

Progren Bamboo

Decking Installation Instruction

Pre-Installation Preparation

1. Standing water beneath the decking must be avoided. A permeable substructure should be provided to ensure proper drainage. For example, drainage can be achieved through a concrete base with suitable slopes or by using a sand and gravel foundation.
2. Use treated timber joists with a recommended standard thickness of 40 mm or galvanized steel joists as the supporting framework. See Figure 1.
3. The decking should be installed with a slope to facilitate surface drainage. A fall of approximately 2 mm per meter is recommended in both the lengthwise and widthwise directions.
4. Ensure adequate ventilation around the deck ends. Maintain a minimum gap of 20 mm from walls or other obstacles, and do not fully enclose both sides of the installation area.
5. A minimum clearance of 80 mm must be maintained between the underside of the decking and the subfloor. Joist thickness should be greater than 40 mm.
6. Leave a 4–5 mm expansion gap between adjacent decking boards. No expansion gap is required at the board ends during installation.
7. Joists with a standard dimension of 40 × 60 mm are recommended. The durability class of the joists should be equivalent to that of the decking. If steel joists are used, the steel thickness shall not be less than 2 mm.
8. Install the decking boards on joists spaced at 460 mm center-to-center.
9. When joining joists end-to-end, leave a 5–8 mm expansion gap. All board ends are factory-sealed with an end sealer to balance moisture absorption and release. Therefore, any cut ends made on-site must be resealed with an end sealer, wax, or equivalent protective coating.

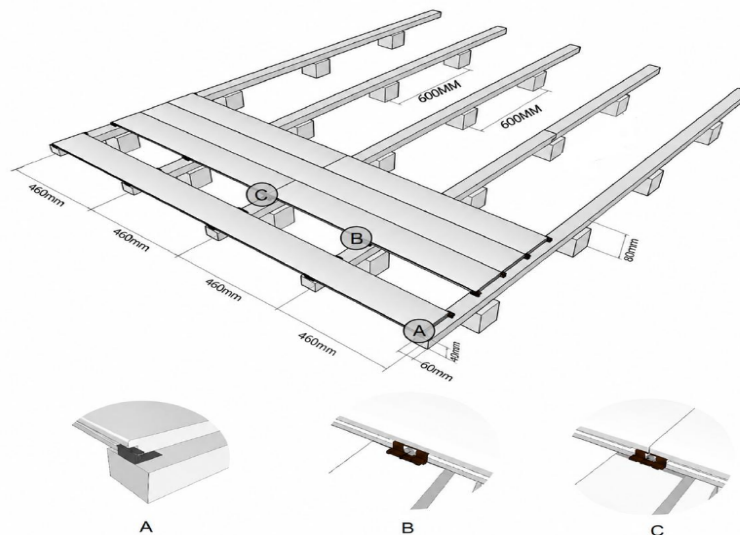


Figure 1

Important Notes

1. Bamboo is not a composite material, WPC, or PVC decking. Bamboo is a grass rather than a wood species, although its composition, performance, and characteristics are comparable to those of natural hardwoods.

2. Progren bamboo products are natural materials. Variations between batches may include:

- Color differences
- Grain pattern variations
- Appearance differences

3. Due to different drying rates between the surface and end grain, minor cracks or splinters may occur on the surface or board ends. In addition, moisture absorption and expansion in outdoor environments may result in:

- Fine surface checking
- Raised fibers
- A rougher surface texture

These are natural characteristics commonly found in most wood products. Progren's patented processing technology significantly reduces these effects. Applying wax or end sealer to freshly cut ends can further minimize end checking.

4. After installation, slight dimensional movement or minor cupping may occur. When there is a significant moisture difference between the top and bottom surfaces of the boards, shingling or tile-like deformation may occur. This is a natural characteristic of most wood products. Progren's patented manufacturing process has been designed to minimize this phenomenon.

Option 1: Hidden Clip Installation

1. Place the first decking board on the joists. Insert the clip into the side groove of the board and fasten it to the joist with screws. Install the next board onto the clip. Continue this process across the deck. The final board should be face-fixed with screws along the outer edge. Maintain a spacing of approximately 4–5 mm between boards.
2. Approximately 14–20 clips are required per square meter, depending on the decking profile.
3. Use only the supplied 304 stainless steel clips and screws, or equivalent corrosion-resistant fasteners (4.5 × 30 mm).

Option 2: Screw-Down Installation

1. Pre-drilling is mandatory before installation to prevent splitting. When fixing into hardwood or bamboo joists, pre-drill to approximately two-thirds of the screw length.
2. Each board must be secured with two screws across its width (one on each side).
3. When face-fixing at board ends, the center of the pre-drilled hole should be at least 25–30 mm from the board edge.
4. Use 304 stainless steel or other corrosion-resistant decking screws (5 × 50 mm).

Storage Requirements

Store the decking in:

- A dry environment
- A cool and shaded environment
- A dust-free environment
- Away from direct sunlight

Disclaimer

While the manufacturer has made every effort to ensure the accuracy of these installation guidelines, actual project conditions may vary due to factors including:

- Geographic location
- Substructure and site conditions
- Installation methods

These factors are beyond the manufacturer's control.

If you have any questions, please contact your local distributor or dealer for assistance.