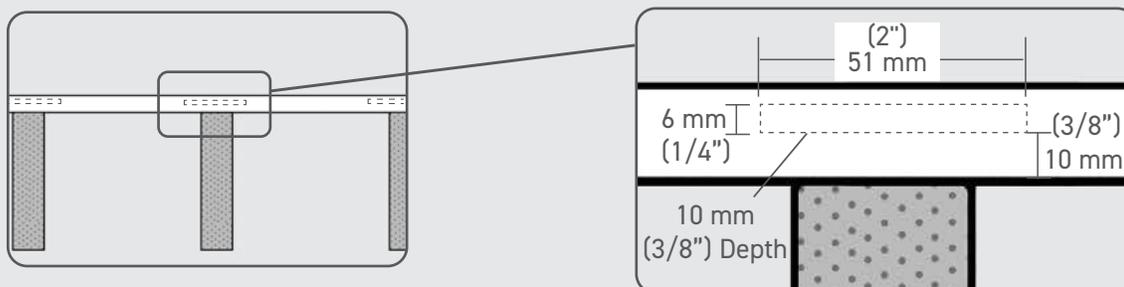
#### HOW TO REPLACE A PLANK

- With all of the screws removed you can now pry up and remove the deck board.
- Before installing a new board, clear all debris from the top of the exposed joist.
- Using loose clips, install FUSIONLoc clips into the trailing groove of the leading deck board.
- Remember, the previous clips were removed during the extraction process.
- The clips should be left just slightly loose to facilitate installation of the subsequent deck board.
- Separate, by hand, collations of hand drive FUSIONLoc screws. Select the correct amount of individual clips to match the number of corresponding joists.
- Place the remaining deck boards into position. Slightly raise one side of the decking plank and slide the separated hand driven FUSIONLoc clips into the abutting grooves.
- Once the remaining boards are set in place, slide the separated hand driven FUSIONLoc clips in position over the corresponding joist.
- When all clips are in place, carefully drive the fastener into the groove. Use a wedge to widen the gap between deck boards. This will enable the head of the screws to clear both board surfaces on installation.
- Once all hand driven FUSIONLoc clips are secured, revisit clips in the grooves just ahead and behind, tightening the clips in those grooves as well.

9

**TO USE FUSIONLoc® HIDDEN FASTENERS WITH TIMBERTECH SQUARE SHOULDERED BOARDS**

- Create a 51 mm (2") long groove on the edge of the plank at every joist.
- Use CONCEALoc Groove Cutting Router Bit or a Freud model.
- #56-112 or Bosch model #85610M 6 mm (1/4") slot cutting bit.
- Flip the plank over and start the groove 10 mm (3/8") off the bottom of the plank.
- Set the depth of the cut from 11 mm to 13 mm (7/16" to 1/2") deep.



- Do not groove the full length of the deck plank. Only notch 51 mm (2") in width above the joist.



**Do not use FUSIONLoc® Hidden Fasteners or L-Brackets for stair installation.**

With proper installation and care, TimberTech® products will provide years of outdoor living pleasure.

For most current recommendations or to download a PDF, visit [TimberTech.com/warranty-and-care/care-and-cleaning](http://TimberTech.com/warranty-and-care/care-and-cleaning).

### Recommended Products for TimberTech Composite

We know you want to keep your TimberTech Deck clean and looking its best, so here are a few guidelines on the best products and methods to use to keep your TimberTech Deck looking great.

These recommended products can be purchased at many hardware stores including Lowe's and Home Depot as well as online. Always make sure to read the cleaning product manufacturers specific information before using any product on your TimberTech Deck and follow their instructions.

#### Storage

Store TimberTech products under cover to maintain a clean surface. If store outdoors, they must be covered with a non-translucent material.

- All products should be stored flat and on a dry surface.
- Stack units with banding and bottom supports aligned.

#### Handling

Although all TimberTech boards are made with low-maintenance materials, each board's unique features require special care and handling ensuring lasting beauty. To maintain the beauty of TimberTech products, please follow these important guidelines when moving and working with TimberTech:

- Never dump TimberTech materials when unloading.
- When carrying TimberTech boards, carry on edge for better support. When carrying a 6.10 m (20') boards should be carried by 2 persons to more evenly distribute the weight of the board and not concentrate the load at one point
- Do not slide boards against each other when moving them. When removing them from the unit, lift the boards and set them down.
- Do not slide tools or drag equipment across the top of the boards during construction.
- Keep the surface of the boards free of construction waste to prevent damage to the boards

#### Brushes

The correct brush is very important so that it not only cleans the surface, but also does not damage or dull the board surface. We recommend using either the Quickie® Professional Pool and Deck Scrub or a medium plastic bristle deck brush. DO NOT use a natural fiber deck brush on capped composites as they can dull the surface.

#### Cleaner

For general periodic maintenance cleaning, use a dilution of mild liquid soap and water. Dawn Ultra® has shown best results. For more difficult to remove dirt, mud, clay,

or surface contamination, use TimberTech DeckCleaner™ or an all purpose cleaner like Chomp® Pro Gutter Cleaner or Zep® Fast 505. \*Note that composite deck cleaners such as Corte Clean®, Thompson's® Water Seal® — Oxy Action, Olympic® Deck Cleaner, or other cleaners specified as composite deck cleaners, in powder or liquid form, should not be used with TimberTech Composite deck boards. TimberTech Composite deck boards are a capped composite material, the cap of these products are not compromised of a wood/plastic composite.

#### Cleaning Procedures:

In preparation for spot cleaning as well as full surface cleaning, you will need a bucket of water, one of the recommended scrub brushes with an extension handle and one of the recommended cleaners.

Work in small manageable areas. Avoid cleaning in direct sunlight, the UV and heat will dry the surface quickly as you attempt to clean.

Saturate the area with one of the recommended cleaners and allow the cleaner to soak for 30-60 seconds. DO NOT allow the cleanser to dry or evaporate before scrubbing. Rinse area thoroughly with water after scrubbing.

Using the recommended brush and extension handle, scrub using moderate downward pressure, first scrubbing in the direction of the grain and then against the grain getting into the surface texture. DO NOT allow the treated area to dry before rinsing thoroughly as this will allow dirt residue to dry in the surface texture.

Thoroughly rinse the treated area with clean water, then allow the area to completely air dry. Note that any residual cleaner can leave a difficult to remove surface film. Always rinse thoroughly and never allow the cleaner to dry or evaporate on the surface prior to rinse.

#### Recommended Products ReliaBoard®

Although TimberTech products are low-maintenance, we recommend periodic cleaning to help maintain the beauty of the product. ReliaBoard is a composite product, and cleaning is not the same as our capped composite products such as TimberTech Composite Decking. These recommended products can be purchased at many hardware stores including Lowe's and Home Depot as well as online. Always make sure to read the cleaning product manufacturers specific information before using any product on your TimberTech Deck and follow their instructions.

#### Power Washing

A power washer can be used when cleaning TimberTech products. The recommended maximum pressure is 1500 psi for TimberTech decks. A fan tip nozzle should be used along with the proper cleaning product. Spray in the direction of the brush/grain pattern to avoid damaging the product. Use caution not to damage the material and always take the proper safety precautions when operation a power washer.

### Cleaner

The cleaners TimberTech recommends for periodic cleaning or use with ReliaBoard include:

- Wash Safe Spray and Clean Composite Deck Cleaner
- Resist Mist Composite Deck Cleaner
- Corte Clean
- Super Deck Composite Deck Cleaner
- Thompson's Water Seal — Oxy Action

#### **Dirt, Grime, Tannin and Mildew Stains:**

TimberTech wood/plastic composite products are formulated to inhibit mildew growth and minimize staining. Rinse off your TimberTech products periodically with a hose. Even if it appears clean, it is important to prevent build-up of pollen/debris. Mildew stains may occur where moisture, pollens, and/or dirt are present. Mildew needs a food source to grow, which can be grass, pollens, dirt, debris, wood and wood resins.

Maintaining a clean, dry surface is the best method for combating mildew. Ensure that water drains effectively from your deck. For TimberTech ReliaBoard, be sure that gaps exist between boards to allow for drainage.

### Tannin Staining

Like any other wood-based product, TimberTech's wood-plastic composite products (ReliaBoard) may experience a naturally occurring process called Extractive Bleeding/Tannins. This process may cause temporary discoloration that will weather away with exposure to flushing rainfall and UV. In most cases the weathering process takes 8-10 weeks but could vary depending on location and specific product application such as a covered porch. Tannins may also be cleaned by utilizing the cleaners referenced for Basic Cleaning Recommendations for ReliaBoard. These guidelines may not cover every care and maintenance scenario encountered. For additional questions about care and maintenance, call 800-307-7780.

### Heat Buildup

Please be aware that excessive heat build on the surface of TimberTech products from external sources such as, but not limited to, fire or reflection of sunlight can potentially lead to damage. For example, sunlight which may be reflected by low-emissivity (Low-E) glass can potentially lead to damage of exterior building products, including TimberTech Deck, Rail, and accessories, due to elevation of surface temperatures which far exceed that of normal exposure of the same materials to direct sunlight. Possible damage by such reflected, concentrated light may include melting, sagging, warping, distortion, surface discoloration, increased expansion or contraction, and unusual weathering. Although TimberTech Deck products are cooler to the touch than many other deck board products in similar colors, all decking products will get hot in the sun. Additionally, the darker the decking color, the hotter it will feel.

### Static Electricity

The buildup of generation of static electricity is a naturally occurring phenomenon in many plastic based products such as carpeting, upholstery, and clothing, and can occur on alternative decking under certain environmental conditions.

### Snow & Ice Removal

As with any walking surface, TimberTech decking products may become slippery in winter weather. Take caution when walking on your TimberTech deck in these conditions. Most products containing calcium chloride can be used without deck/porch surface. These products may leave a white residue damage to the deck/porch surface. These products may leave a white residue which can be cleaned using the cleaning guidelines above. Metal shovels or plastic shovels with a metal leading edge may damage the surface of TimberTech decking and are not recommended for clearing snow from the deck surface.

### Important

Do not allow airborne dust from concrete, landscape blocks, or any masonry product to accumulate on the surface of TimberTech Deck, Rail, and accessories as it may damage the surface of the deck. Do not cut any product on or near TimberTech Decking products. Always remove job site dust, clay, dirt, mud, and other construction dirt and debris to sit on the TimberTech Deck surface. Do not cut metal objects such as railing on the deck surface, the hot debris from the cut may become embedded in the deck surface resulting in staining and damage.

### Warranty

TimberTech Products are made exclusively from technologically advanced materials designed to provide years of enjoyment. The following TimberTech Composite Collections, Legacy, Reserve, and Terrain are covered by a 30-year limited warranty for residential applications and a 10-year warranty for commercial applications. As well as a 30 year residential fade and stain warranty.

The following TimberTech Composite Collections, Prime+, Prime, and Premier are covered by a 25-year limited warranty for residential applications and a 10-year warranty for commercial applications. As well as a 25-year residential fade and stain warranty.

For a complete copy of TimberTech warranties, visit [TimberTech.com](https://www.timbertech.com).