



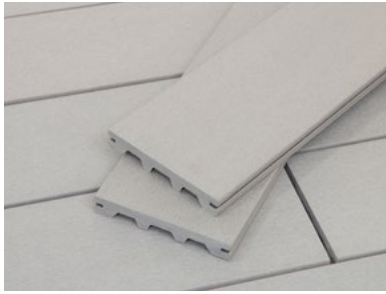
CALI DECKING™

BamDeck®

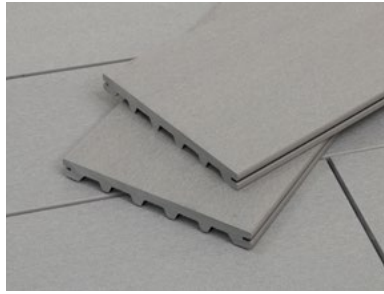
Installation Guide

(888) 788-2254
www.CaliBamboo.com

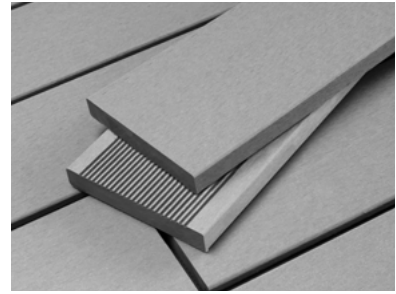
Decking Systems



BAMDECK 4G
5-7/16" Wide
Plank Dims: 192"L x 5-7/16"W x 13/16"H



BAMDECK 4G WIDE
8-1/4" Wide
Plank Dims: 96"L x 8-1/4"W x 13/16"H



BAMDECK SQUARE EDGE
5-7/16" Wide
Plank Dims: 96"L x 5-7/16"W x 13/16"H

Decking Accessories



FASCIA BOARD
6-3/8" Wide
Plank Dims:
96"L x 6-3/8"W x 3/8"H



UNIVERSAL HIDDEN FASTENERS

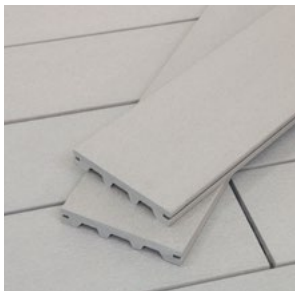


UNIVERSAL BUTT SEAM CLIPS



STARTER CLIPS

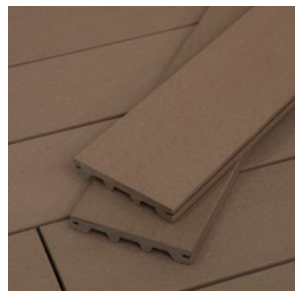
Available Colors



SLATE



CHARCOAL



COFFEE

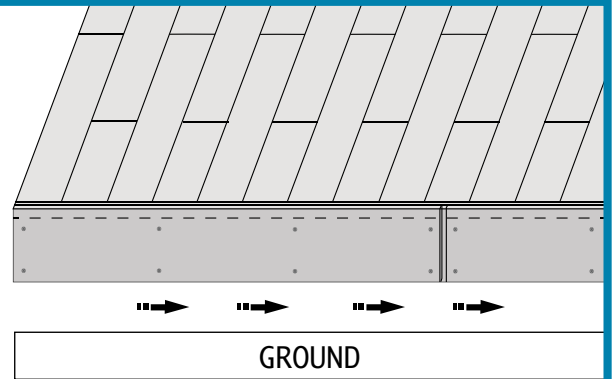
Before you begin installation, remember to take your T.I.M.E. with the checklist below. Full installation instructions and maintenance guidelines can also be found online at www.CaliBamboo.com

T I M E TAKE TIME TO READ



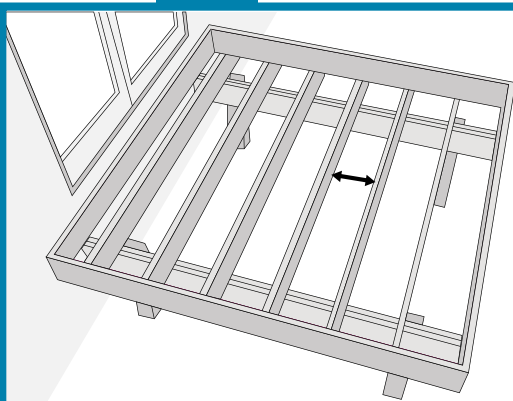
Take time to read the local building codes for any special requirements or restrictions.

T I M E INSTALL VENTILATION



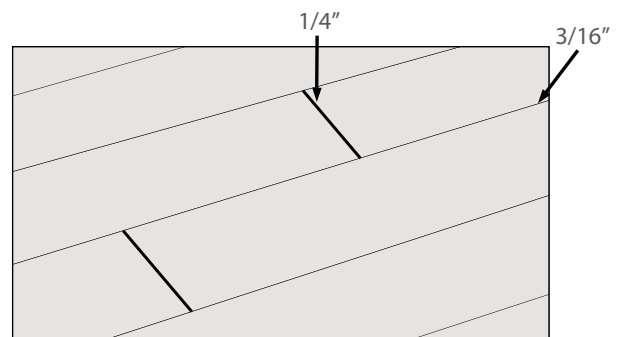
Install 4 inches of continuous net free area under the decking surface for adequate ventilation.

T I M E MEASURE YOUR JOIST



Measure your joist spacing to ensure it is 16" on center for residential applications and 12" on center for commercial applications.

T I M E EXPANSION SPACE



Expansion space is required! Decking boards should always have 3/16" expansion space between boards and 1/4" expansion space on all butt ends.

IMPORTANT: Pre-Installation Guidelines

Note: Decking not used for its intended purpose will not be covered under warranty. For the most up-to-date information, please visit our website at CaliBamboo.com

Prior to installing any composite decking it is recommended that you check with local building codes for any special requirements or restrictions. The diagrams and instructions outlined in this guide are for illustration purposes only and are not meant or implied to replace a licensed professional. Any construction or use of BamDeck must be in accordance with all local zoning and/or building codes. The consumer assumes all risks and liability associated with the construction and use of this product.

Safety

When dealing with any type of construction project it is necessary to wear appropriate safety equipment to avoid any risk of injuries. Cali Bamboo® recommends the following safety equipment when handling, cutting, and installing Cali Bamboo® decking: gloves, respiratory protection, long sleeves, pants, and safety glasses.

Tools Needed

Standard woodworking tools may be used. It is recommended that all blades have a carbide tip. Standard stainless steel or acceptable coated deck screws and nails are recommended.

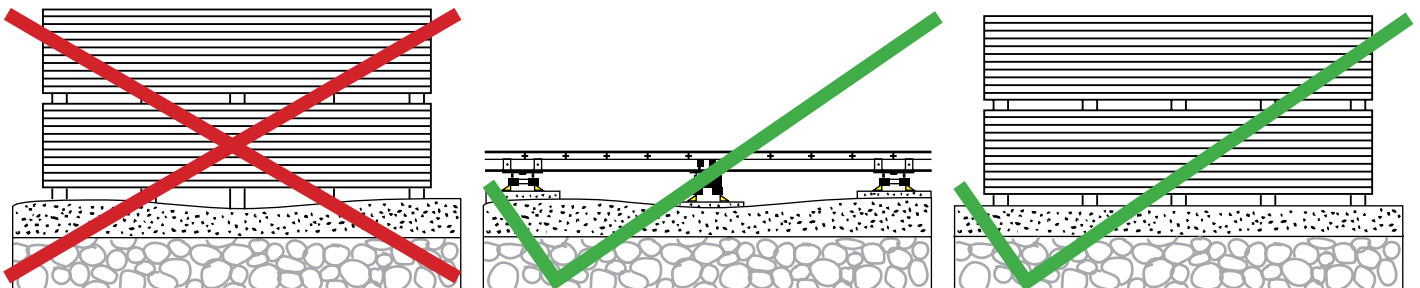
Typical tools needed include but are not limited to:

- Hammer
- Circular Saw (Carbide Tipped Blade)
- Level
- Tape Measure
- Screw Gun
- Chalk Line
- Rasp
- Miter Saw

Note: Any time the decking boards need to be marked use white chalk, straight boards, or string lines as templates for straight lines. NEVER USE COLORED CHALK. Colored chalk will permanently stain BamDeck products and is not recommended.

Storage

A clean, smooth, flat, and strong frame is needed to install BamDeck products correctly. BamDeck products need to be stored on a flat and even surface at all times. Surfaces such as dirt and grass are not recommended as they can move over time and potentially cause warping or distortion. Always remember to keep BamDeck boards dry until you are able to start installation.



Planning

Plan a layout for your decking before starting to ensure the best possible look for your project. Building codes and zoning ordinances generally apply to permanent structures, meaning anything that is anchored to the ground or attached to the house. Therefore, nearly every kind of decking requires permits and inspections from a local building department.

Construction

BamDeck decking is NOT intended for use as columns, support posts, beams, joist stringers or other primary load-bearing members. BamDeck must be supported by a code-compliant substructure. While BamDeck products are great for retrofits, they should not be installed on existing decking boards.

Static

Static build-up is a natural occurring phenomenon that can occur with many plastic products. Dry and windy environments may make this more apparent and varies depending on the climate and age of the decking.

Ventilation

BamDeck products CANNOT be directly installed on a flat surface. They must be installed on a substructure so there is adequate and unobstructed air flow under the decking to prevent excessive water absorption. A minimum of 4 inches of continuous net free area under the decking surface is required for adequate ventilation. This will ensure air can circulate between adjacent members to promote drainage and drying.

Heat and Fire

Excessive heat on the surface of BamDeck products from external sources such as fire or reflection of sunlight from energy efficient window products can cause passive heat gain within a structure. This can lead to unusual heat build-up on exterior surfaces. This extreme elevation of surface temperatures can make BamDeck products susceptible to melting, sagging, warping, discoloration, increased expansion/contraction, and accelerated weathering.

Framing

A clean, smooth, flat, and strong frame is needed to install BamDeck products. Determine the joist spacing of the frame and ensure that it is completely level before installing any boards. Adequate spacing between the joists is required to keep the deck boards from bending. Please review the chart below to see what spacing is required for your profile.

Maximum Decking Spans on Center-to-Center

Profile	Dimensions	Residential Span	Commercial Span
BamDeck, Solid Board	5-7/16" x 13/16"	16"	12"
BamDeck, 4G Board	5-7/16" x 13/16"	16"	12"
BamDeck, 4G Wide Board	8-1/4" x 13/16"	16"	12"

Joist Spanning on Center-to-Center with Angled Decking Installations

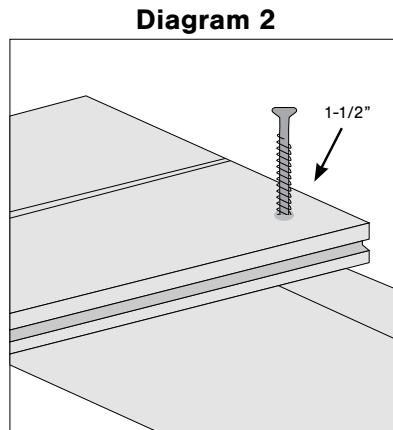
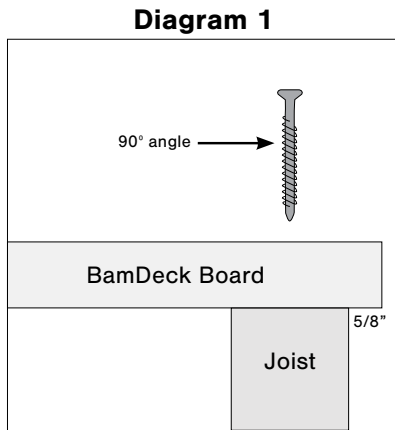
Degree of Angle	Dimensions	Spacing
90	5-7/16" x 13/16" 8-1/4" x 13/16"	Refer to table above
60	5-7/16" x 13/16" 8-1/4" x 13/16"	2" less than the span stated in the above table
45	5-7/16" x 13/16" 8-1/4" x 13/16"	4" less than the span stated in the above table
30	5-7/16" x 13/16" 8-1/4" x 13/16"	1/2 the distance stated in the table above

Face Fasteners

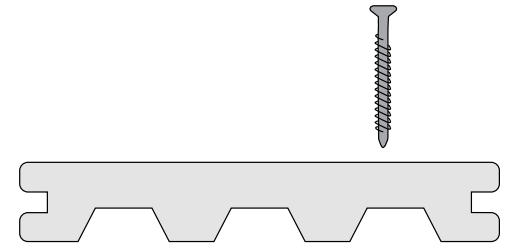
When fastening BamDeck products all screws that are face fastened must be driven in at a 90° angle to the decking surface. See Diagram 1. An extra (sister) joist should be added if a 90° angle cannot be driven into the board. Never toe/edge screw the deck boards.

See Diagram 5 on page 8 for more details on sister joists.

All screws that are face fastened must be stainless steel. When face fastening always go in at least 1-1/2" from both ends of the deck board as shown in Diagram 2.



Tip: When face fastening always go in at least 1-1/2" from both ends of the deck board.



To ensure structural integrity of the boards maximum overhang should be 5/8" as shown in Diagram 1.

Always use screws designated for use with composite decking material. Test the screws on a scrap piece of board to ensure the screws do not cause the surface of the decking to mushroom or bulge around the head of the screw. If it does cause this issue, change to a different brand of screw. Cali Bamboo® recommends using 2-1/2" TrapEase 3 Ultimate composite decking screws.

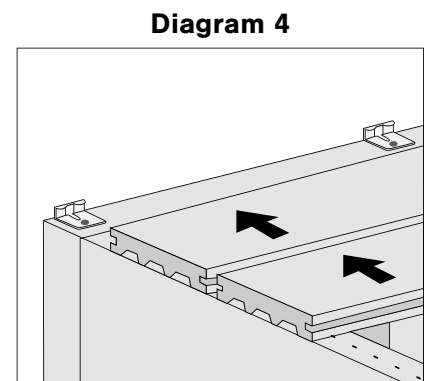
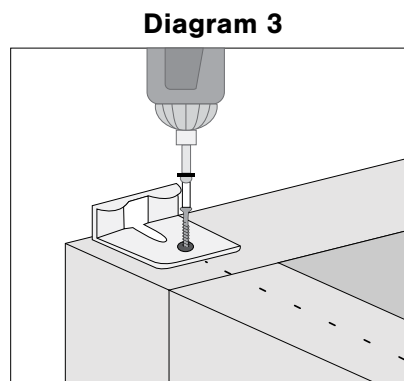
BamDeck Color	TrapEase 3 Screw Color
Slate	Island Mist
Charcoal	Woodland Brown
Coffee	Spiced Rum

Decking Installation

When you begin installation you have the option to use Cali Decking Starter Clips on your first and last rows. The alternative option would be to face fasten the deck boards.

Starting Accessory Installation

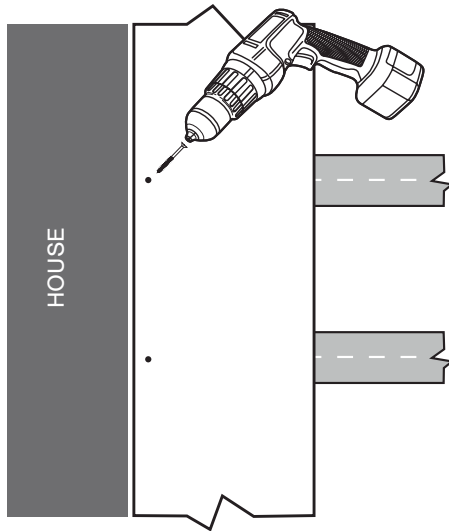
1. After calculating the decking span and making the frame of your deck the first board is ready to be installed.
2. First pre-drill into the joist then affix the Starter Clip into the joist as shown in Diagram 3.
3. Then take your first board and push it into the starting accessory as shown in Diagram 4.



BamDeck Universal Hidden Fastener Installation

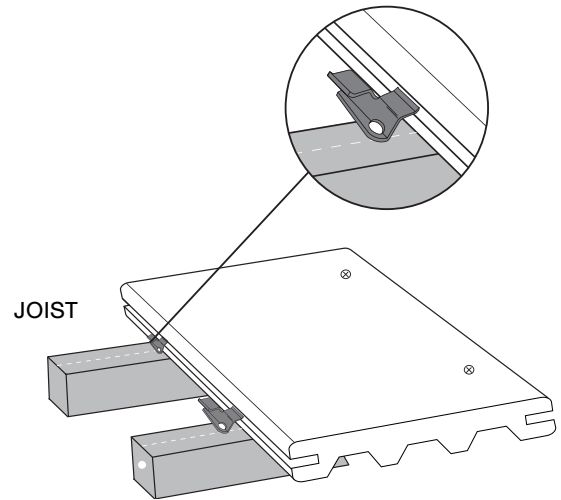
1. Installing First Row

Fasten one edge of the first board at each framing support using a quality 2-1/2" (64mm) deck screw. It is important that this board is straight and well secured.



2. Position Fasteners

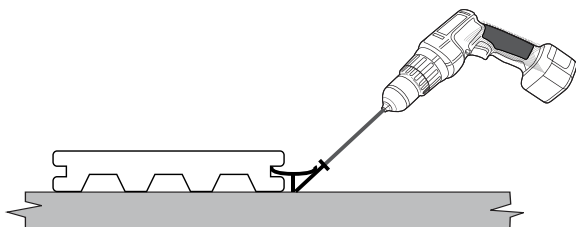
Fully insert Universal Hidden Fastener into grooved edge of deck board. Screw hole should line up with the center of support joist.



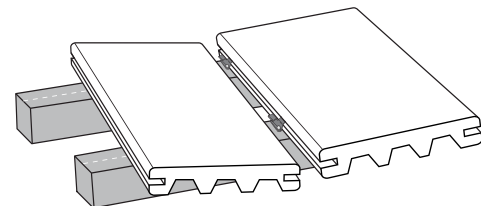
3. Installing First Fasteners

While standing on deck board, install provided screw at 45° angle through fastener and into joist, while applying pressure on fastener. Install one fastener and screw at each support joist.

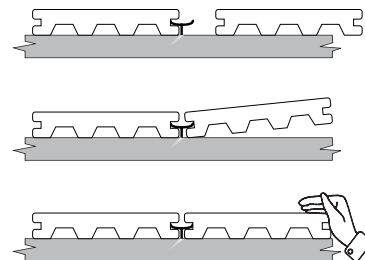
Make sure fastener body is vertical to deck board and the screw is holding fastener down tight to support joist. adjust torque setting on screw gun to prevent spin out of the screw head.



4. Completing Installation of Boards



Place next deck board into position against fasteners. Slightly raise outer edge of board being installed and slide board onto fastener until board contacts spacer tabs.



Check gap between boards for consistency. Apply force to ensure board is fully installed.

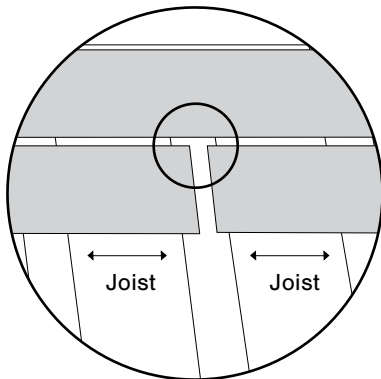
Repeat steps 2 thru 4 until deck is complete.

Universal Butt Seam Clip Installation

1. Determine Location of Seam

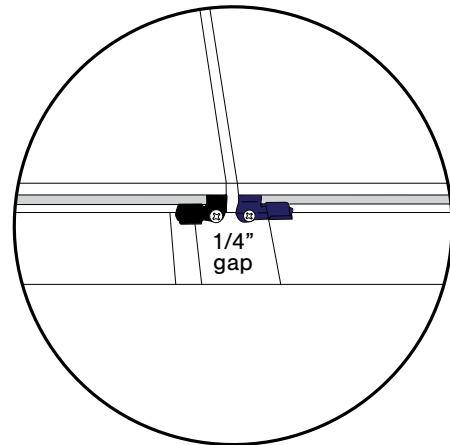
Determine upon which joist your next row of boards will have a seam. If this is not known ahead of time it may be necessary to adjust clip when butt seam location is determined.

Be sure to install a Universal Hidden Fastener and Butt Seam Clip at the joist where the next seam will land. If this is not known ahead of time it may be necessary to adjust clip when butt seam location is determined.



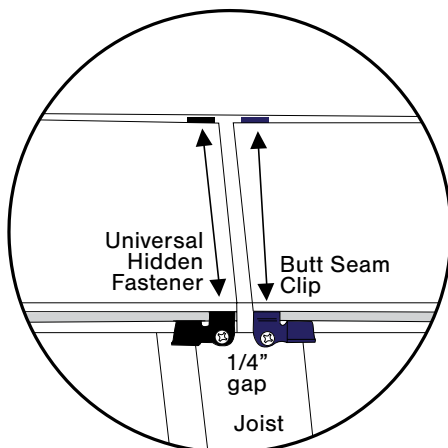
2. Position Boards

Install a Universal Hidden Fastener and Butt Seam Clip into the groove of the deck board. Position the fasteners towards the center of the joist, leaving about a 1/4" gap between the fasteners. Install screws provided at 45° angle into joist.



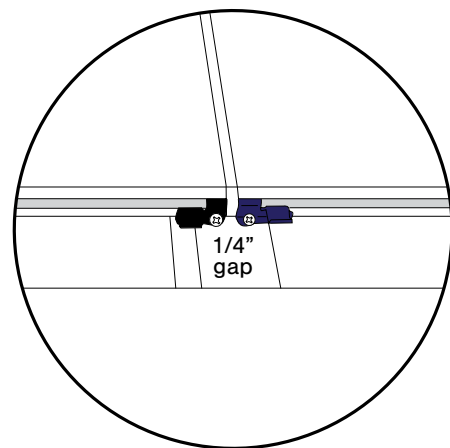
3. Install Universal Hidden Fasteners and Butt Seam Clip

When installing the next row. Make sure the seam of the two boards is centered over the joist. Install a Universal Hidden Fastener and Butt Seam Clip on like shown in step 2.



4. Install Next Board

Install next board and continue with Universal Hidden Fastener installation following Universal Hidden Fastener instructions.



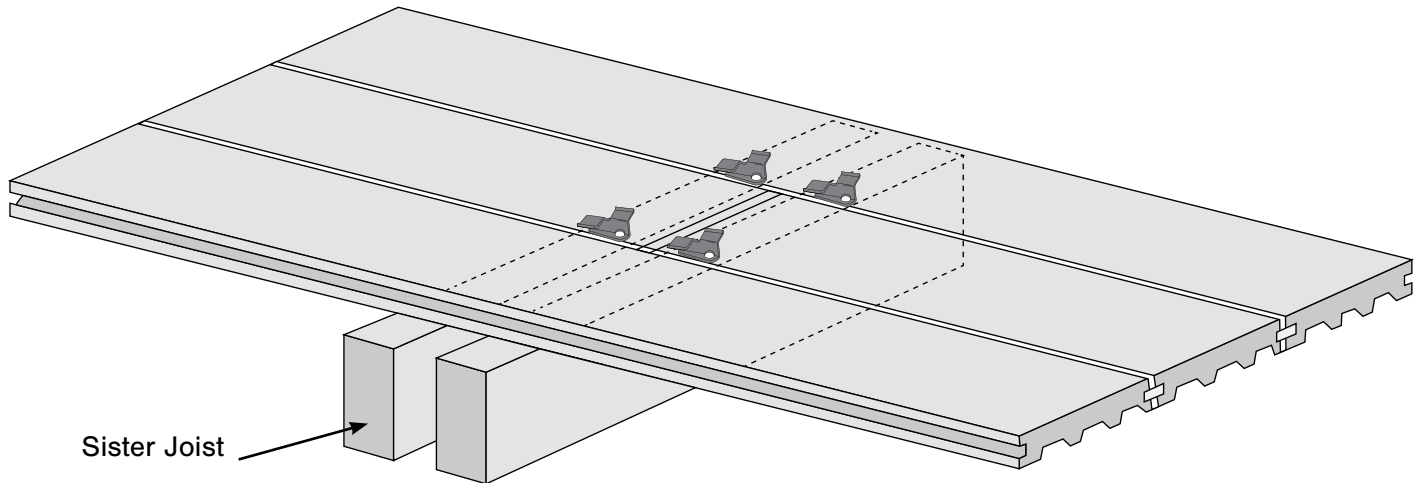
Please Note: BamDeck boards should always have 3/16" expansion space between boards and 1/4" expansion space on all butt ends.

End Joint Installation without Universal Butt Seam Clips

All fasteners should be on their own independent joists. When two board ends meet each other, there must be a sister joist. The end of each board must sit on its own joist as shown in Diagram 5.

All end joints need a minimum of 1/4" expansion gap from board to board.

Diagram 5



Additional Installation Information

Expansion Space in Extreme Climates

Expansion space: Bamboo Composite products expansion rate vary from 0.2% to 0.4% depending on the length of the planks as well as the climate it will be installed in. We always recommend a minimum of 3/16" from plank to plank as well as 1/4" on all butt ends of boards.

Please Note: When installing in extreme situations please consult with Cali Bamboo® before installation. When installation area exceeds 16' shorter planks will show less movement. We recommend that you do not install product when the temperature is below 32°F or above 100°F.

Metal Framing

Cali Bamboo® considers metal framing to be a custom installation. It is an acceptable installation but please note that it is up to the installer to provide the correct screws for the hidden fasteners as the screws that are provided are for wooden joists only.

Number 7 or 8 self tapping screws are usually recommended. Contact the screw manufacturer to ensure proper application.

Breaker Board Installation

When a length of more than two boards is needed to install the deck, we recommend adding a breaker board as shown in Diagram 7. This will help to minimize the appearance of normal expansion and contraction.

Diagram 6 and 7 show the framework and installation of the breaker board respectively.

Diagram 6 framework uses a ladder joist installation where the user is building a frame perpendicular to the board that will be running down it.

Diagram 6

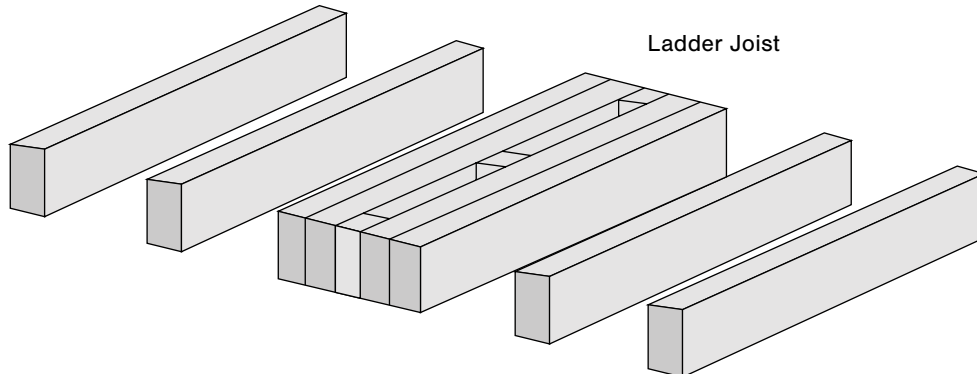


Diagram 7

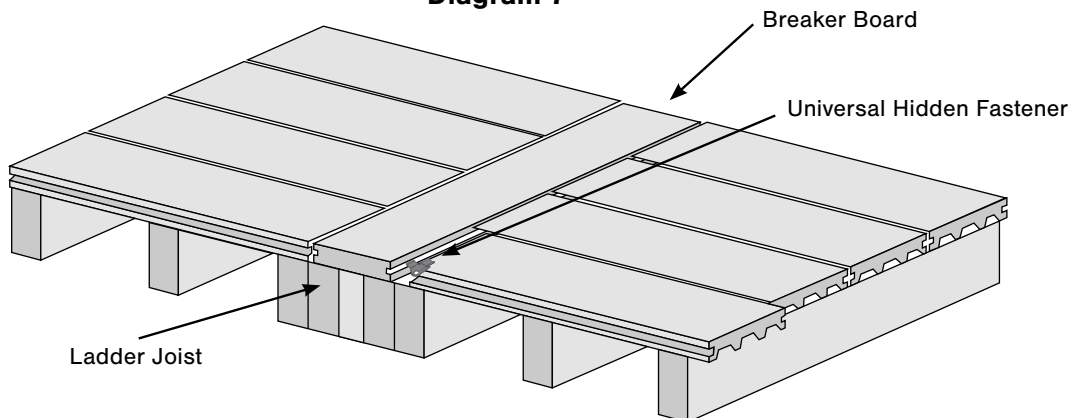
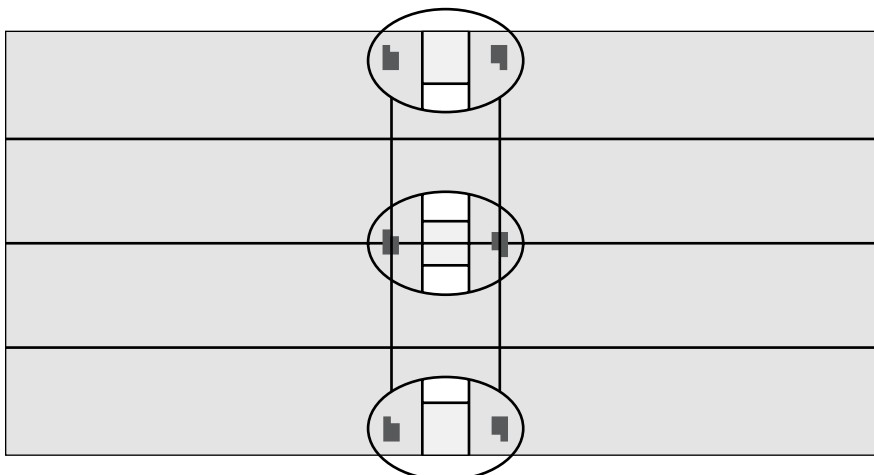


Diagram 8



View from above of completed breaker board with Universal Hidden Fastener cut in half.

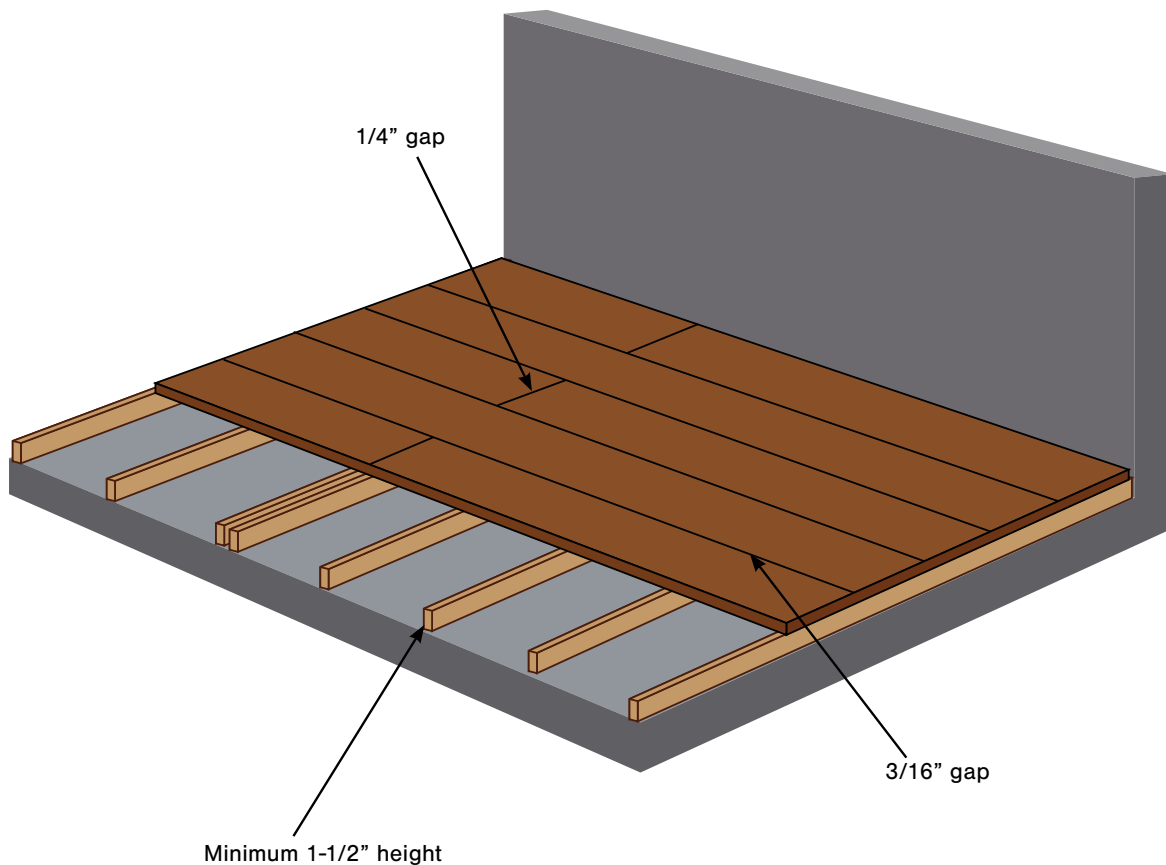
Note: The Universal Hidden Fastener can be used as a breaker board clip by cutting the square notch side of the clip off. A blade rated for metal will be needed for this.

Otherwise the breaker board should be face screwed on both side every 16" for the length of the board.

Sleeper System Installation

- Make sure to fix any water run-off or pooling problems that may exist on the patio
- The system must be solid, no floating systems allowed
- Pre-drill holes for concrete screws
- Sleepers need to be at least 1-1/2" in both width and height
- Do not install sleepers on any loose substance such as dirt, concrete pavers or sand
- Solid surface must be flat and level
- Spacers are permitted (highly recommended) between sleeper system and concrete to improve drainage
- Make sure to use code approved, weather and rot resistant material for your sleeper system
- It is always recommended to use joist tape on your sleeper system to help protect against any possible moisture
- When installed, the screws holding the sleepers down should penetrate the concrete at least 1"
- Always install sleepers parallel to the water run off
- Follow same joist spacing as regular deck install. Residential 16" on center, Commercial 12" on center
- Always review all local building code before starting your project

Diagram 9



Stair Tread Installation

Stair treads built with BamDeck must meet requirements set forth by major national building codes. Consult your local municipality for specific requirements.

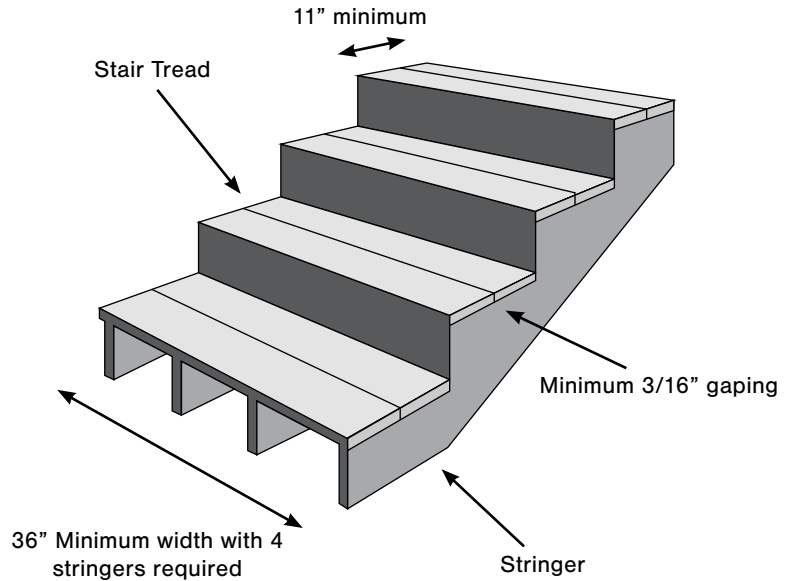
Review Diagram 10 and reference the table below with the maximum spacing from center to center for stair tread installation.

A minimum of four (4) stringers are required. Overhang on a stair tread should not exceed more than 5/8".

Remember to pre-drill before face fixing into the board. Face fixing must happen at a 90° degree angle and must be at least 1" 1/2 by 1" 1/2 from the ends and the width of the board.

Please Note: Stair treads should only be installed using solid profiles. Using any type of hollow board for stair treads will not be warrantied.

Diagram 10



Maximum Spacing Center-to-Center on Stair Stringers and Decking

Profile	Dimensions	Spacing
Square Edge Board	5-7/16" x 13/16"	12"

BamDeck Fascia Installation

1. All fascia boards should be pre-drilled before face fastening.
2. When face fastening always go in at least 1-1/2 inch from both ends of the fascia board.
3. When 2 fascia boards connect there must be a minimum of 1/8" expansion gap between planks.
4. There needs to be a minimum of 2 screws along the width of the plank.
5. The recommended distance between screws lengthwise is 12".
6. When installing Fascia it is important to leave a minimum of 1" clearance from the ground to ensure proper ventilation.

