## Decking Installation & Maintenance Guide

TimberTech Advanced Polymer Decking

# **TimberTech**



Installation Guidelines2
Tools Required2
Installation Preparation4
Working with TimberTech Advanced Polymer Deck Boards4
Cortex <sup>®</sup> Hidden Fasteners8
CONCEALoc <sup>®</sup> Hidden Fasteners10
FUSIONLoc® Hidden Fasteners14
SIDELoc® Hidden Fasteners
Stair Code Compliance23
Trimming an TimberTech Advanced Polymer Deck24
Care and Cleaning26

TimberTech Advanced Polymer Decking & Fascia 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<sup>®</sup> Building Products Inc. accepts no liability or responsibility for the improper installation of this product. TimberTech Advanced Polymer Decking & Fascia may not be suitable for every application and it is the sole responsibility of the installer to be sure that TimberTech Advanced Polymer Decking & Fascia 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. The AZEK Company recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation. To get more information visit **TimberTech.com**.

#### **Tools Required**

TimberTech Advanced Polymer Decking & Fascia can be installed with a minimum number of readily available tools. Many other tools are available that can be used for installation. All tools should be used per applicable manufacturers' instructions. Some of the basic tool requirements:

• Variable speed cordless drill. DO NOT USE IMPACT DRIVER.

- Chalk Line
- Spacing ToolsMiter Saw
- Tape MeasureJig Saw
- Safety Glasses
- Carpenter Square

Use the jigsaw to cut around obstructions such as posts. For best results, a miter saw with a fine-toothed, carbide-tipped finish trim blade (305 mm (12") - 60 tooth minimum) works well for cutting. For a power miter or compound power miter saw, a fine finish alternate top bevel blade is also recommended. When working with Advanced Polymer products be sure to wear proper clothing and safety equipment. Safety glasses should be used during the entire installation process. Do not use any cordless saws.

### STOP! Read this section before you start!

Always make sure to visit TimberTech.com to ensure you are viewing the most current installation instructions, care and cleaning, technical information and more.

#### TimberTech Advanced Polymer Decking

AZEK does not recommend the use of rubber or vinyl products (welcome mats, planters, etc.) on deck boards. A reaction can occur that causes discoloration of the decking under the rubber/vinyl product. This is a common caution for polymer decking products.

DO NOT use nails to fasten Advanced Polymer Decking or Fascia boards.

Cutting or drilling metal should not be done on Advanced Polymer Deck boards as metal shavings may be come hot and embed themselves into the deck boards.

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

#### Walking Surface

Advanced Polymer deck boards need to be installed embossed side up only.

#### 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. Static electricity is not a defect and can occur naturally.

#### Cantilevering

For best results, do not cantilever 13 mm (1/2") beyond the edge of the Fascia or deck framing.

#### Routing

Advanced Polymer Deck/ Fascia 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).

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#### **Color and Grain Patterns**

Advanced Polymer Deck 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 Advanced Polymer Deck 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. 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.

#### **Color and Temperature**

Although Advanced Polymer 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.

#### **Air Flow Considerations**

In areas with obstructed airflow such as roofs, water management systems, skirting and on-grade applications, a minimum of 38 mm (1-1/2") clearance should be provided.

### STOP! Read this section before you start! (continued)

Always make sure to visit TimberTech.com to ensure you are viewing the most current installation instructions, care and cleaning, technical information and more.

Note: more clearance and airflow can help reduce/minimize movement and gapping due to increased heat build.

DO NOT attach deck boards to a floating sub-structure which is not mechanically fastened frequently and sufficiently to the building and roof deck.

#### Note

Advanced Polymer Deck is NOT intended for use as columns, support posts, beams, joist, stringers, guard railing or other primary load-bearing members. AZEK must be supported by a code-compliant substructure. While Advanced Polymer products are great for deck re-planking (removing old deck surface boards and installing Advanced Polymer on codecompliant substructure), Advanced Polymer Deck Boards SHOULD NEVER be installed on top of an existing deck.

Failure to install TimberTech Advanced Polymer Decking products in accordance with applicable building codes and this Installation Guide may lead to personal injury, affect deck system performance and void the product warranty.

## Roof Top Decks

When considering Advanced Polymer Deck in a roof top application, it is imperative that the framing/sub-structure to which the decking will be attached is securely attached to the building or roof deck using suitable mechanical fasteners. Do not use adhesives to attach framing to the building or roof surface, and NEVER ATTACH DECK BOARDS TO A FLOATING FRAME/ SUB-STRUCTURE. Frequently check tops of sub-structure framing members to ensure that they are in plane, as Advanced Polymer Decking will conform to the contour of the framing members to which it is attached. It may be necessary to shim or plane framing members due to thickness variations in lumber, or variations in the surface to which the framing/sub-structure is attached. Securely attaching rigid blocking between framing members at frequent intervals should also be incorporated to help limit sub-structure movement. Framing or sleepers must be sufficient to resist thermal movement of decking in any direction, or uneven walking surface may appear. Proper drainage and air flow should also be considered, with a minimum of 38 mm (1 ½") sleeper height necessary and deck boards must be attached to the properly secured sub-structure with a minimum of a 3 mm (1/8") gap between deck boards. It is the installer's responsibility to determine if Advanced Polymer Deck is suitable for a specific roof top application. The AZEK Company recommends that all applications be reviewed by a licensed architect, engineer, or local building official before installation. If you have any questions or need further assistance, please call TimberTech Customer Service at 1-877-275-2935 or visit our website at TimberTech.com.

## **Extreme Heat Warning**

Be aware of excessive heat on the surface of TimberTech Advanced Polymer products from external sources, such as but not limited to, fire, hot ashes/embers, fire pits, grills or reflection of sunlight from energy-efficient window products. Reflection of sunlight from Low-emissivity (Low-E) glass can potentially harm TimberTech Advanced Polymer 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 Advanced Polymer products to melt, sag, warp, discolor, increase expansion/ contraction, and accelerate weathering. 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. 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.

## A Metamerism

Metamerism is the phenomenon wherein two colored samples will appear to be of the same shade under one light source but will appear to be different shades under a second source.

When installing Advanced Polymer deck boards at different angles, metamerism may make the boards installed at one angle appear to be of a different shade than the deck boards installed at the other angle, depending on the lighting and the angle which the deck is viewed. This is a natural phenomenon, not a defect, and can occur even when the deck boards are cut from the same boards or come from the same unit. Metamerism is an aesthetic issue and not a performance or product warranty issue.

## **A** Excessive Construction Debris

It is important during construction, 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.

Do not use Advanced Polymer Deck as a work surface.

When installing Advanced Polymer Deck, best practice is to install after all other construction (siding, roofing, painting, etc.) is completed, otherwise permanent damage may occur. If a build-up does occur please refer to the Care and Cleaning section in the Advanced Polymer installation guide, the TimberTech Decking Care & Cleaning Guide, or our website, TimberTech.com.

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**IMPORTANT:** Do not allow airborne dust from concrete, landscape blocks, or any masonry product, including fiber, cement, siding and trim, to accumulate on the Advanced Polymer Deck, Porch, Fascia, & Riser surface as it may damage the surface of the deck. Do not cut any product on or near Advanced Polymer Deck, Porch, & Fascia.

### Substructure/Preparation

Follow these guidelines for best deck installation:

 As joists are installed, run string line frequently to ensure that the tops of the joists are in plane, as Advanced Polymer 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.

- Prior to installation, check to make sure all joists are level, structurally sound, and there are no nails or screws protruding.
- Proper joist spacing is required for proper installation. Joist spacing should never exceed 406 mm (16") on center (up to 610 mm (24") on center for MAX boards). For a more rigid feel, 305 mm (12") may be preferred. However, all angled or commercial installations of decking require 305 mm (12") on center maximum.
- Install solid wood blocking between each joist, placed in rows at maximum every 1,22 m 1,83 m (4' 6') within the structure using exterior grade screws. Solid blocking will help reduce up or down movement and/or twisting of joists. Limiting joist movement can help reduce excessive gapping and also ensure a more uniform finished surface of the Advanced Polymer Deck.
- 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 locations such as near glass, areas of high heat build or sunlight reflection.
- · Reference the Deck Building Resource Center for more info: https://www.timbertech.com/resources/deck-building



406 mm (16") BASIC INSTALLATION SUBSTRUCTURE 406 mm (16") on center maximum joist spacing (up to 610 mm (24") on center for MAX boards). (305 mm (12") on center for commercial applications)



PICTURE FRAME INSTALLATION SUBSTRUCTURE

406 mm (16") on center maximum joist spacing (up to 610 mm (24") on center for MAX boards) plus additional support for picture frame structure (305 mm (12") on center for commercial applications)



DIAGONAL INSTALLATION SUBSTRUCTURE 305 mm (12") on center maximum joist spacing (up to 406 mm (16") on center for MAX boards). More severe angles may require closer joist spacing.

Additional diagrams can also be seen on https://www.timbertech.com/resources/deck-building/deck-joist-spacing/.

#### **Expansion and Contraction**

Advanced Polymer Deck/Fascia will expand and contract, move, and gap with changes in temperature, unlike wood whose size will fluctuate with moisture changes. The expansion and contraction encountered may result in gaps, which might be noticed at the ends of boards or in splice/butt joints. Gapping is normal and some gapping can be expected. Using top-down fastening method for the deck boards according to the Installation Guidelines will help minimize expansion and contraction.

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Note: Splices/butt joints are where gapping most commonly occurs. Limiting length of deck boards for long runs can help minimize gapping. Adding design features such as properly framed parting or breaker board can reduce or eliminate the need for butt joints. Also consider using shorter deck board lengths or a design which allows running deck boards in shortest possible direction.

- For better results keep decking as cool as possible during attachment. Direct full sun exposure will increase board temperature and length. If attaching during high heat, larger gapping can be expected.
- DO NOT leave a gap at butt joints, splices or miters.
- Expansion/contraction is most significant where extreme temperature change may exist.
- Best practice is to cut and fasten the deck boards as soon after cutting as possible.
- Be sure to fasten ends of boards, splices, or abutments to building or structure securely into framing using 2 screws. Position the screws at or within 13 mm (1/2") of each board end or joint and 19 mm (3/4") from side of deck plank.
- For butt joints, be sure to trim cut factory ends to ensure squareness. Do not scarf cut butt joints.



- To help reduce or minimize movement, gapping, and expansion/contraction with Timbertech Advanced Polymer deck, consider using only top-down fastening methods such as Cortex or TOPLoc screws for the entire deck.
- Provide a 3 mm to 6 mm (1/8" to 1/4") side to side gap between deck boards.
- Framing/sub-structure must be securely attached to ground footings or building structure. No floating sub-structures should be used in any application with Advanced Polymer Deck, including on grade, concrete, or in roof top applications.
- For best results, stagger splices and miters across deck surface so that all splices and miters do not break on the same joist or beam.
- To further minimize expansion and contraction, proper ventilation and air flow should be considered.
- Some area building codes may require double joisting when joining boards end to end. Double joist and/or secure double blocking is always required at butt joints when using CONCEALoc or FUSIONLoc fasteners. Always check with your local code authority for specific requirements before installation.
- During installation, frequently check that Advanced Polymer Deck boards are installed straight and with consistent gapping and spacing by using a string line.

- Due to the durability of Advanced Polymer deck products, a high-quality fastener is recommended that meets the following specifications: use Cortex hidden fasteners, Advanced Polymer TOPLoc color-matched deck/fascia fasteners, or a high quality stainless steel screw (minimum #7 size and minimum length of 57 mm (2-1/4")).
- Be sure that screws are driven to a minimum depth of 32 mm (1 1/4") into solid wood framing below the bottom of the Advanced Polymer Deck Board. This will enhance holding power and uplift resistance.
- Avoid using flathead screws. Trim head screws typically provide a better result. As always, **the fastener should be tested on a sample board before being used on your deck.**
- Be sure to install 2 screws per joist on each deck board. regardless of temperature during attachment of Advanced Polymer deck boards, be sure to keep butt joints and miters tight and place fasteners within 13 mm (1/2") of ends.
- The fastening pattern and installation methods are the same for standard width 140 mm (5.5"), narrow width 89 mm (3.5"), wide width 184 mm (7.25"), and MAX (38 mm (1.5") thick) boards.
- For salt water coastal applications, we suggest using the above minimum fastener requirements in 316 stainless steel.
- For Advanced Polymer square shoulder decking, use Cortex<sup>®</sup>, SIDELoc<sup>™</sup>, or TOPLoc<sup>®</sup> fasteners.
- For TimberTech Advanced Polymer grooved decking, use CONCEALoc<sup>®</sup> or FUSIONLoc<sup>®</sup> hidden fasteners.
- The following fasteners are compatible with MAX 38 mm (1.5") thick boards:
  - 64 mm (2-1/2") Cortex for MAX (305 stainless steel)
  - 60 mm (2-3/8") SIDELoc (316 stainless steel)
  - 76 mm (3") TOPLoc for PRO/EDGE Light Gray (305 stainless steel)
- TimberTech recommends using TimberTech fasteners with TimberTech Decking. TimberTech fasteners are specifically
  engineered and tested to work 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 TimberTech's product warranty and TimberTech/AZEK will
  not be financially liable in the event such issues arise.
- WARNING: When installing TimberTech Advanced Polymer with hidden fasteners, always use a beater board against side of deck board. Do not strike deck board directly with hammer or rubber mallet or damage to the deck plank may occur.
- WARNING: When installing fasteners, some shoe soles or harder knee pads may leave scuffs when dragged across deck surface. Shoe covers are recommended.



#### **Grooved Deck Boards**

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Use TimberTech CONCEALoc or FUSIONLoc Hidden Fasteners. Follow the directions on the CONCEALoc bucket, box or pages 8-11 of this guide.



## Working with TimberTech Advanced Polymer Deck Boards

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DECK PRODUCTS	SQUARE SHOULDERED LENGTHS		GROOVED LENGTHS			FASCIA	
Standard Thickness 25 mm (1") Standard Width 140 mm (5½")	3,66 m (12')	4,88 m (16')	6,10 m (20')	3,66 m (12')	4,88 m (16')	6,10 m (20')	3,66 m (12')
VINTAGE COLLECTION		*	*	*	*	*	*
LANDMARK COLLECTION <sup>™</sup>		*	*	*	*	*	*
HARVEST COLLECTION Kona®		*	*				*
HARVEST COLLECTION Brownstone, Slate Gray		*	*	*	*	*	*
Narrow Width 89 mm (3½")							
VINTAGE COLLECTION		*	*				
Wide Width 184 mm (7½")							
VINTAGE COLLECTION		*	*				
HARVEST COLLECTION Brownstone, Slate Gray		*	*				
MAX 38 mm (1½") Thick							
VINTAGE COLLECTION Coastline®	*	*	*				
HARVEST COLLECTION Slate Gray	*	*	*				

ADVANCED POLYMER DECKING	FASTENING OPTIONS				
	CONCEALoc®	FUSIONloc®	TOPLoc <sup>®</sup>	Cortex®	SIDELoc®
Vintage, Landmark, and Harvest Collections Grooved	*	*	*	*	
Vintage, Landmark, and Harvest Collections Square Shouldered			*	*	*

### **Cortex® Hidden Fastening System Installation Instructions**

#### Suggested Drills

Corded or cordless drill (18V variable speed recommended). Do not use impact drivers.



1

#### **DRIVE SCREW**

- 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 or toggle the drill trigger in a start/stop manner.



2

#### INSTALL DECK SCREWS INTO JOISTS

- Install two screws into decking at each joist.
- Maximum spacing between each row of screws should be 406 mm (16") on center (up to 610 mm (24") on center for MAX boards).
- Reference Pages 5 & 6 for proper fastener placement.



#### INSTALL PLUG

- Place plug into cored hole with grain aligned and gently tap flush with deck surface.
- Always use a smooth faced plastic hammer to avoid damaging the deck surface while setting the Cortex plug.
- When installing Collated Cortex Plugs:
  - 1. Tear off one strip of collated Cortex plugs
  - 2. Position the leading plug into hole
  - 3. Gently tap plug into place
  - 4. Pull collated strip away from installed plug
  - 5. Tap plug once more to flush



**IMPORTANT-** when installing Cortex plugs use caution to prevent damage to the Advanced Polymer deck surface.

### Important Information

- 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 plastic 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.
- Fasteners should be positioned approximately 13 mm (1/2") from board ends and 19 mm (3/4") from board sides.

#### **Restricted Cortex Uses**

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

- Advanced Polymer Cortex should not be used with Advanced Polymer Fascia or any other material which is 16 mm (5/8") or less, or less than 16 mm (5/8") thick.
- Docks or decks with framing members in constant contact with saltwater.

### **CONCEALoc®** Hidden Fasteners for use with TimberTech Advanced Polymer Deck Boards

#### **CONCEALoc & Accessory Installation Instructions**

• Note: When using clips, larger gaps can be expected at butt joints or breaker boards. Consider using top down fastening methods to help reduce gapping.

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- CONCEALoc Hidden Fasteners retail box for 9 m<sup>2</sup> (100-square-foot) coverage or bulk bucket for 92 m<sup>2</sup> (1,000-square-foot) coverage. Includes stainless steel 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 Polymer 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.
- For a completely fastener-free surface, use Cortex on the first and last boards.
- CONCEALoc Router Bit Rout the correct notch dimension on a solid plank for a perfect CONCEALoc fastener fit even allows for notching an installed plank over a joist.
- Reference the Deck Building Resource Center for additional guides: https://www.timbertech.com/resources/deck-building

#### **CONCEALoc® Hidden Fasteners Installation Instructions**



#### **INSTALL THE FIRST PLANK**

 Fasten outer edge of the first plank at each framing support 25 mm (1") from the edge using Advanced Polymer TopLock or Cortex screws. For a completely fastener-free surface, use Cortex on the first and last boards.



#### **POSITION CONCEALOC FASTENERS**

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





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- Install 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 additonal requirements for butt joints.
- Make sure fastener is in full contact with edge of plank and the screw is holding the fastener down tight to the deck board.



#### **COMPLETE INSTALLATION**

- Place the next plank into position against the fasteners. Slightly raise the outer edge of the plank being installed and slide it onto the fastener until the plank contacts the spacer tab. When properly installed the inserted plank 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") at least 610 mm (24") in length and use it as a tamping block/ beater board to bring edge of deck board into contact with spacer tab to ensure proper spacing.
- Recommend that boards be checked frequently for straightness as they are installed using a string line or laser line.
- Never strike the edge of decking directly with hammer as damage will occur. Always use beater board.



#### INSTALLING CONCEALOC FASTENERS AT BUTT JOINTS

- · Joists at butt joints must be doubled up for proper fastener attachment.
- Install fasteners as detailed below. Note that the two clips on the left 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 joist.
- To help minimize gaps at butt joints, consider installing Cortex screws within 13 mm (1/2") of board ends as well as 2 per joist at two to three joists from butt joints on either side of the butt joint. and for a more secure attachment, consider adding Cortex screws within 13 mm (1/2") of board ends as well as 2 per joist at minimum of 3 joists from each board end in either direction.
- Note: the more fasteners added will increase performance. Consider adding additional fasteners for longer runs or longer length boards.







7

8

Do not use **CONCEALoc®** 

Fasteners or L-Brackets for stair installation.

Hidden

#### 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 clip 13 mm  $(1/2^{"})$  to the right of center line of the joist, so screw will not exit the side of the joist when driven.







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

#### HOW TO REPLACE A PLANK

- · 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 drive onto remaining tabs.
- · Once the board is set into position, secure the loose edges with Cortex hidden fasteners or TOPLoc stainless steel fasteners.

#### TO USE CONCEALoc® HIDDEN FASTENERS WITH ADVANCED POLYMER SOLID DECK BOARDS (FOR START/STOP ONLY)

- Create a 51 mm (2") long notch on the edge of the plank at every joist.
- Use Advanced Polymer 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 notch 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.

	· 51 mm (2")
(1/4") 6 mm	'' 10 mm (3/8")

### FUSIONLoc® Hidden Fasteners for use with TimberTech Advanced Polymer 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 separtely by FastenMaster<sup>®</sup>.
- 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 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



#### SET UP FUSIONLOC GUN

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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.

3

#### 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.



#### 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

Page 15

#### 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.



#### 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 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.
- 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.





Correct

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

## **8**a

#### HOW TO REMOVE A DECK PLANK

- First, pick the interior board to be extracted.
- $\cdot\,$  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.

## 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.

#### TO USE FUSIONLoc® HIDDEN FASTENERS WITH ADVANCED POLYMER SOLID DECK BOARDS

- Create a 51 mm (2") long groove on the edge of the plank at every joist.
- $\cdot~$  Use CONCEALoc Groove Cutting Router Bit or a Freud model.
- #56-112 or Bosch model #85610M 6 mm (1/4") slot cutting bit.
- $\cdot~$  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 (7/16") to 13 mm (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<sup>®</sup> Hidden Fasteners or L-Brackets for stair installation.

### SIDELoc<sup>®</sup> Hidden Fasteners for use with TimberTech Advanced Polymer Deck Boards

**IMPORTANT:** The SIDELoc Hidden Fastener System is your key to installing a beautiful, fastener-free surface on capped polymer decking. Designed specifically for Advanced Polymer Square Shouldered Deck Boards, SIDELoc Capped Polymer Deck Fasteners (referred

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BY AZEK

to as SIDELoc Screws), SIDELoc Guide, and SIDELoc Driver Bits are all a part of the SIDELoc System—each product was engineered to work exclusively within the system. Using tools, guides, fasteners, or bits from other brands will impair performance and won't produce the desired results.

The SIDELoc Guide and SIDELoc Capped Polymer Deck Fasteners are designed specifically for Advanced Polymer Square Shouldered Deck Boards.

**NOTE:** SIDELoc should NOT be used with TimberTech Composite, or any grooved profiles of decking.

The SIDELoc Guide directs SIDELoc Screws into the side of the deck board and into the joist. Use SIDELoc Guides on any 89 mm – 184 mm (3 1/2" – 7 1/4") wide solid capped polymer deck board. No predrilling is required, and the SIDELoc Guides provide automatic 3 mm (1/8") spacing between deck boards.

#### SIDELoc & Accessory Installation Instructions

- SIDELoc Screws available in Fastener Packs of 350, 700, and 1750
- SIDELoc Guide SIDELoc 140 mm (5 1/2") or SIDELoc 89 mm (3 1/2")
- For wide width boards, use the SIDELoc 184 mm (7 1/4") Extension
- SIDELoc Driver Bit (included with SIDELoc Screws)
  - $\cdot$  Driver Bits set the depth of drive making it impossible to overdrive the screw
- Drill for maximum driving efficiency, set the drill speed to the highest drill setting

#### SIDELoc<sup>®</sup> Hidden Fasteners Installation Instructions



#### SET UP SIDELOC TOOL

The steps noted below must be followed to properly adjust the SIDELoc Tool for the varying requirements of the materials and profiles used in Advanced Polymer and TimberTech Decking.

- Adjusting the SIDELoc Tool: Loosen the Thumb Dial to adjust the Spacer Teeth to fit the width of the deck boards you are using. Once you have achieved a snug fit on the board, tighten the Thumb Dial to hold the position.
- Installing wide boards? Attach the SIDELoc 184 mm (7 1/4") Extension to the SIDELoc 140 mm (5 1/2") Guide to easily fasten 184 mm (7 1/4") boards.

## 2

#### HOW TO INSTALL ON ANGLE

- Position the SIDELoc Guide over the edge of the high side of the joist so the screw is fastened completely into the joist when fully driven.
- For precise positioning, draw a line where the board intersects with the joist. Position the SIDELoc Guide so the middle of the Screw Guide rests over the line, then drive the screw. Repeat this process down the length of the deck board on both edges.

#### FASTENING THE BOARD NEXT TO THE STRUCTURE

- If the board next to the structure runs parallel to the structure, it may be necessary to face-fasten the inside edge of that board:
  - 1. Place the board snug to the structure and mark where you'll drive the SIDELoc Screws into the joist.
  - 2. Move the board away from the structure, position the SIDELoc Guide over the mark, and drive the SIDELoc screw 13 mm (half an inch) into the board. Repeat at every mark.
  - 3. Push the board up to the structure with the SIDELoc Screws on the outside edge of the board and drive the SIDELoc Screws the rest of the way. Face fasten the inside edge with Cortex or TOPLoc for Advanced Polymer.

#### SET

- Beginning on one end of the deck board, squeeze the Trigger Handle of the SIDELoc Guide and set the Guide over the deck board centered over the joist.
- With the tool feet flat on the surface of the board, release the Trigger Handle, allowing the Spacer Teeth to grip the deck board–a properly adjusted Guide clamps securely to the board.
- With the SIDELoc Guide in place on the deck board, push the deck board snugly against the previous board. The Spacer Teeth automatically provides a 3 mm (1/8") gap between the boards.



### SIDELoc® Hidden Fasteners Installation Instructions

## 5

LOAD

#### • With the SIDELoc Guide set on the board, place a SIDELoc Screw into each of the Screw Guides.



To ensure proper performance of the SIDELoc Guide, it is important to regularly check the Screw Guides for deck material build-up. If material is present, use the SIDELoc Driver Bit to clear the Screw Guides.

## 6

 $\Lambda$ 

#### DRIVE

- Hold the Tool Handle (which is not intended to be weight-bearing) and start driving the SIDELoc Screw on the outside edge of the board running the drill at full speed. Let the screw do the work—forcing the screw can result in mushrooming or splitting. Once you've started the screw, gently increase pressure.
- When the shoulder of the Driver Bit reaches the Screw Guide, you are finished driving the screw.
- Follow the same steps to fasten the inside edge of the board.
- Continue this process down the length of the board until you've installed the entire board. Do not skip any joists.



### **Stair Installation**



- Stairs should be constructed per local code requirements.
- For riser installation, you can use a ripped piece of Advanced Polymer fascia using the fascia install recommendations on the following page.
- Alternatively, use an Advanced Polymer 184 mm (7.25") wide-width deck board. Attach using (2) screws every 406 mm (16") minimum.

### **Advanced Polymer Fascia**

3.66 m (12' lengths) - 25 mm (1/2") thick by 11.7" wide

Harvest Collection®

· Brownstone, Kona®, Slate Gray

Landmark Collection<sup>™</sup>

· American Walnut®, Boardwalk®, Castle Gate™, French White®

Vintage Collection®

· Coastline®, Cypress®, Dark Hickory, English Walnut™, Mahogany, Weathered Teak™

#### NOTE:

- · Deck Boards are to be installed with the grain side up for the walking surface.
- · Advanced Polymer Fascia are one-sided. Fascia are to be installed grain side out.

#### Fastening Methods: Advanced Polymer Fascia Installation Guidelines

#### **Recommended Fasteners**

- Due to the durability of TimberTech Advanced Polymer Decking products, use Advanced Polymer TOPLoc color-matched fascia fasteners, or a high quality stainless steel screw (minimum #7 size and minimum length of 41 mm (1-5/8")).
- Avoid using flathead screws. Trim head screws typically provide a better result. As always, the fastener should be tested on a sample board before being used on your deck.
- · For salt water coastal applications, we suggest using the above minimum fastener requirements in 316 stainless steel.
- · Color-matched stainless steel deck screws are also available. Your TimberTech dealer can assist with more information on these products.
- Do not use Cortex fastening system.

#### Storage

- · Store fascia boards in a cooler, shady area prior to installation.
- · Store fascia boards on a flat solid surface.

#### Fascia/Riser Attachment

- · Be sure to keep butt joints tight. Do not leave a gap at butt joints, splices or miters.
- Attach fascia to a solid backer wide enough to support the entire width of the rim cover. Use 51 mm x 305 mm (2 x 12) wood rim board or rip cut fascia to fit exactly. A slight overhang of 13 mm (1/2") or less is okay.
- Use a quality exterior rated construction adhesive as shown below.
- Install three (3) screws from top to bottom with top and bottom screws positioned no more than 13 mm (1/2") from the edge as shown below. The third screw should be approximately centered in the board. Repeat this configuration every 305 mm (12"). Screws at ends of boards should be no more than 13 mm (1/2") from the end.
- · Always trim/cut the factory cut ends of fascia to ensure they are square and for a finished look.
- · Advanced Polymer Fascia are one-sided. Fascia are to be installed grain side out.



Solid Backer

The techniques shown above should be used for best results. Results may vary as expansion and contraction could still occur. The AZEK Company claims no liability or responsibility for the improper installation of this product. Since all installations are unique, it is the sole responsibility of the installer to determine specific requirements in regard to each decking application. The AZEK Company recommends that all designs be reviewed by a licensed architect, engineer or local building official before installation. Please contact TimberTech Customer Service prior to installing if you have question or concerns.

### Considerations

- Depending on environmental conditions, TimberTech Advanced Polymer Deck, Porch, Fascia, & Riser colors may appear to lighten over time as part of the natural weathering process.
- Please be aware that excessive heat build on the surface of Advanced Polymer products from external sources such as, but not limited to, fire, hot ashes/ embers, fire pits, grills or reflection of sunlight from energy-efficient window products. Reflection of sunlight from Low-emissivity (Low-E) glass can potentially harm Advanced Polymer 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 Advanced Polymer products to melt, sag, warp, discolor, increase expansion/contraction, and accelerate weathering.
- Static build-up is a natural occurring phenomenon that can occur with many plastic products including PVC Decking. It could occur with Advanced Polymer products under the right environmental conditions. 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 and is not a product defect.
- Although Advanced Polymer Deck & Porch products are cooler to the touch than many other deckboard products in similar colors, all decking products will get hot in the sun. Additionally, the darker the decking color, the hotter it will feel.
- **IMPORTANT**: Do not allow airborne dust from concrete, fiber cement siding, landscape blocks, or any masonry product to accumulate on the Advanced Polymer Deck, Porch, Fascia, & Riser surface as it may damage the surface of the deck. Do not cut any product on or near Advanced Polymer Deck, Porch, & Fascia.

### Storage & Handling

- Store TimberTech Advanced Polymer Deck, Porch, & Fascia boards on a flat and level surface.
- Store products in a cool, shady area prior to installation.
- Do not stack bundles over 8 units high.
- Always leave factory applied protective wrap, If stored outdoors, the product must be covered with non-translucent material.
- Use care when handling product with a forklift as forks can easily damage the material.
- If banding is used, use protective corners to prevent indents from the bands.
- Avoid storing TimberTech Advanced Polymer Deck, Porch, Fascia, & Risers in areas of excessive heat.

#### Warranty

TimberTech Products are made exclusively from technologically advanced materials designed to provide years of enjoyment. TimberTech Advanced Polymer Decking products are covered by a Limited Lifetime Warranty for residential applications and a 20year Limited Warranty for commercial applications. The warranty covers defects resulting in blistering, peeling, flaking, cracking, splitting, cupping, rotting or structural defects from termites or fungal decay. TimberTech Advanced Polymer Decking products are also covered by a 50-year limited residential fade and stain warranty. Visit TimberTech.com to view complete warranty information.

## Care & Maintenance

To keep your TimberTech Advanced Polymer Deck/Porch looking its best:

- To remove rust stains, use a cleaner such as Krud Kutter "the must for rust".
- Avoid the use of rubber-backed mats, tarps, pool toys, and other non-porous items on the deck/porch for any extended period of time as these items may cause discoloration to the decking surface.
- Some products, such as sunblock and insect repellent, contain chemicals that may alter the surface of Advanced Polymer Deck, Porch, Fascia, & Risers. Check product labels and consult with the manufacturer as to product compatibility with plastic materials, such as Advanced Polymer Deck, Porch, Fascia, & Risers, prior to use on or near Advanced Polymer Deck/Fascia.
- Do not get any PVC glue or similar product on the surface of any Advanced Polymer Decking/Porch Product as it may discolor and permanently damage the surface.
- To clean Advanced Polymer Deck/Porch, use TimberTech DeckCleaner<sup>™</sup> or another all-purpose cleaner such as Chomp<sup>®</sup> Gutter cleaner, Zep<sup>®</sup> 505, or Krud Kutter<sup>®</sup> Cleaner/ Degreaser with a stiff natural fiber brush.
- Always read the cleaning product manufacturers specific information before using any product on your Advanced Polymer Deck and follow their instructions. Outside of the list above, it is also a good idea to test the cleaner on a scrap piece or inconspicuous area of the deck to make sure it does not harm the surface.
- WARNING: Keep children and pets away from cleaning products and Advanced Polymer Deck until dry.
- \*Note that composite deck cleaners such as Corte Clean<sup>®</sup>, Thompson's<sup>®</sup> Water Seal<sup>®</sup> Oxy Action, Olympic<sup>®</sup> Premium Deck Cleaner, or other cleaners specified as composite deck cleaners, in powder or liquid form, SHOULD NOT be used with Advanced Polymer Deck/Porch. Advanced Polymer Deck/Porch is a PVC/polymer deck plank and not a wood/plastic composite.
- Note: If any of the suggested cleaning methods are not satisfactory, take before and after photos of the attempt and contact TimberTech Customer Service at 1(877) 275-2935.

- It is always a good idea to test on a scrap piece or confirm cleaning process prior to cleaning the entire deck or large area.
- Store products under cover to maintain a clean surface.
- If stored outdoors, they must be covered with a non-translucent material.
- Do not use any other cleaners, detergents, stain removers, or chemicals including but not limited to: Goof Off products, Acetone, Goo Gone, Mineral Spirits, etc. As noted, contact TimberTech Customer Service with before and after photos if any suggested methods are not satisfactory for possible further recommendations at 1(877) 275-2935.

#### Ice and Snow:

- As with any walking surface, Advanced Polymer deck products may become slippery in Winter weather. Take caution when walking on the your Advanced Polymer deck in these conditions.
- For ice removal, most products containing calcium chloride chloride in flake or pellet form can be used without damage to the deck/porch surface. For more pet friendly options, most products containing magnesium chloride can also be used without damaging the deck 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 will damage the surface of Advanced Polymer Deck and are not recommended for clearing snow from deck/porch surface.

## For specific details, see TimberTech Care & Cleaning Guide.