



Proper Framing and Blocking for Picture Frame Application



What Makes TimberTech so Simple to Install?



EASE OF CUTTING

Cuts easily when using the proper saw blade and cutting equipment.



LIGHTWEIGHT

If using TimberTech AZEK decking, it weighs up to 30% less than competitive composite decking, making lifting and handling your deck boards easier.



EASIER FASTENING / SIMILAR TO WOOD INSTALLATION PRACTICE

TimberTech decking used in picture frame applications is easily attached with screws. No predrilling is needed with AZEK decking, however, it is when using PRO and EDGE decking.

To access this information on the website click here. <https://www.timbertech.com/resources/deck-building/how-to-picture-frame-a-deck/>

DISCLAIMER

TimberTech 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® Building Products Inc. accepts no liability or responsibility for the improper installation of this product. TimberTech Decking & Fascia may not be suitable for every application and it is the sole responsibility of the installer to be sure that TimberTech 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. 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](https://www.timbertech.com).

Prior to your purchase, AZEK Building Products also recommends that you see the full installation guidelines for more details regarding installation as well as information on care and maintenance, storage and handling, reference to warranty coverage, and other important product information. Installation Guidelines can be found at:

<https://www.timbertech.com/resources/installation-help/>

Design Assumptions

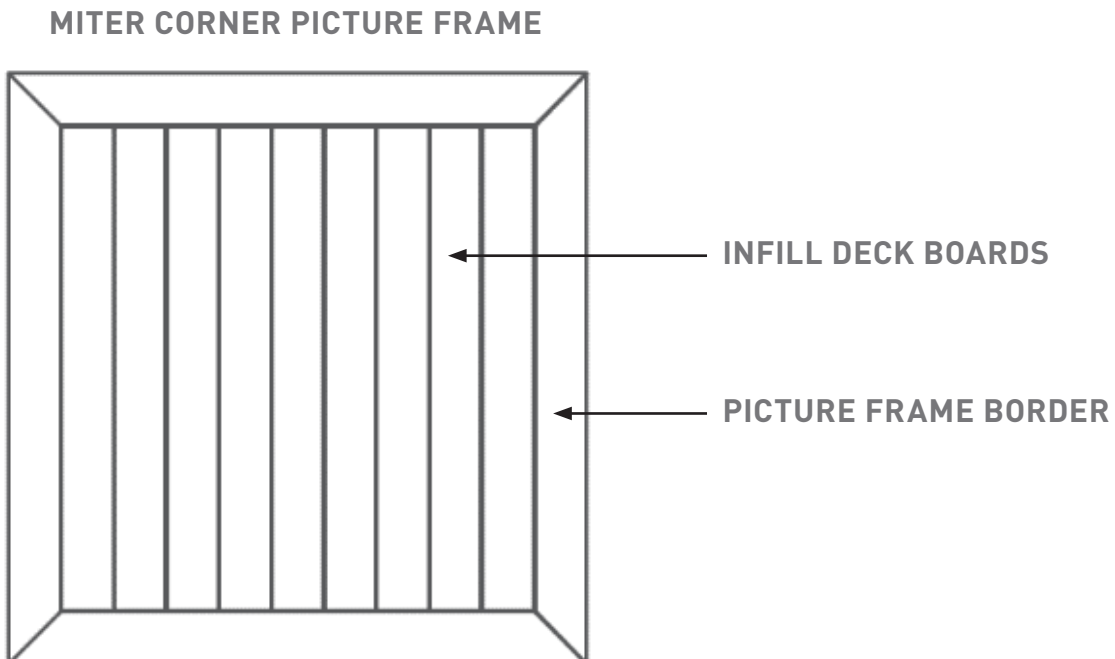
These tips will help you establish the proper blocking and installation methods for **picture framing a deck** using TimberTech AZEK or TimberTech® PRO® and EDGE® square shoulder boards.

This guide focuses on a picture frame deck design.

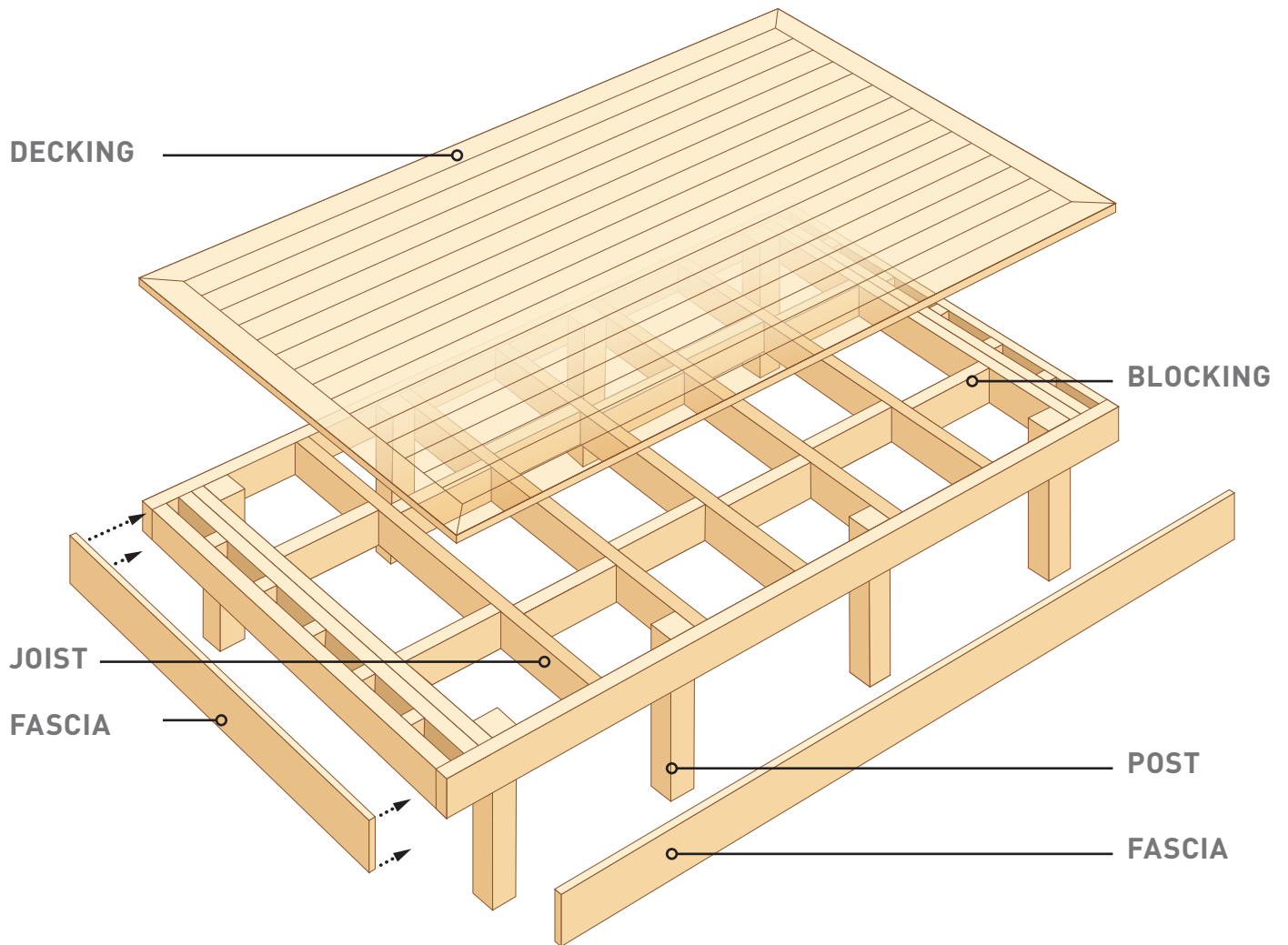


Design Options Include:

- A mitered picture frame design.



Deck Components



Understanding TimberTech Deck Material

1. It's best to keep the decking products stored in a cool, dry place, with packaging on if possible.
2. TimberTech decking, like other alternative decking products, will encounter expansion and contraction during significant temperature changes which can occur between direct sunlight and shade / cloud cover.
3. Expansion / contraction / gapping, is most significant where extreme temperature change may exist.
4. For better results keep decking as cool as possible during attachment. Full direct sun exposure will increase board temperature and length. If attaching during high heat, larger gapping can be expected.
5. Best practice is to cut and fasten the deck boards as soon after cutting as possible. Do not cut and leave boards unattached for long periods of time, or over night, as the board length will change with temperature changes.
6. To further limit expansion, contraction, and gapping, follow the fastening instructions noted on the subsequent pages.
7. Avoid cutting and dragging ends of boards over each other as unwanted marks on deck surface could occur.

Considerations and Tools

**ESTIMATED TIME:**

2 Hours*

**RECOMMENDED MAN-POWER:**

1 - 2 People



PRE-REQUISITE 1: Deck plan (size, layout)

PRE-REQUISITE 2: Pre-existing framing attached to the house

PRE-REQUISITE 3: Proper joist spacing and blocking

PRE-REQUISITE 4: Determine style of picture frame border that you will use

**STEPS:**

1. Install suggested blocking using exterior grade lumber for the style of picture frame desired.
2. Tips for cutting picture frame border deck boards.
3. Tips for fastening picture frame border deck boards.
4. Tips for fastening the in-fill deck boards.

**TOOLS NEEDED:**

- Safety glasses
- Power Miter Saw/
Circular Saw
- Cordless Driver
- Exterior-grade
construction screws
- Measuring Tape
- Carpenter Square
- Cordless drill
- Recommended fasteners
and installation tools

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

* Minimum, based on an average 16x20 deck.

Time may vary based on the installer's skillset and quality of substructure



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

STEP ONE

Blocking Your Picture Frame

1. Picture framing requires additional blocking.
2. For the two (2) picture frame deck boards that run in the same direction as the joists, additional blocking / joists must be installed to your existing substructure to adequately support and fasten the deck board.
3. All infill deck boards that meet a picture frame border must be fully supported beneath the ends of each board.
4. All additional framing / blocking must be in plane across the tops of existing framing members.
5. All blocking / framing must be attached / installed using exterior-grade screws. DO NOT use nails.
6. Additional blocking / joists can be installed at 16" on center, maximum. However, consider installing blocking / joists at 12" on center for a more rigid feel.

STEP ONE

Single Picture Frame Blocking Method

USE 2" X 6" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.



1. ADD BLOCKING TO CORNERS

- Place a solid block at all four corners to support the frame and additional joists being added.
- You will add blocking at even intervals along the perimeter.

2. CONTINUE BLOCKING EDGE

- Block: 2" x 6". Length of blocking: 3 1/4".
- Continue applying blocking along the edge of the deck frame at an interval of 16".



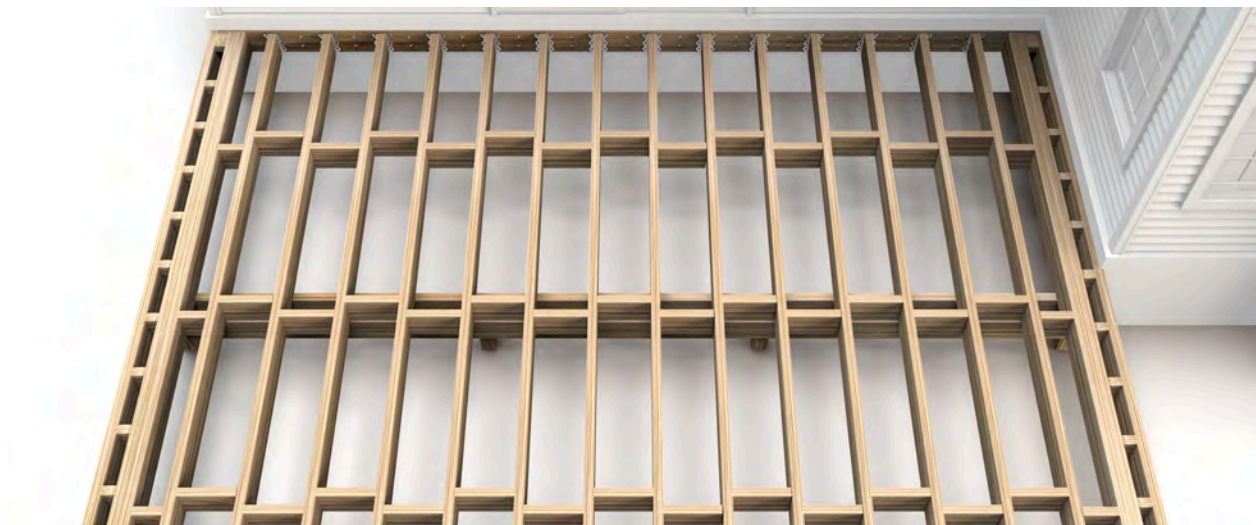
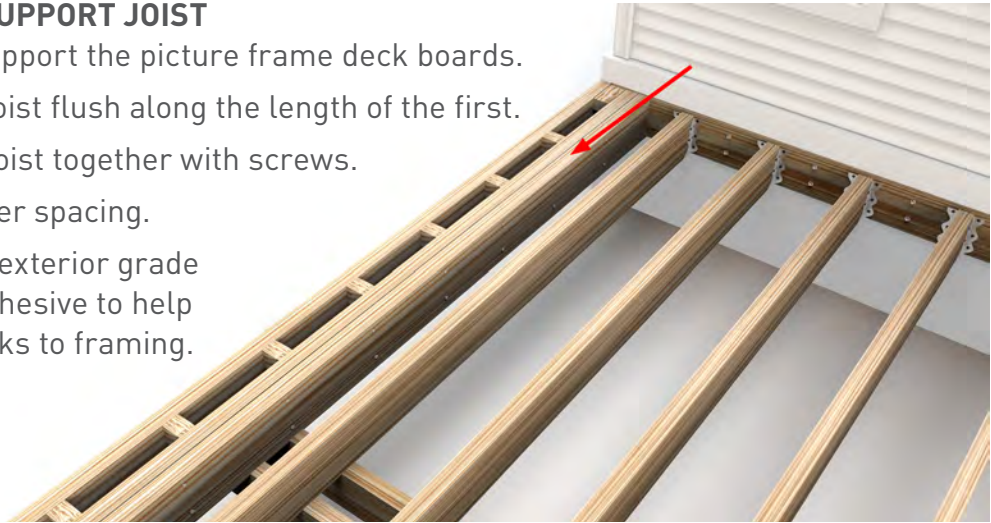
STEP ONE

Single Picture Frame Blocking Method

USE 2" X 6" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

3. ADD SECOND SUPPORT JOIST

- Add a joist to support the picture frame deck boards.
- Place another joist flush along the length of the first.
- Fasten double joist together with screws.
- Maintain all other spacing.
- Consider using exterior grade construction adhesive to help secure flat blocks to framing.



4. BLOCK SUBSTRUCTURE

- Space joists at 16" on center, max, and double joists to support picture frame deck boards.
- Consider using joist tape to protect all framing, joists, blocking prior to installation of decking.

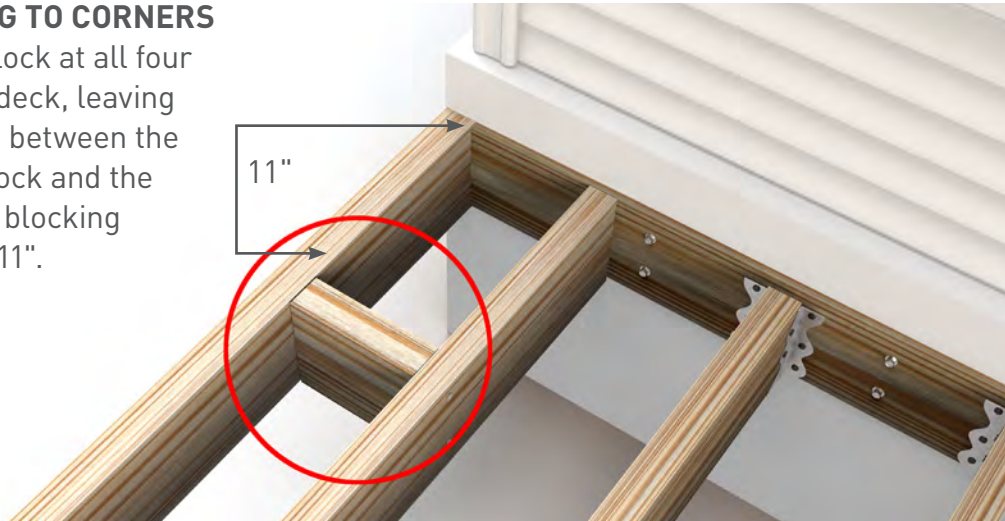
STEP ONE

Double Picture Frame Blocking Method

USE 2" X 6" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

1. ADD BLOCKING TO CORNERS

- Place a solid block at all four corners of the deck, leaving 11" clear space between the inside of the block and the corner. Corner blocking should be 9" x 11".



2. ADD CORNER SUPPORT JOIST

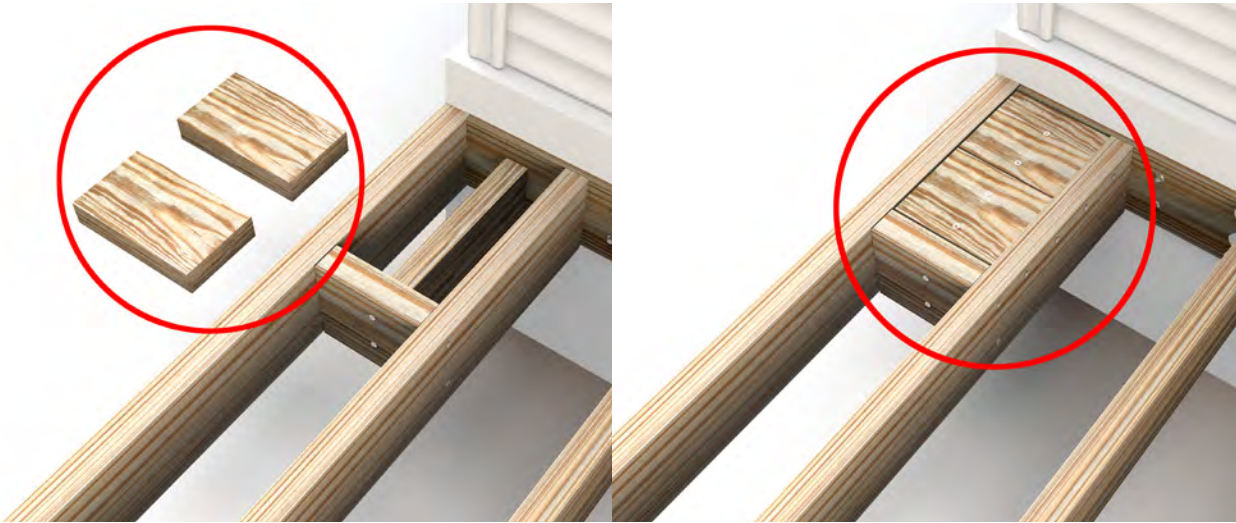
- Place corner support joist perpendicular to the blocking. This support is placed at 1 1/2" below framing. This support is placed at 1 1/2" below framing.



STEP ONE

Double Picture Frame Blocking Method

USE 2" X 6" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

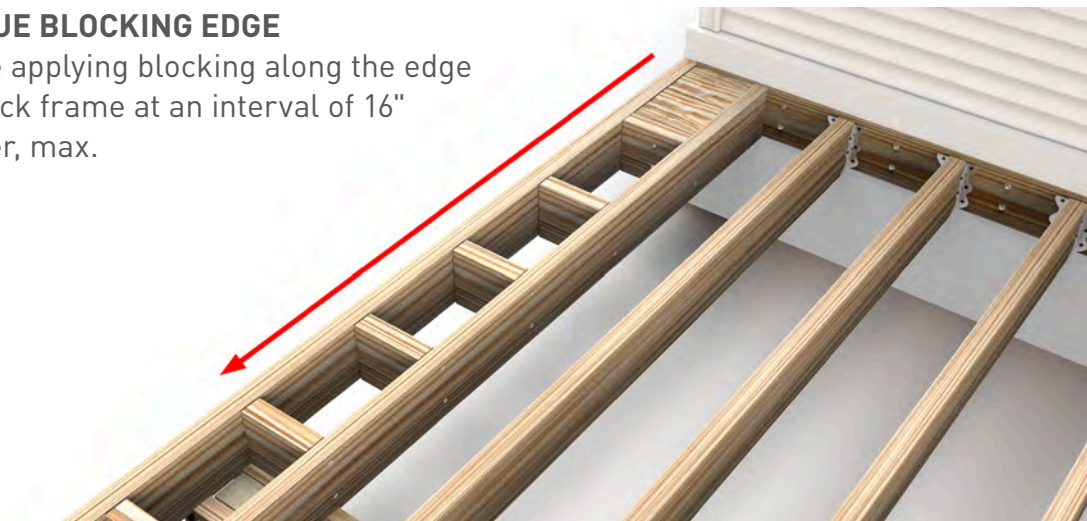


3. ADD TWO (2) FLAT BLOCKS

- Use two (2) corner blocks, each 2" x 6", cut to 9" length. Combined length of blocking: 18". Secure the flat blocks using screws.
- Consider using exterior grade construction adhesive to help secure flat blocks to framing.

4. CONTINUE BLOCKING EDGE

- Continue applying blocking along the edge of the deck frame at an interval of 16" on-center, max.



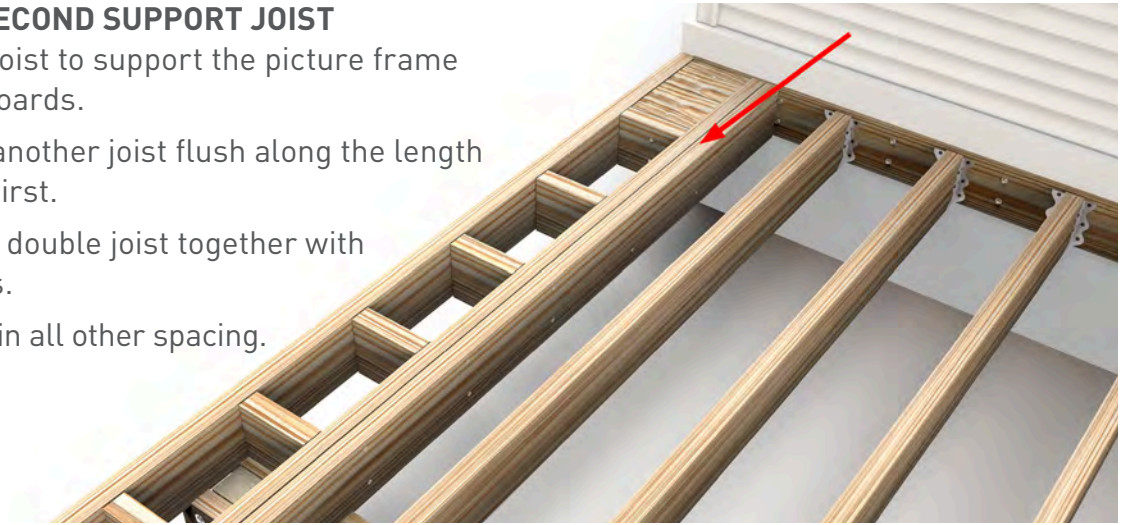
STEP ONE

Double Picture Frame Blocking Method

USE 2" X 6" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

5. ADD SECOND SUPPORT JOIST

- Add a joist to support the picture frame deck boards.
- Place another joist flush along the length of the first.
- Fasten double joist together with screws.
- Maintain all other spacing.

**6. BLOCK SUBSTRUCTURE**

- Space joists at 16" o.c. max., or 12" o.c. for a more rigid feel, and install blocking between all joists in rows 4 to 6 feet apart. Run string lines frequently to ensure tops of all joists, blocking are in plane across tops prior to final attachment.
- Consider using joist tape to protect all framing, joists, blocking prior to installation of decking.

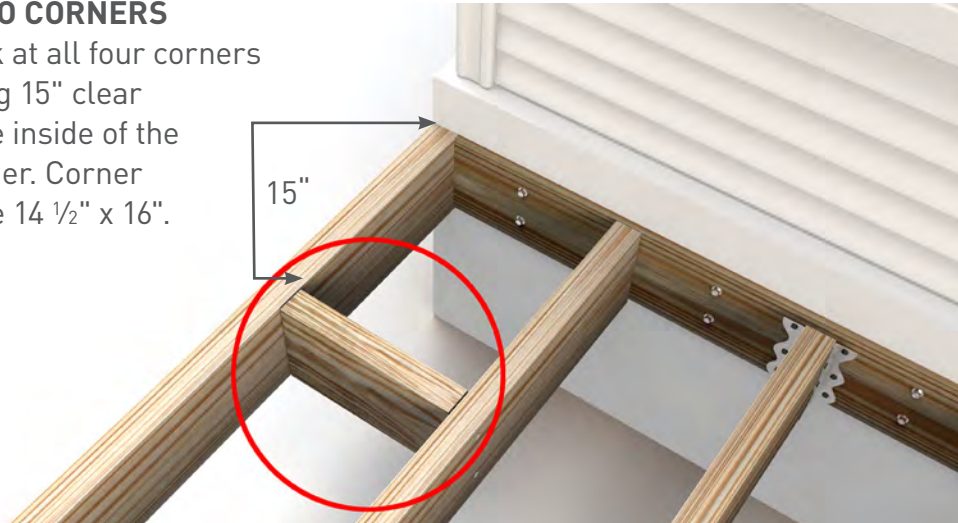
STEP ONE

Triple Picture Frame Blocking Method

USE 2" X 8" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

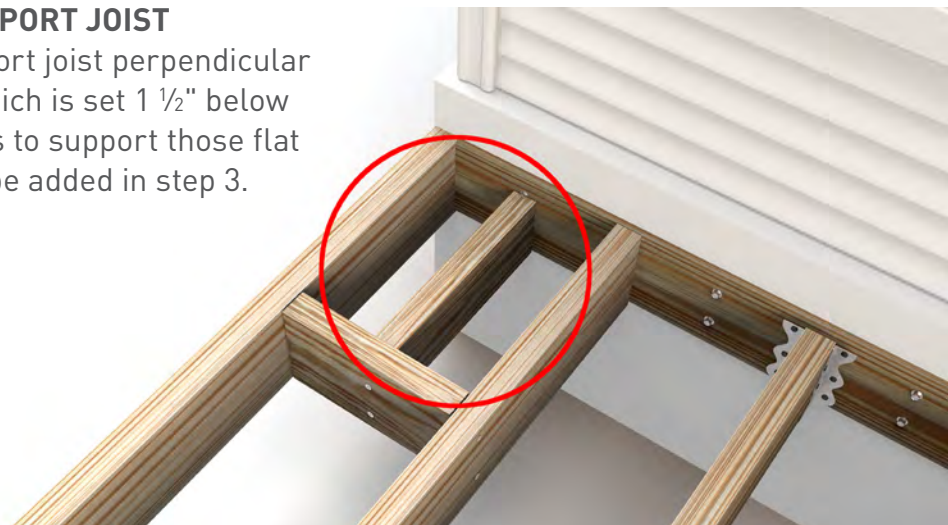
1. ADD BLOCKING TO CORNERS

- Place a solid block at all four corners of the deck, leaving 15" clear space between the inside of the block and the corner. Corner blocking should be 14 ½" x 16".



2. ADD CORNER SUPPORT JOIST

- Place corner support joist perpendicular to the blocking, which is set 1 ½" below the top of the joists to support those flat blocks which will be added in step 3.



STEP ONE

Triple Picture Frame Blocking Method

USE 2" X 8" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.



3. ADD TWO (2) FLAT BLOCKS

- Use two (2) corner blocks, each 2" x 8", cut to 14" length. Combined length of blocking: 29". Secure the flat blocks using screws.
- Consider using exterior grade construction adhesive to help secure flat blocks to framing.

4. CONTINUE BLOCKING EDGE

- Continue applying blocking along the edge of the deck frame at an interval of 16" on-center, max.

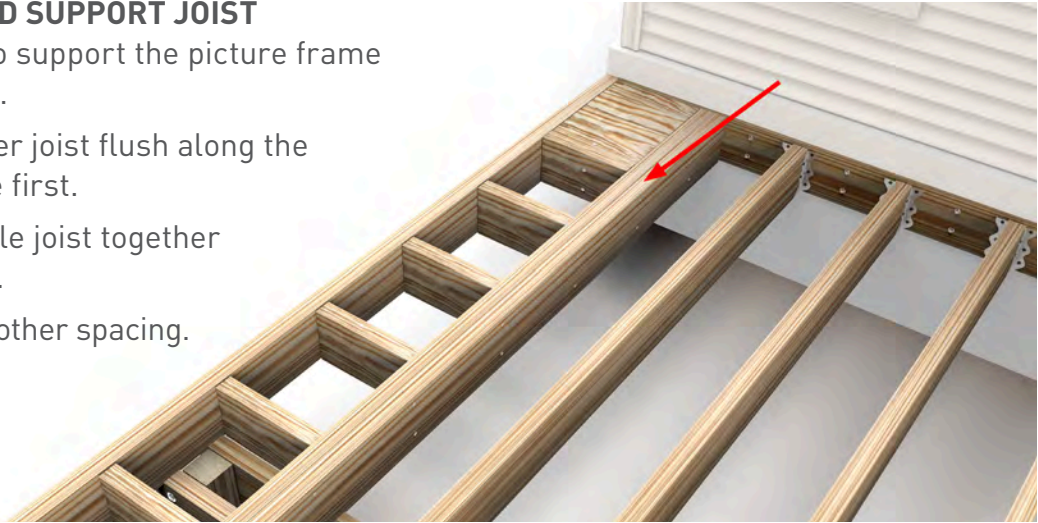


STEP ONE

USE 2" X 8" FLAT BLOCKING TO SUPPORT THE MITERED CORNER.

5. ADD SECOND SUPPORT JOIST

- Add a joist to support the picture frame deck boards.
- Place another joist flush along the length of the first.
- Fasten double joist together with screws.
- Maintain all other spacing.



6. BLOCK SUBSTRUCTURE

- Space joists at 16" o.c. max., or 12" o.c. for a more rigid feel, and install blocking between all joists in rows 4 to 6 feet apart. Run string lines frequently to ensure tops of all joists, blocking are in plane across tops prior to final attachment.
- Consider using joist tape to protect all framing, joists, blocking prior to installation of decking.

STEP TWO

Cutting TimberTech Picture Frame Deck Boards

POWER MITER OR COMPOUND POWER MITER SAW

For best results a miter saw with a fine-toothed, carbide-tipped finish trim blade (12" 100-tooth minimum or 10" 80-tooth minimum) works well for cutting.



HAND-HELD ELECTRIC CIRCULAR SAW

For cutting AZEK deck boards and fascia. Use an electric circular saw with a 60-tooth, fine-finish blade.



ELECTRIC JIG SAW

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



NOTE! Do not use any cordless saws



STEP TWO

Cutting TimberTech Picture Frame Deck Boards

- Use proper saw and blade.
- As with any wood or alternative decking product always be sure to cut the factory ends of your board for a clean and square finish.
- Cut deck boards with the grain facing upward.
- Make sure face of the deck board is protected from the bottom of the saw during cutting with a circular saw or a jig saw.
- When cutting picture frame boards, confirm that you're cutting at a 45-degree angle.
- If using a hand-held circular saw be sure to use a saw guide for clean square cuts.
- A saw guide can reduce binding which could result in chipping of deck surface.
- Cut boards one at a time.
- For best results cut boards before installing / fastening or chipping can occur.
- Do not cut boards to length after fastening or chipping can occur.
- While using any saw, cut slowly or chipping can occur.
- As always, measure twice and cut once.
- Fasten the deck boards as soon after cutting as possible. Do not leave boards unattached for long periods of time or overnight, as the board length will change with temperature changes.



NOTE! Always wear the proper safety glasses (PPE)

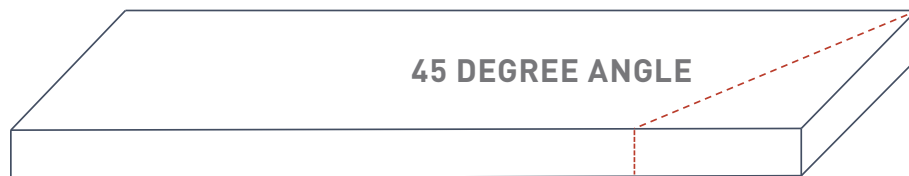
STEP TWO

Cutting TimberTech Picture Frame Deck Boards

TIPS FOR CUTTING TIMBERTECH PICTURE FRAME DECK BOARDS

- Determine your angle.
- Measure and cut your deck boards to length using a power miter saw or sliding compound power miter saw depending on board width.

For further and specific instructions for cutting and installing TimberTech deck boards, be sure to review full installation guidelines.



STEP THREE

Best Practices for Fastening TimberTech Picture Frame Deck Boards

Due to the high quality and long lifespan of TimberTech deck products, we recommend a high-quality fastener for installation such as the following:

- Cortex hidden fasteners with collated plugs and included setting tool
- TOPLoc color-matched fasteners

When fastening TimberTech AZEK decking with Cortex or TOPLoc fasteners, NO PREDRILLING IS REQUIRED.



NOTE! When fastening TimberTech Pro and Edge, pre-drilling is required—see installation guidelines for details.

CORDLESS DRILL

For TimberTech AZEK / PRO / EDGE



TOPLOC COLOR-MATCHED FASTENERS

For TimberTech AZEK



CORTEX® FASTENERS

For TimberTech AZEK



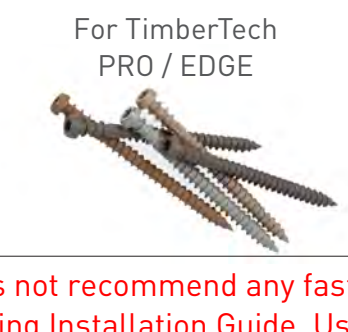
T-TAP DRIVER BIT

For TimberTech AZEK



TOPLOC COLOR-MATCHED FASTENERS

For TimberTech PRO / EDGE



CORTEX® FASTENERS

For TimberTech PRO / EDGE



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

STEP THREE

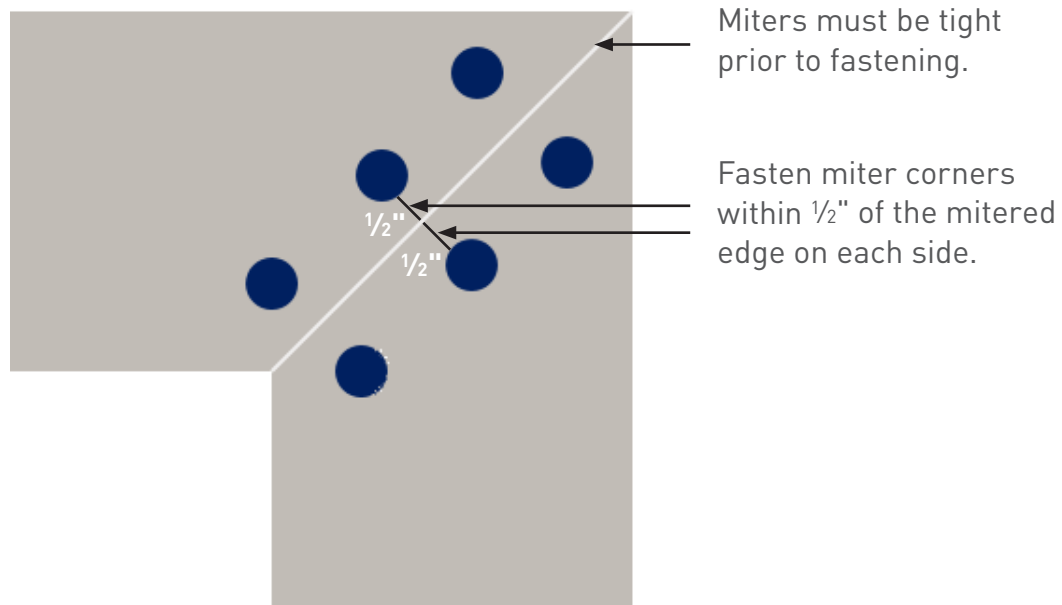
Best Practices for Fastening TimberTech Picture Frame Deck Boards

USING TOPLOC OR CORTEX TO FASTEN TIMBERTECH AZEK BOARDS

Fasten along the mitered edge of each picture frame board within $\frac{1}{2}$ " of the edge using three (3) TOPLoc OR Cortex for AZEK deck screws for best results.

(For additional tips on installing TimberTech AZEK decking, visit the Deck Building Resource Center.)

Using Cortex fasteners with collated plugs will provide a seamless, fastener-free look.



STEP THREE

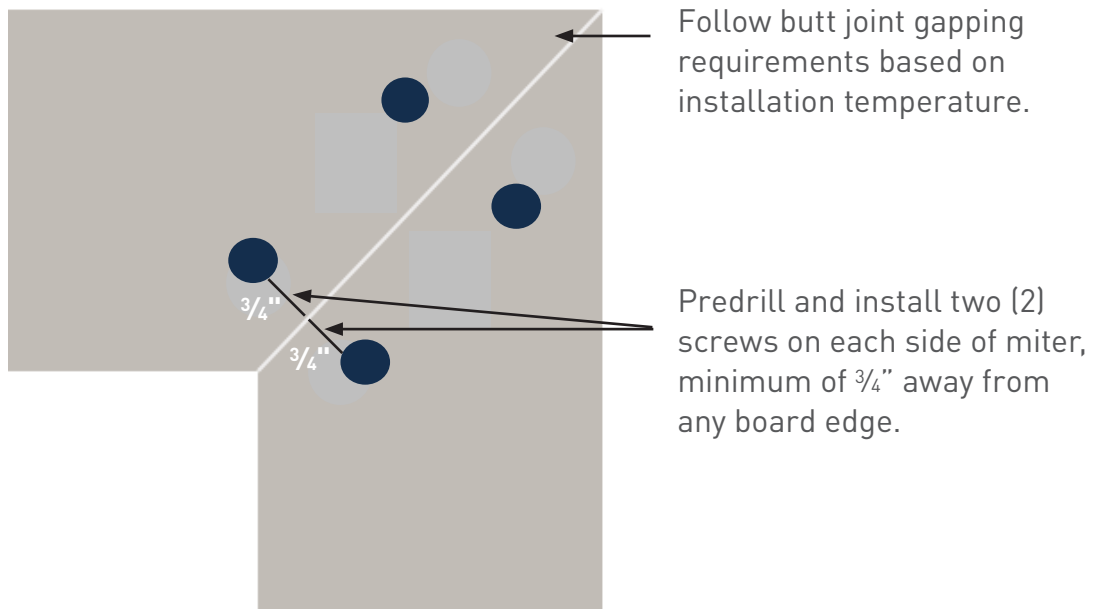
Best Practices for Fastening TimberTech PRO and EDGE Picture Frame Deck Boards

USING TOPLOC OR CORTEX TO FASTEN TIMBERTECH PRO AND EDGE BOARDS

Predrill and fasten along the mitered edge of each picture frame board minimum of 1 3/4" from any board edge using two (2) TOPLoc #8 x 2 1/2" deck screws or Cortex deck screws for best results.

(For tips on installing TimberTech PRO and EDGE decking, visit the Deck Building Resource Center.)

Using Cortex fasteners with collated plugs will provide a seamless, fastener-free look.



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

STEP THREE

Fastening for Single, Double, and Triple
Picture Frame Border

SINGLE DECK BOARD PICTURE FRAMING



DOUBLE DECK BOARD PICTURE FRAMING



STEP THREE

Fastening for Single, Double, and Triple Picture Frame Border

TRIPLE DECK BOARD PICTURE FRAMING



STEP 1: LAY YOUR BOARDS & SPACE FASTENERS

- Achieve a clean finished look by allowing the picture frame border boards to overhang the outside wood rim joist by $\frac{3}{4}$ ". Border board can be flush to the wood rim if no rim joist is used.
- Installing TimberTech AZEK fascia boards, each of which is $\frac{1}{2}$ " thick, will leave a slight ($\frac{1}{4}$ ") overhang of the picture frame border.
- Consider using TimberTech PRO-Tac Flashing and Joist Tape to protect all joists, framing, and blocking.

STEP 2: DETERMINE CORRECT FASTENER POSITION AND SECURE BOARDS

For TimberTech AZEK deck boards: You will need three (3) TOPLoc® for AZEK color-matched deck screws, or Cortex® fasteners, evenly spaced on both sides of the miter (pictured). Predrilling not required for TimberTech AZEK deck boards.

- Miters must be tight prior to fastening.
- Fasten along the mitered edge of each picture frame board within $\frac{1}{2}$ " of the edge as illustrated on page 15.
- Continue fastening each picture frame board using 2 screws per joist at 16" o.c. maximum.

For TimberTech PRO and EDGE deck boards:

You will need two (2) TOPLoc #8 x 2 $\frac{1}{2}$ " deck screws, or Cortex screws, evenly spaced on both sides of the miter. Predrill the screw holes.

- Fasten along the mitered edge of each picture frame board at a minimum of $\frac{3}{4}$ " from any board edge as illustrated on page 16.
- Continue fastening each picture frame board using 2 screws per joist at 16" o.c. maximum.



STEP FOUR

Fasten Your Infill Deck Boards

TO INSTALL THE REMAINING DECK BOARDS

Complete fastening the picture frame boards along the perimeter of the deck.

Measure the length between the picture frame boards:

If using TimberTech AZEK decking, keep ends tight to the picture frame border.

- Each end of infill boards: Use two (2) screws within 1/2" ends.

If using TimberTech PRO or EDGE, provide gap at the ends of infill boards, per BUTT JOINT GAPPING REQUIREMENTS chart (See page 16).

- Each end of infill boards: Predrill and fasten two (2) screws within 3/4" from edges.

Install the infill deck boards per the installation instructions.

HOUSE SIDE

