



CALI DECKING™

TruOrganics®

**Cladding & Facade
Installation Guide**

(888) 788-2254
www.CaliBamboo.com

Decking Systems

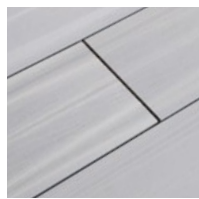


TRUORGANICS SQUARE EDGE
5-7/16" Wide
Plank Dims: 192"L x 5-7/16"W x 7/8"H

Available Colors



SEDONA



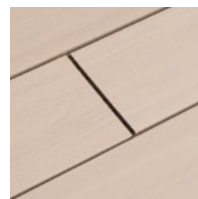
GLACIER



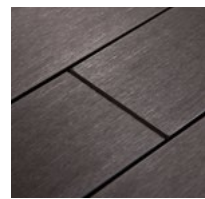
DENALI



YOSEMITE



MOJAVE



CARIBOU

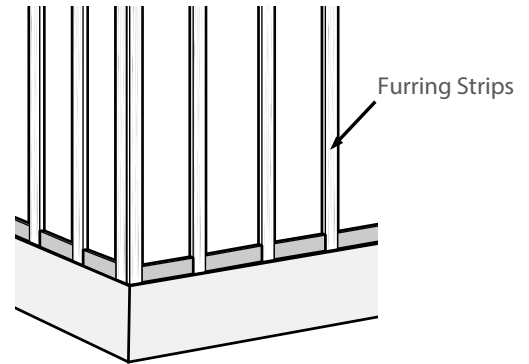
Before you begin installation, remember to take your T.I.M.E. with the checklist below. Full installation instructions and maintenance guidelines can also be found online at www.CaliBamboo.com

T I M E TAKE TIME TO READ



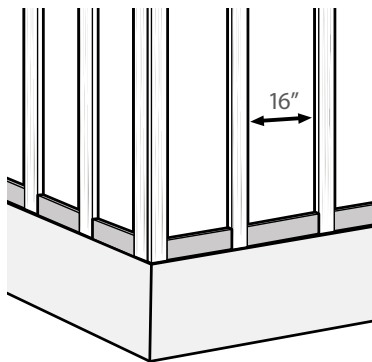
Take time to read the local building codes for any special requirements or restrictions.

T I M E INSTALL VENTILATION



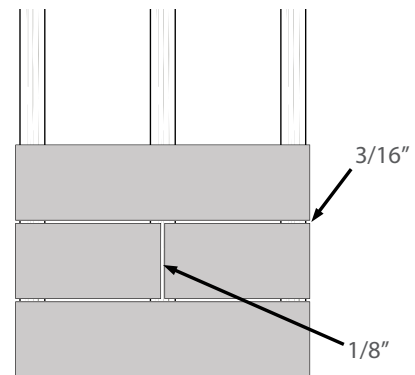
Decking used for Cladding must be attached to joists/furring strips to allow proper room for ventilation.

T I M E MEASURE YOUR JOIST



Measure your joist/furring strip spacing to ensure it is 16" on center for cladding application.

T I M E EXPANSION SPACE



Expansion space is required! Decking boards should always have 3/16" expansion space between boards and 1/8" expansion space on all butt ends.

IMPORTANT: Pre-Installation Guidelines

Note: Decking not used for its intended purpose will not be covered under warranty. Square Edge boards are the only product warranted to be used for cladding or facade installation. 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 TruOrganics® 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.

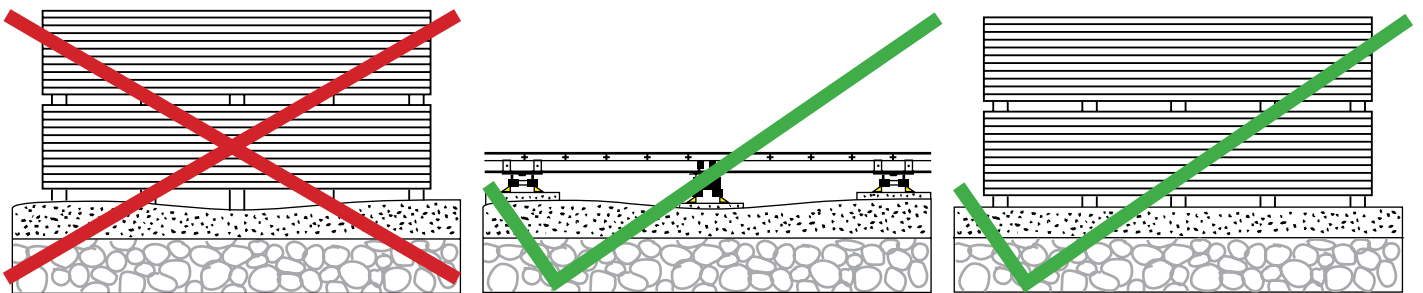
Typical tools needed include but are not limited to:

- Hammer
- Circular Saw (Carbide Tipped Blade)
- Level (min. 4ft.)
- Tape Measure
- Screw Gun
- Chalk Line
- 3/16" Spacers
- Speed Square
- Miter Saw
- Carpenters Pencil

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 can permanently stain TruOrganics® products and is not recommended.

Storage

A clean, smooth, flat, and strong frame is needed to install TruOrganics® products correctly. TruOrganics® 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 TruOrganics® 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

TruOrganics® decking is NOT intended for use as columns, support posts, beams, joist stringers or other primary load-bearing members. TruOrganics® must be supported by a code-compliant substructure. While TruOrganics® 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.

Drainage Plane and Ventilation

TruOrganics® products CANNOT be directly installed on a flat surface. There must be a drainage plane that will ensure adequate ventilation and uninterrupted airflow. This can be done with the use of studs/furring strips. For wall application a minimum 2" x 4" (pressure treated wood or metal) laying on the wide side 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 TruOrganics® 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 TruOrganics® products susceptible to melting, sagging, warping, discoloration, increased expansion/contraction, and accelerated weathering.

Studs/Furring for Cladding

A clean, smooth, flat, and strong frame is needed to install TruOrganics® products. Determine the studs/furring spacing of the frame and ensure that it is completely level before installing any boards. Adequate spacing between the studs/furring 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
TruOrganics®, Solid Board	5.5" x 0.9"	16"	16"

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

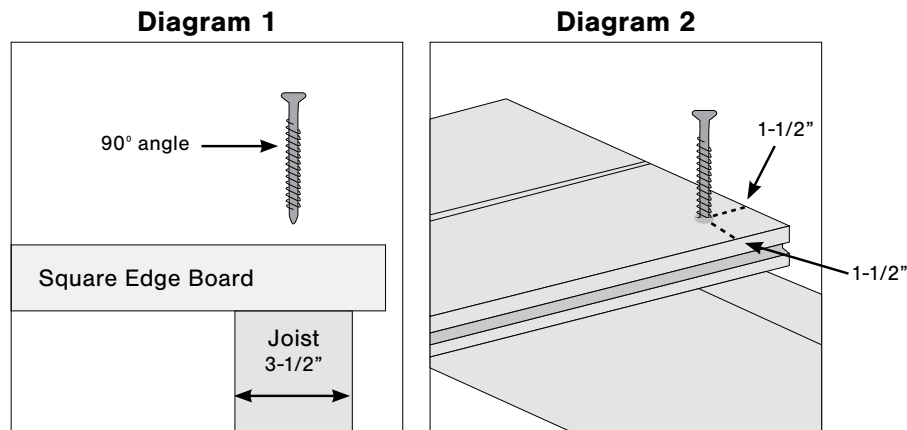
Degree of Angle	Dimensions	Spacing
90	5.5" x 0.9"	Refer to table above
60	5.5" x 0.9"	2" less than the span stated in the above table
45	5.5" x 0.9"	4" less than the span stated in the above table
30	5.5" x 0.9"	1/2 the distance stated in the table above

TruOrganics® square edge deck boards can be installed as cladding both horizontally, vertically as well as angles provided above.

Face Fasteners

When fastening TruOrganics® products all screws that are face fastened must be driven in at a 90 degree angle to the decking surface. See Diagram 1. Never toe/edge screw the deck boards.

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

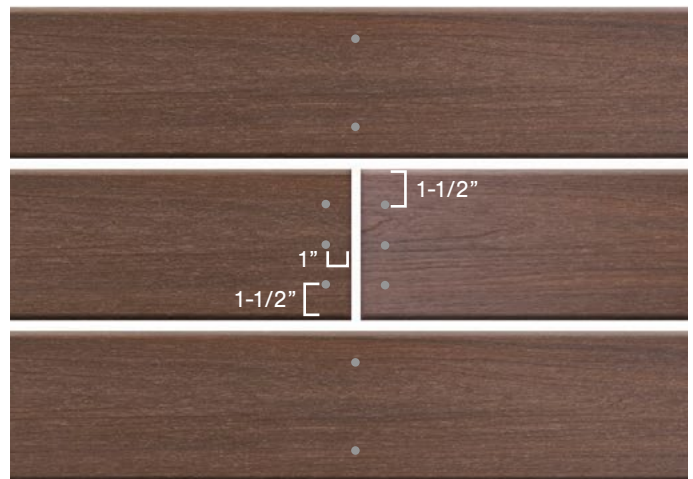


Always use screws designated for use with composite decking material. Test the screws on a scrap piece of board to ensure the screws do not cause the surface of the decking to mushroom or bulge around the head of the screw. If it does cause this issue, change to a different brand of screw.

Cali Bamboo recommends the use of TrapEase 3 Composite Deck Screws 2 1/2"

Fastener Specifications

- Due to the specifics of cladding/wall installation hidden fasteners are not an option. Face screws must be used to maintain warranty.
- TrapEase 3 Ultimate Composite Deck Screw 2-1/2" or similar.
- Screws must be able to penetrate 1-1/4" into furring strip.
- Stainless Steel composite deck screws recommended for best results.
- Fasteners must be used on every stud/furring strip.
- 3 screws per a board at the end of the board.
- Fasteners should be placed 1 1/2" from both the top and bottom of the deck board.
- Fasteners should be in at least 1" inch from end of deck board.
- Third fastener should be placed in the middle of first two fasteners.
- 2 screws per a board on all other furring strips.
- Fasteners should be placed 1 1/2" from both the top and bottom of deck board.
- For best results it is always recommended to pre-drill all fastener holes.
- Remember to leave a minimum of 1/8" between butt end of deck boards.



Expansion Space Chart

Gapping	Expansion Space Needed
Butt End	1/8"
Edge to Edge	3/16"
Against Wall or Post	1/4"
From Finished Grade	6"

Expansion Space in Extreme Climates: Manual Equation

In extreme climates additional expansion space between the boards may be necessary. Please reference the formula below to calculate your expansion space.

What you will need to know:

- Coefficient of Linear Expansion (CLE): 0.04 mm/m (°C) / 20.2 x 10E-6 inch/inch/ (°F)
- Installation Temperature (°C or °F)
- Max or Minimum Temperature in your region (°C or °F)
 - When installing at a low temperature always use the maximum temperature in your region to calculate
 - When installing at a high temperature always use the minimum temperature in your region to calculate
- Length of the Board (mm / inches)

Expansion space = Coefficient of Linear Expansion (CLE, °C or °F) x Length of the Board (mm / inches) x (Max. or Min. Temp. in your region - Installation Temp., (°C or °F).

Angle Cuts and Spacing

- For best results when cutting the deck boards, it is recommended to use a 60 to 80 tooth carbide tipped blade.
- When making angle cuts to achieve a finished edge transfer the expansion space to the other side of the deck boards thus changing the 1/8" expansion gaps to 1/4" expansion gaps on the miter cut board.

What not to do

- Do not use TruOrganics 3G boards for cladding. TruOrganics Square edge is the only product warrantied for cladding application.
- Do not install cladding before first checking local building code and prepping surface with proper drainage and water proofing.
- Do not use fewer than the recommended number of fasteners to install deck boards.
- Do not install Fasteners without first testing them to make sure the look is aesthetically pleasing to end user.
- Do not install fasteners closer than 1" from butt end of deck boards.
- Do not install fasteners closer than 1 1/2" from top and bottom of deck boards.
- Do not use TruOrganics deck boards in any structural capacity.
- Do not caulk between boards to cover expansion space.
- Do not allow airborne dust from concrete, landscape block or any masonry product to accumulate on the TruOrganics board surface as it may cause damage to the decking.