

Composite Bamboo Decking Installation Guide

Composite bamboo decking is a durable, sustainable, and generally maintenance-free decking solution. It is made from 60% bamboo wood remnants and 40% recycled plastics, making it an eco-friendly alternative to hardwood decking.

Features & Benefits

- **Two looks in one:** Get a classic wood grain look with the "A" side, or a sleek, modern style with the flat/untextured "B" side of these planks.
- **No more refinishing:** This deck stays beautiful without the hassle of staining or refinishing.
- **Built to last:** This decking stands up to stains, scratches, and dents so you can enjoy it for years.
- **Weatherproof beauty:** Your deck will look great all year round, no matter the weather.
- **Protected all around:** All four sides are capped for extra protection against the elements.
- **Feels like the real thing:** The low-gloss matte surface gives you a natural look and feel.
- **Smooth and flawless:** Hidden fasteners mean no visible screws for a clean, polished look.
- **Use it anywhere:** Perfect for indoor and outdoor spaces, wet areas, and even poolside.
- **Easy to install:** The pre-grooved design and hidden fasteners make installation a breeze with standard tools.
- **Peace of Mind:** This product is backed by a lifetime warranty for your confidence.

Pre-Installation

For a Safe & Code-Compliant Deck

- **Consult Experts:** Work with a licensed architect, engineer, or building official to ensure your deck design meets all safety and structural requirements.
- **Know Your Codes:** Follow all local building codes and regulations.
- **Get Your Permits:** Obtain any necessary permits before starting construction.
- **Installer Responsibility:** While this guide is helpful, you are ultimately responsible for ensuring your installation methods comply with regulations.

Recommendations

- Calculate the needed accessories, including joists, hidden fasteners, and fascia planks if desired.
- For a consistent deck color, buy all your planks at the same time. This also saves on shipping costs.
- Remember to Order 10% extra for cutting and waste.
- Allow your planks to acclimate for 48 hours before installation. This helps them adjust to your climate and prevents warping later on.

How to Store Your Decking Planks

- **Flat and Stable Surface:** Store planks on a flat, level surface. Ensure the planks are fully supported to prevent warping or distortion.
- **Elevate with a Pallet:** Keep decking planks dry and protected from moisture until you are ready to begin installation.

- **Choose a shaded, cool location:** This prevents warping or discoloration due to sun exposure.

Installing Your Bamboo Composite Deck - A Step by Step Guide

Step 1 - Gather Tools & Safety Gear

Before starting your deck installation, ensure you have the necessary safety gear and tools on hand:

Recommended Protective Gear

- Safety glasses
- Work gloves
- Wearing long sleeves and work pants
- Ear defenders
- A dust mask
- We recommend wearing knee pads for comfort and protection

Recommended Tools

- Hammer
- Tape Measure
- Pencil
- Level
- Chalk Line
- Drill
- Safety Glasses
- Work Gloves
- Cutting Tools:
 - Circular Saw (carbide-tipped blade recommended)
 - Miter Saw (optional)
 - Stanley knife
- Recommended Fasteners:
 - Stainless steel screws (appropriate length based on joist material)
 - Bamboo hidden fasteners (if using)
 - Start/Stop clips (if using)

Safety First

- **Lift with care.** Planks can be heavy, especially longer ones.
- **Work in pairs.** A minimum of two people is recommended for safe lifting and carrying. Avoid injury by confirming that anyone assisting can safely handle the weight of the planks.

Step 2 - Preparing & Building Your Substructure

Do Your Ground Assessment

- Start with a level, well-drained base. This is key for a stable deck. If your ground needs major work, hire a landscaper.
- Already have a deck structure? Make sure it's solid, clean, and dry before building on top of it.

If Using A Ledger Plank

- For decks attached to a house or any other permanent structure, begin by installing a ledger plank as support.
- Take extra care when installing the ledger plank – it's the foundation for a secure and long-lasting deck.
- Start by installing flashing, as this will prevent water intrusion behind the ledger plank
- Fasten the ledger plank securely to the house using lag bolts. Ensure the plank is level with the planned deck surface.

Beam and Post Installation

- Bigger, stronger beams can handle more weight over wider distances, allowing posts to be spaced farther apart.
- Consult local codes and span tables for spacing and sizing guidelines.
- Use code-compliant concrete footings and space posts as required by your design and loads.

All About Joists

- Pressure-treated lumber is recommended for joists.
- Hollow core composite decking should always be installed 12 inches on center (12" OC) to prevent sagging or bending effects over time.
- Joists should be perpendicular to the deck planks.
- For extra stability, add blocking between your joists to prevent warping.
- Reinforce end-to-end plank joints by using double joists for added support.
- Attach treated lumber joists to concrete footings, ensuring they are spaced according to the guidelines mentioned above.
- Check that your entire substructure is level, square, and securely fastened before starting to build your deck. Any uneven sections at this level will transfer to your final deck surface.
 - To prevent this, a simple trick is to stretch a string across the joists. This helps you easily identify any high spots that need to be planed down with a power hand planer. While it might seem like extra work, this step takes less than an hour and makes a big difference in the final look of your deck.
- Cover your floor joists with a waterproof membrane or butyl-based tape to prevent moisture buildup and extend their lifespan, even though composite decking resists rot better than traditional wood.

Ventilation is Very Important

- Build your substructure with at least 4 inches of open space below for good airflow. This helps prevent moisture buildup.

Be Mindful of Construction Debris

- Keep the decking free of construction debris, such as sand, dirt, and concrete dust to prevent damage like scratching.
- Be mindful of any unnecessary damage to the planks during the installation process.
- Regularly clean the decking surface to avoid the accumulation of debris.

Recommended Overhang

- We recommend an overhang of no more than 0.79 inches (20mm).

Sleeper Deck Substructure

A sleeper system is a substructure consisting of joists that are laid over a solid surface (e.g., concrete) to provide a stable foundation for composite decking installation.

- **Choose Suitable Locations:** For areas with limited ventilation, like roofs or on-grade installations, a minimum 1-1/2" sleeper system is required to support your composite decking.
- **Prepare the Surface:** Ensure the installation surface is clean, level, and free of debris. Repair any cracks or unevenness for a stable base.
- **Plan Your Layout:** Determine sleeper joist placement based on your decking pattern and plank dimensions. Sleepers should run perpendicular to the decking planks.
- **Secure the Sleepers:** Attach your sleepers to the surface using screws, nails, or construction adhesive for added stability.
- **Check for Level:** Use a level to ensure each sleeper is installed horizontally and level across its length for a smooth deck surface.
- **Drainage:** For proper water runoff, maintain a slight slope of 1/2" for every 8' away from the house.

Considerations for Deck Designs

Hollow core composite decking planks may seem weaker than solid planks, but don't be fooled. Their internal arch design provides comparable strength.

Still, when creating complex designs, be mindful of creating substructures that will provide long-lasting support. Here are a few principles to guide you. It is also recommended to get professional guidance when planning your deck.

Joists and Blocking

- Inlaid patterns, diagonal layouts, and intricate designs often require closer joist spacing compared to straight, parallel decking runs.
- You may need additional blocking or joists for support where longer planks are required.
- Seams must always end across double joists for strength.

Decking Material

- Intricate patterns could lead to more material waste from cuts. Plan accordingly to minimize this.
- Ensure the pattern works with standard decking plank lengths to avoid excessive cuts and seams.
- Consider using framing techniques around elaborate patterns to provide a clean border and hide end cuts.

Step 3 - Install The Decking

Considerations

When fastening bamboo composite decking from the top-down:

- To prevent cracking, keep screws at least 3/4" from the edges of the planks.
- Always pre-drill holes if working near the ends of planks or in temperatures below 45 degrees F.

About Start/Stop Clips

Primary Use: These clips are designed to secure the first and last rows of decking boards along the long edges, ensuring that the boards are held in place without visible screws on the deck surface.

Placement: They are installed along the long sides of the planks (not the butt ends) at the edges of the deck, where the first board starts and the last board stops, hence the name start/stop clips.

Install Your Planks

1. Attach Start/Stop clips to the ends of your joists before laying down that first plank.
2. Place the first plank, ensuring its ends rest fully on joists. Make sure there's no overhang. Attach it to each joist using the Start/Stop clips.
3. Our self-spacing hidden fasteners help maintain consistent spacing between deck planks, contributing to a seamless look, optimal drainage, and accommodates for natural expansion and contraction due to weather changes.
4. Slide a decking fastener into the groove of your first plank, positioning it in the middle of the first joist. Repeat for each joist, ensuring the screw holes line up with the center of the joists.
5. Set your cordless drill to low speed and low torque. Gently screw at a 90° angle through the clip into the plank (don't over-tighten!). Apply some downward pressure on the plank as you drill.
6. Slide and Connect - Fit the next plank's groove against the installed clips. Gently lift the outer edge and slide it in.
7. If needed, tap the plank into place using a scrap piece of wood (don't use a hammer directly on the plank).
8. Expansion gap guidelines butting up against a fixed object like a wall: if you live an area with stable year around humidity, where the humidity does not fluctuate more than 20% throughout the year, you can use a 1/4" gap. Otherwise use a 1/4"

gap when installing in a period of high humidity and a ½” gap when installing in a period of low humidity.

9. Expansion gap guidelines between the butt ends of planks:
 1. If you live in an area with stable year-round humidity, where humidity does not fluctuate more than 20% through the year:
 - Leave a 3mm (1/8”) expansion gap
 2. If you live in an area with strong seasons and variable humidity:
 1. If humidity is less than 45% during installation
 - Leave a 3mm (1/8”) expansion gap
 2. If humidity is more than 45% during installation
 - Leave a 5mm (3/16”) expansion gap
10. After installing each plank, go back and tighten the clips on the previous row.
11. Where planks meet end-to-end, double up your joists for support and make sure each plank is securely fastened.
12. Check all connections and tighten any loose clips. Use Start/Stop clips to secure the last plank. You may need to rip / cut the last plank along its length to fit if necessary.

To Remove and Replace a Deck Plank

1. Unscrew both sides of the plank to be replaced using a T15 bit. Be cautious not to harm the adjacent deck planks.
2. You can now lift the deck plank without causing damage.
3. Before installing a new plank, remove all debris from the top of the exposed joist.
4. For plank replacement:
 - a. Insert clips into one side of the exposed grooves.
 - b. Leave the clips slightly loose for easier installation of the next deck plank.
 - c. Once the plank is in place, fasten the remaining edge of the replacement plank.

The Finishing Touches

1. Once you reach the final row, wiggle the last plank onto the fasteners at a 30-degree angle.
2. Like with the first row, use a decking stop clip to secure the plank to the substructure.
 - i. Slide the end caps securely onto the ends of the deck planks, ensuring a snug fit that covers the hollow core opening. Tap them gently into place using a mallet.
 - ii. Stairs can be finished off by installing an end plank or a stair nose



How To Install End Planks

Important: To properly install your end plank, follow these steps carefully:

- 1. Stop Before the End:** Do NOT install hidden fasteners in the groove after the last standard decking plank. (You will slide these in at step 4 below). If you started against a wall or other surface and have reached the edge of the deck, and need to install end planks, if they don't line up perfectly you may have to rip the end plank longitudinally so that it fits into place.
- 2. Screw the start/stop clips into place:** Secure start/stop clips along the front edge of the deck frame (screwing into the substructure) at 12-inch intervals, with the "U" of the clip curve facing the deck. These clips will hold the grooved edge of the end plank.
- 3. Angle and Position:**
 1. Hold the bullnose end plank at a 15-degree angle, with the grooved edge facing the installed start/stop clips.
 2. Carefully lower the end plank into position
- 4. Slide in hidden fasteners:**
 1. **Insert Fasteners:** Slide fasteners through the gaps between the second-to-last decking plank and the end plank, aligning them with each joist.
 2. **Secure the End Plank:** Using the provided screws, tighten the deck fasteners to firmly attach the end plank to the deck frame.

Taking Care of Your New Deck

Your composite decking requires regular maintenance to preserve its beauty and longevity. Here are the recommended cleaning methods:

Taking Care of Routine Cleaning

- **Sweep it often:** Regular sweeping gets rid of dirt, leaves, and pollen that can lead to mold and mildew.
- **Act fast on spills:** Wipe them up quickly to prevent stains.
- **Use mild soap for everyday cleaning:** Mix warm water with a bit of dish soap. Gently scrub with a plastic brush, then rinse well.

- **No harsh chemicals:** These can ruin the finish of your deck. Stick to gentle cleaners.
- **Test first:** Always test any cleaning solution in a hidden spot before using it on the whole deck.
- **Skip the pressure washer:** It can damage the surface.

Stain Removal for Longevity

- **Water Stains:** These usually fade on their own within a few months, especially on new decks.
- **Mud and Dust:** Hot soapy water is your best bet. Use a stiff brush for tough spots.
- **Oil, Alcohol, etc.:** Remove these carefully with steel wool or fine-grit sandpaper. Always clean the area with hot, soapy water afterwards.

Extreme Heat Precautions

Keep your deck away from extreme heat sources like fire or strong reflected sunlight. Too much heat can cause warping, sagging, melting, color changes, and other damage.

Warranty

Thoroughly review our [warranty policy](#) for specific terms and conditions before starting your project.