

Composite Decking Installation Guide

A step-by-step guide on installing & caring for your new composite decking

BEFORE YOU INSTALL / How to Handle the Decking

Decking should be stored on a flat, suitable surface before installation, if needed. Place the boards on battens spaced no more than 400mm apart to keep them level and prevent bowing, scratching, or exposure to standing water.

If storing composite decking boards, cover them to keep the surface clean. When stored outdoors, use a non-translucent cover.

Handle the boards with care—do not slide or drop them, as this can cause scratches or other damage.

During installation, avoid dragging or dropping tools or equipment across the boards to prevent surface damage.

BEFORE YOU INSTALL / Using the Correct Tool

TOOLS REQUIRED

Standard woodworking tools are suitable for use with composite decking.

- **Circular Saw:** For the cleanest cuts, a 40-tooth blade is recommended.

- **Power Mitre Saw:** Ideal for creating bevelled edges and ensuring consistent, uniform cuts.
- **Impact Driver or Hand Drill:** Use with a low torque setting for optimal control.
- **Tape Measure, Carpentry Square, and Spirit Level:** For accurate measurements and alignment.

Important: Avoid dragging or sliding equipment across the decking boards to prevent surface damage.

Personal Protective Equipment (PPE):

- Safety Goggles
- Dust Mask
- Ear Protection

BEFORE YOU INSTALL / Things to consider

PRE-PLANNING

Carefully consider the size, shape, and orientation of your deck during the initial planning stage. The layout of your decking boards will determine the placement and spacing of joists. Pay close attention to areas near boundaries and doorways that open onto the deck, as these can impact the design and require specific adjustments.

TEMPERATURE

Composite decking expands and contracts with changes in temperature. The T-clip and screw system is designed to allow for this movement by creating appropriate expansion gaps. Be sure to leave gaps at end-to-end joints and where the decking meets any fixed structure such as a wall. Refer to the temperature guide to determine proper spacing during installation.

SUBFRAME

Decking must be installed on a suitable subframe. Acceptable materials include timber, metal, or composite frameworks. Always ensure there is a

minimum 40mm clearance beneath the subframe to provide adequate airflow and help prevent moisture build-up.

COLOUR

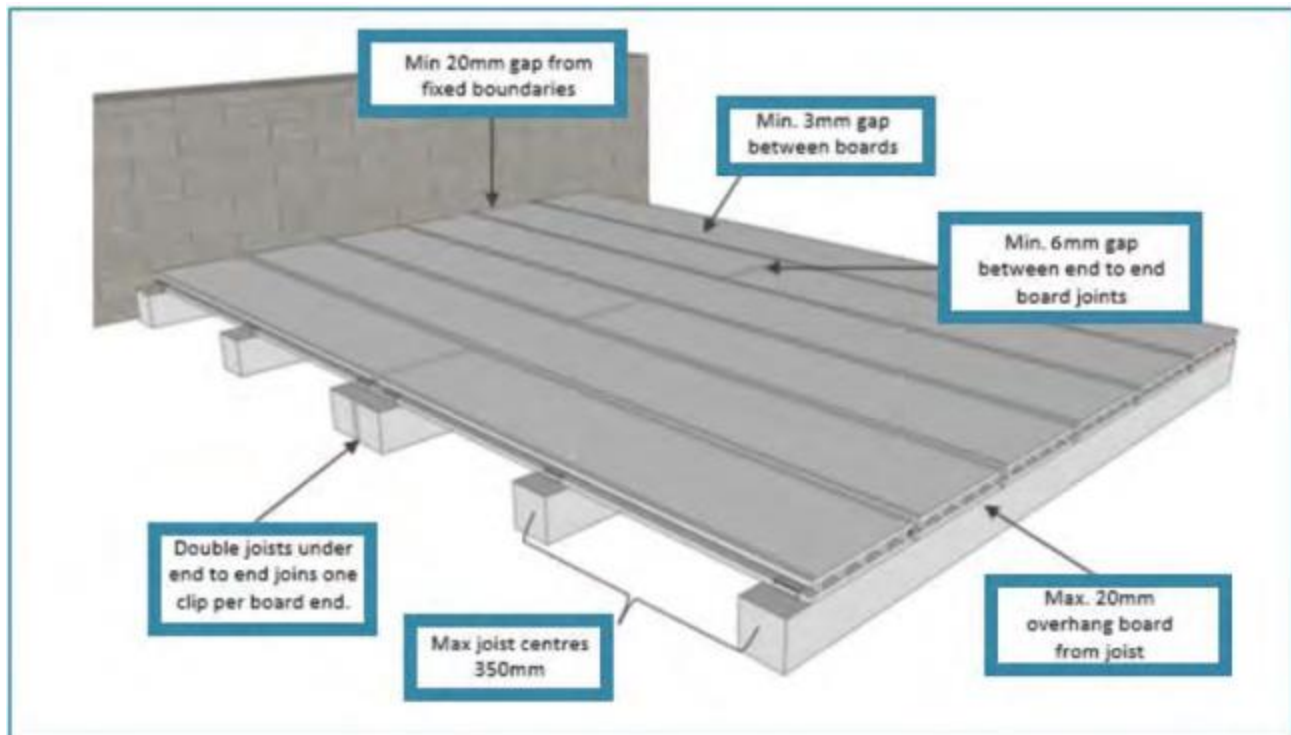
Expect a natural “fade back” of colour within the first three months after installation. This occurs due to the tannins in the wood-based material reacting to weather exposure. After this initial period, any further colour change will be minimal. You may notice a slight colour variation between the boards and trims, particularly when installing with the woodgrain side facing up—this difference will become less noticeable over time.

Outside Temperature	End to End Gap
Below 4°C	9mm
Between 4°C- 24°C	6mm
25°C or above	3mm

INSTALLATION GUIDE / Spacing the boards & Subframe

INSTALLATION GUIDELINES

- Maintain a **minimum 3mm gap** between decking boards; a **6mm–10mm gap** is recommended, as determined by the T-clip and screw system.
- For **end-to-end (butt) joints**, leave a **minimum 6mm gap**, which may vary depending on temperature—refer to the temperature chart for guidance.
- **Joist spacing** should not exceed **350mm** between centers.
- **End-to-end joints** must be supported by **two separate joists**, one for each board, with each end clipped securely.
- Ensure a **drainage slope of 0.5% per meter** is incorporated to allow effective water runoff and prevent pooling.

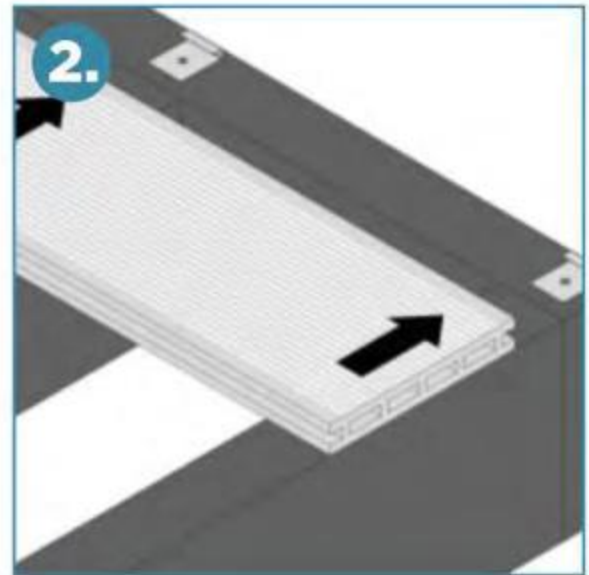
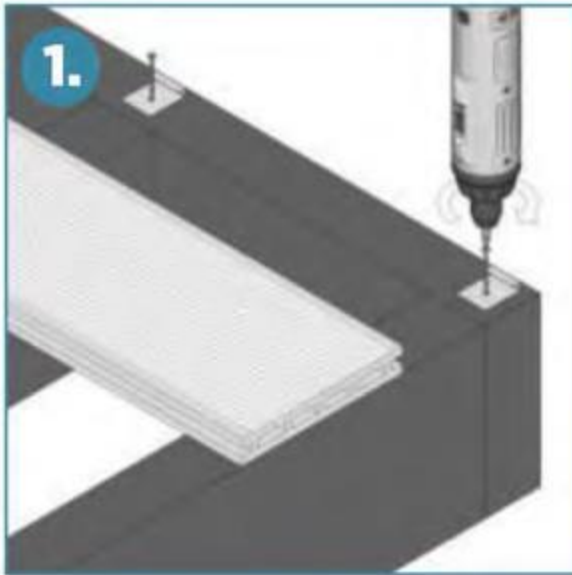


INSTALLATION GUIDE / Making A Start

STARTING INSTALLATION

Once your subframe is securely laid and levelled, you can begin installing the decking boards.

1. Start from the outer edge of your decking area.
2. Attach **Starter Clips** to the edge of the framework using the provided steel screws (see fig. 1).
3. **Countersinking** is recommended to make screw insertion easier and provide a cleaner finish.
4. Place starter clips at **350mm intervals** along each joist for secure and consistent fixing.
5. Clip the **first decking board** into the installed Starter Clips (see fig. 2).



INSTALLATION GUIDE / Screwing the Decking Down



INSTALLING DECKING BOARDS

1. Lightly screw in the **T-Clips and Screws**—**do not fully tighten** at this stage (see fig. 3).
2. Position the **next board** onto the framework, sliding it into the clips and screws (see fig. 4). You may need to slightly lift the board's edge to help it slot into place. Ensure the board sits snugly against the clips along its entire length.
3. Install clips at **every 350mm** to align with joist spacing.
4. Once the new board is in position, **fully tighten** the T-Clips and screws between the boards (see fig. 5).

5. Repeat steps 3 to 5 for each board until you reach the final two boards (see fig. 6).

INSTALLATION GUIDE / The last board



INSTALLING THE FINAL DECKING BOARDS

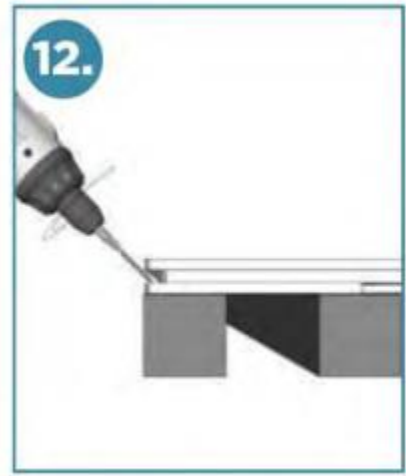
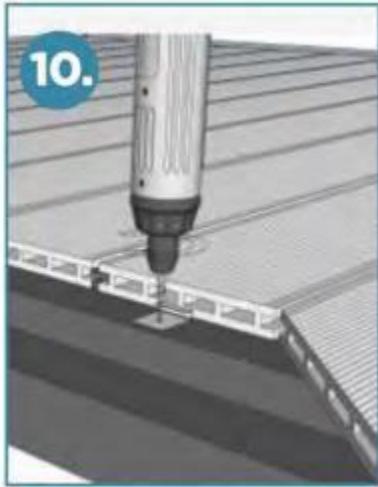
1. Measure the combined width of the **last two boards**, including a **6mm spacing gap** between them.
2. Mark this measurement on the final joists and install the **Steel Finishing Clips** at the marked position (see fig. 7).
3. Clip the **last decking board** into place.
4. Insert the second-to-last board, maintaining a **minimum 6mm gap** between the two boards.
5. Slide the required number of **T-Clips** between the boards (see fig. 8), then screw them into the joists.

Alternative Method:

If the above method is not feasible, the final board can be secured by **angling screws through the bottom edge** of the board into the joist every **350mm** (see fig. 9).

Important: Do not overtighten the screws to avoid splitting the material.

INSTALLATION GUIDE / Picture Frame Border



INSTALLING A PICTURE FRAME BORDER

If you plan to install a picture frame border, ensure your subframe is properly prepared for this layout.

- Use **double joists** beneath all sides where the picture frame boards will run **perpendicular** to the main decking boards (see fig. 12).
- When the picture frame runs **parallel** to the main deck, you can follow the standard installation method outlined on the previous page (figs. 3–9), including a **45° mitred edge** (see fig. 11).

Perpendicular Installation:

- For boards running perpendicular to the main deck, install **starter clips** along the inner joists to secure the inner edge (see fig. 10).
- Clips should be spaced **every 35mm** along the joist.
- Slide the picture frame board into the starter clips (see fig. 11).
- Maintain a **6–10mm expansion gap** between the mitred edges.
- Once the board is in position, **secure the outer edge** by screwing it into the joist (see fig. 12).

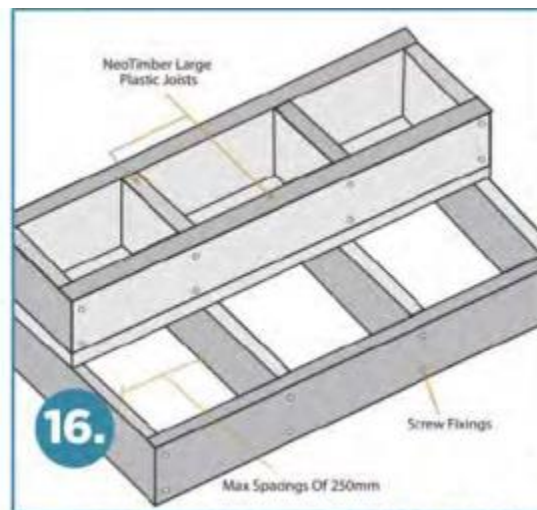
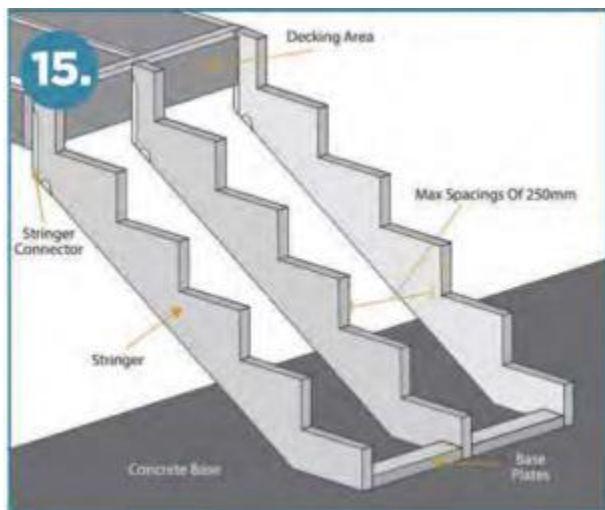
INSTALLATION GUIDE / Edging Trims



INSTALLING EDGING TRIMS

1. **Measure and cut** the required length of edging trim to fit the exposed deck edges.
2. For corners, **mitre the ends at 45° angles** for a clean, professional finish (see fig. 13).
3. Position the **corner trim** over the edge of the deck and **attach using screws**.
4. **Pre-drill 4mm countersunk pilot holes** to prevent splitting (see fig. 14).
5. Use **50mm countersunk screws** to fix the trim in place (fig. 14).
6. Do **not overdrive screws** through composite materials—complete final tightening by hand.
7. **Only screw trims into the decking**, not into any underlying subframe.
8. Leave a **minimum 4mm expansion gap** between trim ends to allow for natural movement.

INSTALLATION GUIDE / Decking Steps



DECKING STEPS

Decking steps must be carefully planned to ensure the **rise (height)** and **tread (depth)** are consistent along the entire staircase for both safety and aesthetics.

- The **maximum rise** for each step should not exceed **190mm**.
- The **tread depth** should be between **250mm and 450mm**.

A **flat, stable landing pad**, such as one made from concrete or compacted gravel, is recommended beneath the step area to provide adequate structural support.

There are two common methods for constructing decking steps:

1. **Stringer Steps**
2. **Box-Framed Steps**

Both methods should be selected based on your project layout, available materials, and desired finish.

STEP CONSTRUCTION METHODS

1. Stringer Steps *(see fig. 15)*

Stringer steps are commonly built using pressure-treated timber. A **stringer** is a diagonal support that extends from the decking subframe down to the base of the step area. Multiple stringers are used together to form the structural framework of the staircase.

- Use a **carpentry square and saw** to mark and cut notches into the stringers, defining the rise and tread.
- At the **base**, anchor the stringers using a base plate fixed securely to the landing pad.
- At the **top**, reinforce the subframe area behind the steps with a **stair header**, and use **stringer connectors** to fix the stringers to the decking structure.

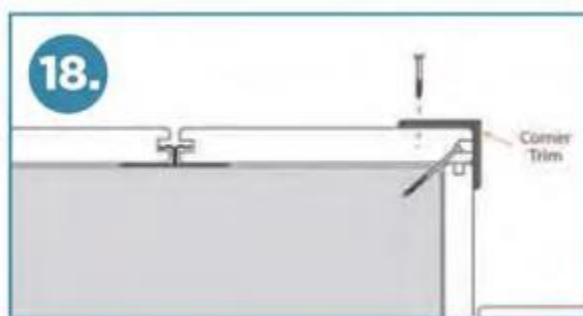
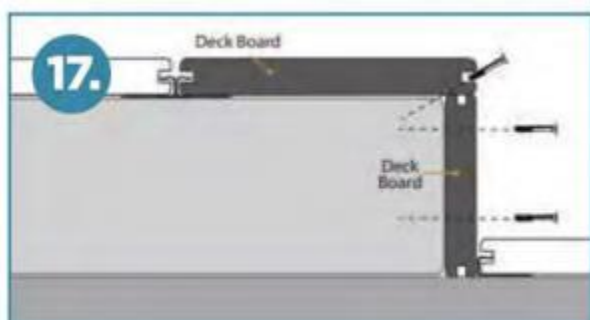
2. Box-Framed Steps *(see fig. 16)*

Box-framed steps are created by stacking individual box-shaped frames on top of one another to form each step.

- Build each box using timber, metal, or plastic joists.
- Inside each box, add joists spaced **every 250mm** for support.
- Secure each box-frame to the main decking subframe at every intersection using **appropriate fixings**.

Both methods require careful alignment and secure anchoring to ensure safety, durability, and a clean, professional finish.

INSTALLATION GUIDE / Decking Steps (cont)



FIXING STEP BOARDS & TRIMS

1. Install Decking Boards

- Fix boards to form both the **tread** (horizontal surface) and **riser** (vertical face) of your steps.
- Where possible, use the **T-Clip system** to secure the boards to the step framework.
- For any **exposed grooved edges**, either use a composite screw to **face-fix** or screw directly through the groove (see fig. 17).

2. Install Edging Trim

- Attach **corner trim** to cover the exposed edges of the steps (see fig. 18).
- Pre-drill **4mm countersunk pilot holes** to prevent splitting.
- Fix the trim using **50mm countersunk screws**.
- **Do not overdrive screws** through composite materials—finish tightening by hand to avoid damage.
- Trims should be **screwed only into the decking**, not the underlying subframe.

This finishing touch ensures a clean look while protecting step edges from wear.

CARE GUIDE / Routine Clearing

CARE & MAINTENANCE

Composite products are low maintenance, but regular cleaning will help keep your outdoor space looking its best for years to come.

- **Routine Cleaning:** Clean your decking **every 3 months** to remove dirt, mud, and soil buildup.
- **General Cleaning:** Use **warm soapy water** and a **soft-bristled brush** to scrub the surface of the boards.
- **Deep Cleaning:** For a more thorough clean, a **jet wash** (maximum **1500 PSI**) can be used.
 - Use the **fan attachment** and keep it **at least 150mm (6 inches)** away from the surface to avoid damage.

No matter which method you choose, always **clean along the length of the boards**. This helps prevent debris buildup in the grooves and supports proper drainage, preserving the long-term appearance and performance of your decking.

CARE GUIDE / Stubborn Spot Stains & Surface Mildew Growth

STAIN REMOVAL & SURFACE CARE

Many common stains can be effectively cleaned with **warm water, soap**, or a **household degreasing agent**. For best results, scrub and soak the affected area as soon as the stain occurs, then rinse thoroughly with warm water.

- For **stubborn stains**, use a **composite-specific cleaner** designed for deeper, more effective stain removal.
- In the case of **very set-in stains**, you may lightly sand the area with **coarse sandpaper (60–80 grit)**.
 - Always sand in the **direction of the grain**.
 - Be cautious when sanding **woodgrain-textured boards**, as this can reduce or remove the surface detailing.

Note: Cleaned or sanded areas may appear lighter. Exposure to sunlight over **8–10 weeks** typically helps these areas blend back in with the surrounding boards.

Composite materials, like all wood-based products, may experience a natural process known as **extractive bleeding** or **tea staining**, causing temporary discoloration. This will **fade over time** with weather exposure.

While the boards are resistant to mold and mildew, these can still form on outdoor surfaces. Adhering to the **Routine Cleaning** guidelines will help prevent excessive build-up and maintain the appearance of your decking.

CARE GUIDE / Water Staining

OIL RESIDUE & WHITE STREAKS

Despite careful manufacturing, some residual oils may remain in our Woodgrain and Grooved decking ranges. These oils can occasionally leach out, causing **white streaks** to appear on the surface of the boards.

- These **water stains** will naturally fade over approximately **6–8 weeks** with regular exposure to rain.
- To accelerate the process, clean the affected boards thoroughly with **warm soapy water**.
- You can also use a **jet wash** on the affected areas to help remove surface residue more quickly.

Regular cleaning will help restore the appearance and maintain the quality of your decking.

CARE GUIDE / Clearing ice and snow

To keep your decking safe and protected during winter, it's important to thoroughly clear snow and ice from the surface. Follow these guidelines to maintain your deck throughout the colder months:

- Avoid using **metal shovels, rakes, hoes, ice chippers**, or any sharp tools, as they can **scratch or damage** the decking surface. Instead, use a **plastic shovel** for snow removal.
- Use a **salt-free, non-corrosive ice melt** that leaves no residue and is generally safer and more effective than salt-based products. Apply this either before a forecasted frost or on existing icy patches.
- If you use **rock salt**, clear it away promptly after application to prevent potential damage or scratching of the boards.

Proper winter care will help extend the life and appearance of your composite decking.

FAQ'S / Frequently Asked Questions

Q: Will the color fade over time?

A: Our composite decking products are more fade-resistant than traditional wooden decking. The boards will lighten and develop their weathered color over about 6 months. After this period, any further fading will be minimal.

Q: How do your products react when exposed to water?

A: Decking boards are designed to absorb very little water. They have a much lower absorption rate than timber, significantly reducing the risk of wet rot over time.

Q: Do you have recommended installers I can use?

A: Yes, Decking works with a trusted network of recommended installers known for their quality and professionalism. However, we advise you to perform your own due diligence before contracting any third party.

Q: Does composite decking get hotter than wooden decking when under the sun?

A: Studies show that the **color** of the decking has the greatest impact on heat retention, whether the material is composite or wood. Darker boards heat up faster than lighter ones. In fact, pressure-treated wood stained the same color was found to get hotter than composite boards under the same conditions.

Signature outdoor living recommends a professional installer. For our verified installers nationwide please contact us at **sales@signatureoutdoorliving.co.uk**