

INSTALLATION GUIDE

Decking Systems

WPC Woodline Board

WELCOME TO COMPOTECH SOLUTION

Thank you for choosing Compotech Solution.

Our high-performance WPC products are designed to provide a natural timber aesthetic with superior durability and low maintenance.

Purpose of This Guide

This document serves as a reference guide for the installation of Compotech products. It does not replace professional training, local building codes, or the expertise of a licensed contractor.

It is the responsibility of the installer to ensure the project complies with the National Construction Code (NCC) and local council regulations.

DISCLAIMER & WARRANTY CONDITIONS

Installation & Handling: Please be advised that the Compotech Solution Warranty does not cover damage resulting from improper installation, intentional misuse, or any handling that deviates from the instructions provided in this guide.

Fastening System: To maintain the integrity of your installation and your warranty coverage, you must use the Compotech Solution Universal Fastening System (including our specific clips and screws). The use of any non-approved or third-party fastening system will void the product warranty, as our system is specifically engineered to manage the natural thermal expansion and contraction of the boards.

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SAFETY & ENVIRONMENT



Personal Protective Equipment (PPE)

Always wear appropriate safety gear during installation.

- **Eye Protection:** Safety glasses or goggles to protect against flying debris.
- **Respiratory Protection:** Dust masks (P2 recommended) to avoid inhaling composite dust during cutting.
- **Hand Protection:** Durable work gloves for handling boards.
- **Footwear:** Non-slip safety boots for site safety.



Safe Tool Operation

- Use standard woodworking tools with sharp, carbide-tipped blades for clean, professional cuts.
- Ensure all electrical tools are in good working condition and tagged if required for commercial sites.



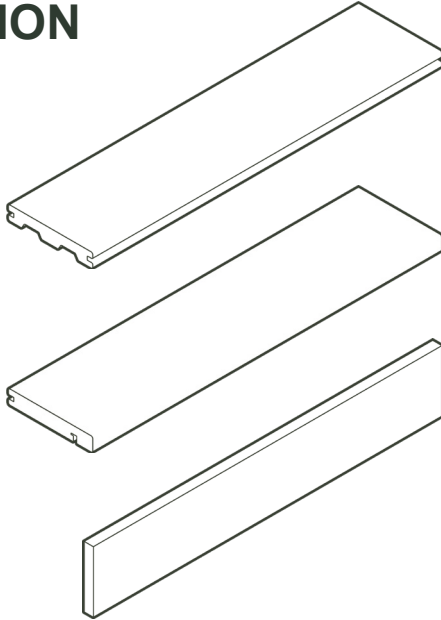
Storage & Environment

- **Flat Storage:** Store boards on a flat, level surface with supports every 500mm to prevent sagging or permanent warping.
- **Acclimatisation:** Boards must sit on-site for a minimum of 48 hours prior to installation. This allows the material to adjust to the local temperature and humidity, reducing movement after installation.
- **Installation Weather:** Avoid installation during rain, high winds, or when temperatures exceed 30°C to ensure precise gapping and installer safety.

MATERIAL IDENTIFICATION

BOARDS WSP Woodline

- A. Grooved Board
138 × 23mm
- B. Edge Board
138 × 23mm
- C. Fascia Board
180 × 18mm



(Main decking)

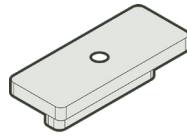
(For starting/finishing edges)

(For vertical perimeter finishing)

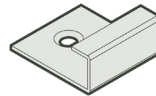
Compotech Solution Universal Fastening System

CLIPS

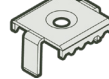
- a. T Clip
- b. Starter Clip
- c. Locking Clip



a



b



c

SCREWS

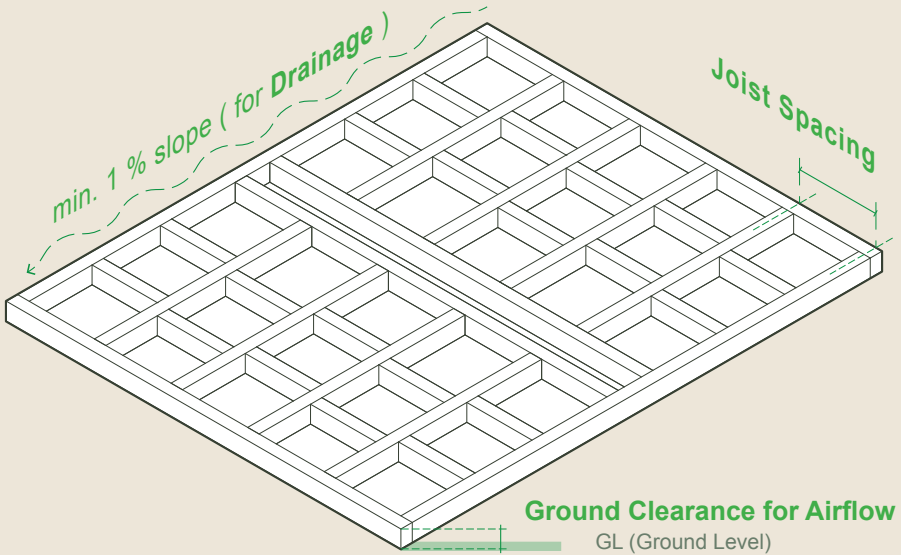
- For Timber Joist
7g × 32mm
- For Metal Joist
7g × 32mm



SUBSTRUCTURE PREPARATION

A solid, level, and well-ventilated substructure is essential for a successful installation.

Subframe / Joist



SAFETY WARNINGS

- **Heavy Lifting:** WPC boards are denser and heavier than traditional timber. Always use proper lifting techniques or a two-person lift to avoid back injury.
- **Cutting & Dust:** Always wear a P2 dust mask and safety glasses when cutting. Use a vacuum extractor where possible to minimize composite dust in the environment.
- **Heat Retention:** WPC products can become hot in direct sunlight. Be cautious when working on hot days.
- **Slip Resistance:** While our boards are rated for slip resistance, use caution when the surface is wet or covered in construction debris.

Joist Spacing

To prevent “bouncing” or sagging, do not exceed the following spans

APPLICATION	ANGLE of deck boards relative to joists		
	90° <i>(Perpendicular)</i>	60°	45°
Residential (maximum)	450mm	400mm	350mm
Residential (recommended)	400mm	350mm	300mm
Commercial (maximum)	350mm	300mm	250mm

Note: All spans are measured from the center of one joist to the center of the next.

Ventilation & Ground Clearance

Adequate airflow is vital to prevent heat build-up and moisture retention.

- **Over Concrete:** Minimum 50mm clearance required.
- **Over Soil/Grass:** Minimum 100mm clearance required. A weed-mat and gravel layer is recommended to prevent moisture rising from the ground.
- **Airflow:** Do not completely seal the sides of the deck. Maintain at least a 3mm gap at the fascia to allow air to circulate under the boards.

Water Drainage & Fall

Ensure the area under the deck is well-drained. The substructure should have a **minimum 1% slope** (10mm per meter) away from the main structure/house to prevent water pooling.

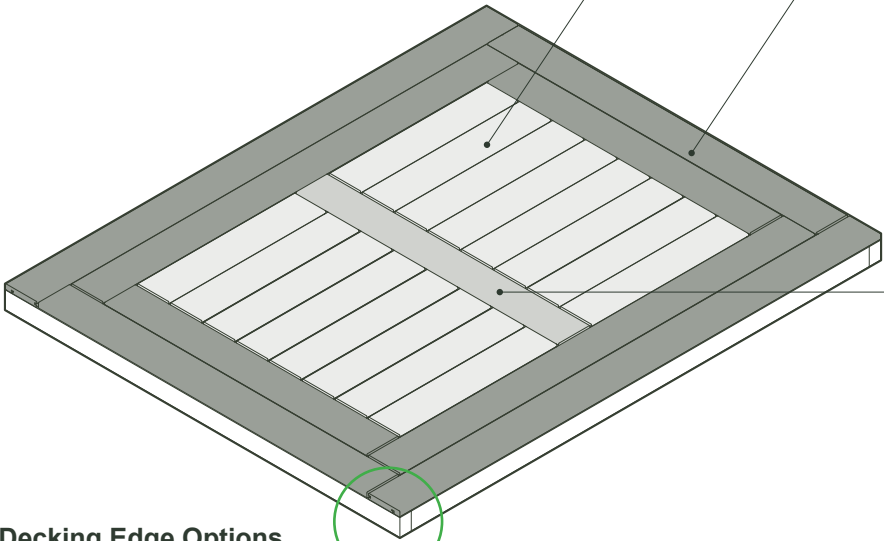
Double Joists at Butt Joints

Where two board ends meet (a butt joint), you **must** use a double-joint system. Each board end requires its own clip and its own dedicated joist support to allow for independent thermal movement.

INSTALLATION GUIDES

TERMINOLOGY & DECK LAYOUTS

Common Layout Types

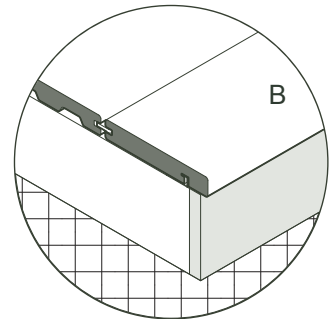
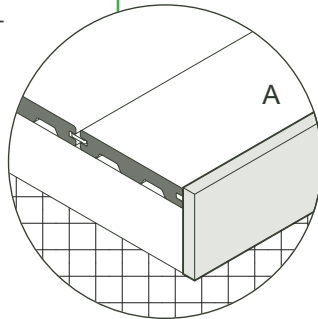


Decking Edge Options

You have two primary ways to finish the edge of your deck:

A. Standard Edge —
Using a grooved board that runs to the very edge.

B. Frame Edge —
Using a dedicated Edge Board (solid on one side) to create a perimeter frame.



“Standard Layout”

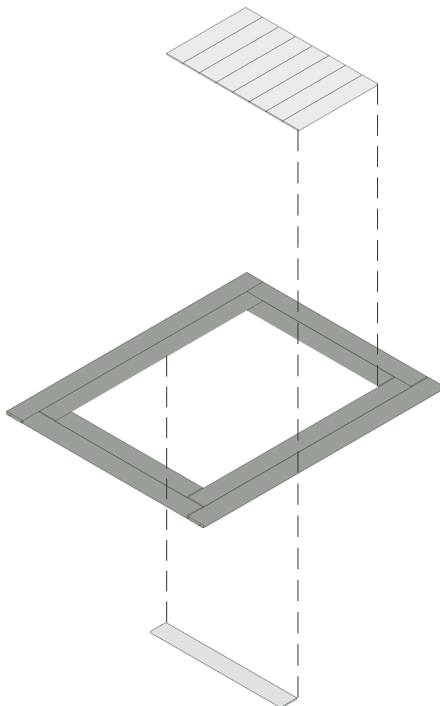
Boards are laid parallel to each other across the entire deck area.

“Picture Framing”

One or more boards are installed around the entire perimeter of the deck, creating a “frame” aesthetic. This also provides a clean, finished edge that hides the grooved ends of the main boards.

“Breaker Boards”

A single board laid perpendicular to the main decking boards to break up long spans.



- Why use them? They manage thermal expansion in long runs and eliminate the need for traditional butt joints, providing a more professional and durable finish.
- Note: Breaker boards are strongly recommended for all Compotech installations to improve structural integrity and reduce material waste.

Installation Overview

Follow these four steps for a successful project:

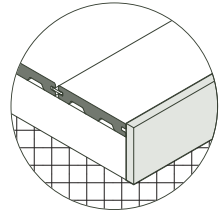
STEP 1: The First Board	— Setting the desired edge finish.	p.10
STEP 2: Main Decking	— General installation and clip usage.	12
STEP 3: Thermal Gapping	— Essential spacing for expansion and contraction.	14
STEP 4: Final Finishing	— Fascia installation and detailing.	17
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1

INSTALLATION GUIDES STEP1 First Board

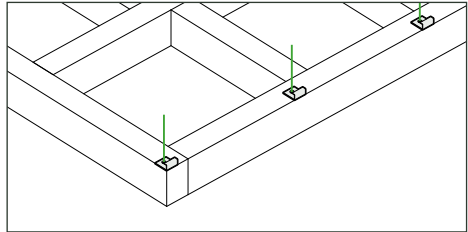
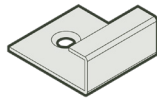
Option A (Standard Edge)

This option uses your standard decking boards right to the edge.



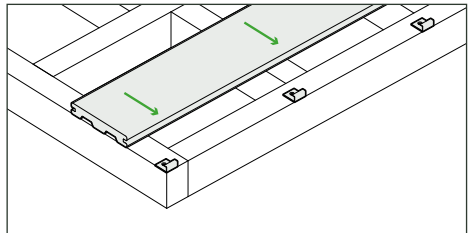
1. Position *Starter Clips*

Install Compotech Solution Starter Clips at every joist, ensuring they are perfectly aligned with the outer perimeter of your subframe.



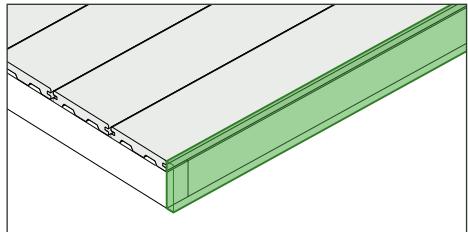
2. Install *Grooved Board*

Slide the first Grooved Board into the starter clips until it is fully engaged and secure.



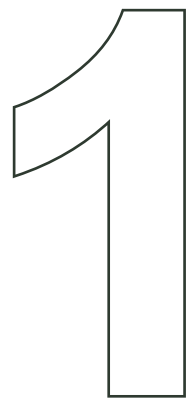
3. Prepare for Fascia

Leave a **minimum 3mm gap** between the edge of the board and the future position of the fascia board. This gap is vital for airflow and thermal expansion.



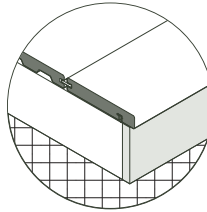
*Refer to STEP 4 (Page 10) for detailed finishing instructions.

The installation method of your first board depends on your desired edge finish. This step establishes the alignment for the entire deck, so it is essential to confirm your layout before proceeding.



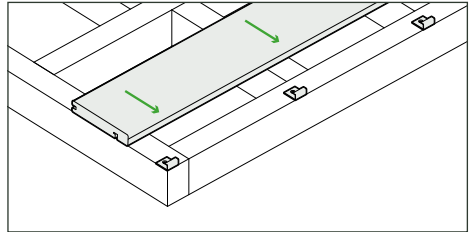
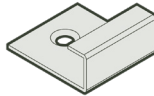
Option B (Frame Edge)

Using a **Edge Board** (solid on one side) to create a perimeter frame.



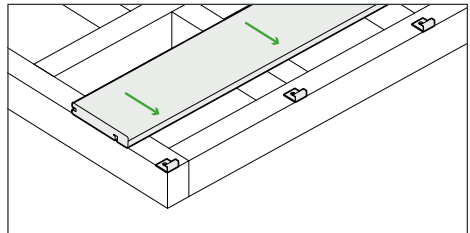
1. Position *Starter Clips*

Fix starter clips at every joist, following the same alignment as Option A .



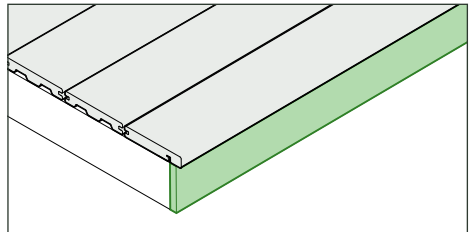
2. Install *Edge Board*

Slide the **Edge Board** into the clips. The solid (un-grooved) side should face outward toward the perimeter.



3. Vertical Fascia Prep

Ensure there is enough subframe clearance to install the vertical fascia board later.



*Refer to STEP 4 (Page 10) for detailed finishing instructions.

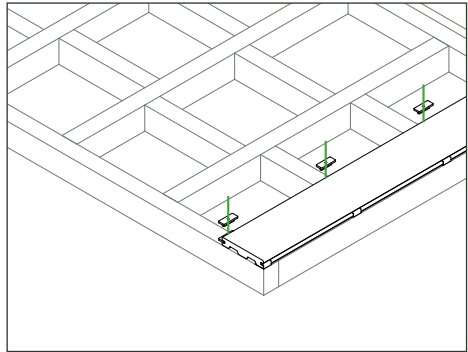
2

INSTALLATION GUIDES STEP2 Main Decking

With your first board and edge style established, you can now proceed with the main body of the deck. This stage uses the Compotech Solution Universal Fastening System to ensure consistent spacing and to manage the natural movement of the WPC material.

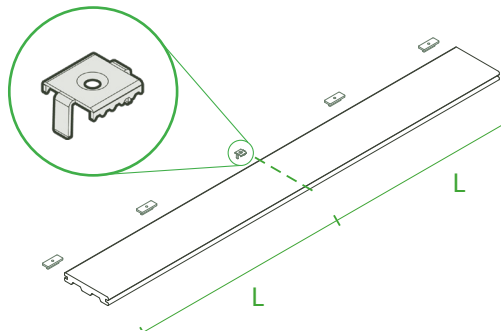
1. Insert Clips

Slide the T-Clips into the groove of the previously installed board at every joist intersection.



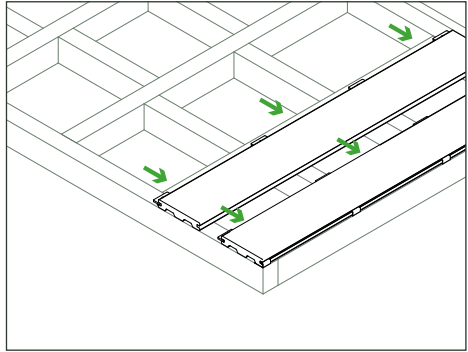
2. Position Locking Clips

Use one Locking Clip per board, typically at the center joist (for boards under 5.4m or as dictated by your specific layout (e.g., at the breaker board)).



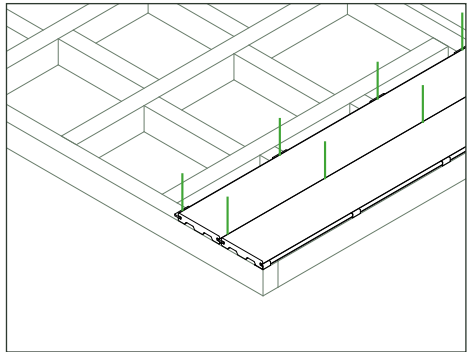
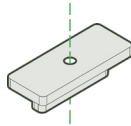
3. Slide Next Board

Push the next decking board firmly against the clips. Ensure the clips are fully seated in the groove.



4. Secure Screws

Tighten the screws through the center of the clips into the joists.

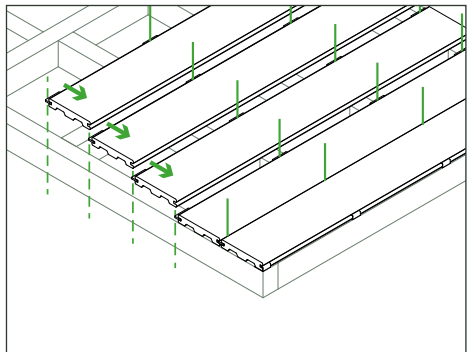


*Pro Tip: Do not over-tighten. The screw should be snug, but the clip must not be deformed.

Ongoing Alignment Checks

Stay Square: Every 3–5 rows, measure the distance from the house/start-point to both ends of the current board. This ensures your deck remains parallel and doesn't "fan" out.

Staggering Joints: If your deck is longer than a single board length, ensure you are using a Breaker Board or a Double-Joist Butt Joint as detailed on the next page.



3

INSTALLATION GUIDES STEP3 Thermal Gapping

Understanding Thermal Movement

WPC boards expand and contract with temperature changes. Proper gapping is not optional; it is essential to prevent the boards from buckling or warping.

- **End-to-End Gapping Table**

Refer to the table below to determine the required gap based on the ambient temperature during installation.

BOARD LENGTH	AMBIENT TEMPERATURE during installation			
	15 °C	20 °C	25 °C	30 °C
1800mm	2mm	2mm	1mm	1mm
2700mm	2mm	2mm	1mm	1mm
3600mm	3mm	2mm	1mm	1mm
5400mm	4mm	3mm	2mm	1mm

- **The Breaker Board (Recommended)**

For decks longer than 5.4m, we strongly recommend using a Breaker Board.

- **Why?** It breaks a long run of boards into two smaller sections, allowing the material to expand and contract from the center rather than pushing against the ends of the deck.
- **Installation:** A breaker board requires a double-joint underneath for full support. Use T-Clips to secure the main boards to the side of the breaker board.

ADVANCED LAYOUT

Breaker Boards



Breaker Board is a single decking board installed perpendicular to the main decking rows. This is highly recommended for any deck span exceeding 5.4m to manage thermal expansion effectively and eliminate the need for traditional butt joints.

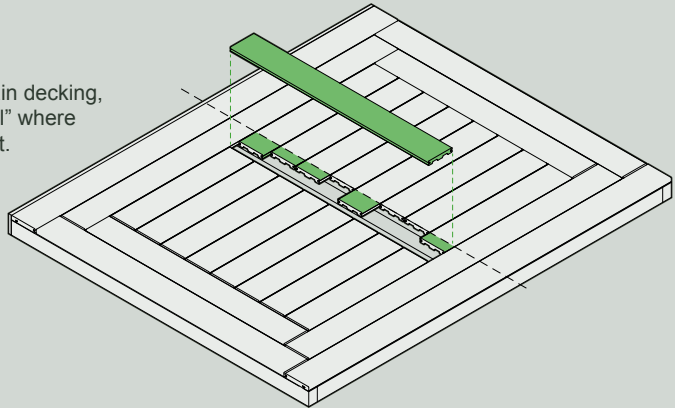
- **Substructure Requirement (Double Joists)**

A Breaker Board must be supported by double joists underneath. Every board end that meets the breaker board must have its own dedicated support and its own fastening clip.

(Installation Steps)

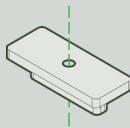
1. Leave a Channel

When installing your main decking, leave a precise “channel” where the breaker board will sit.



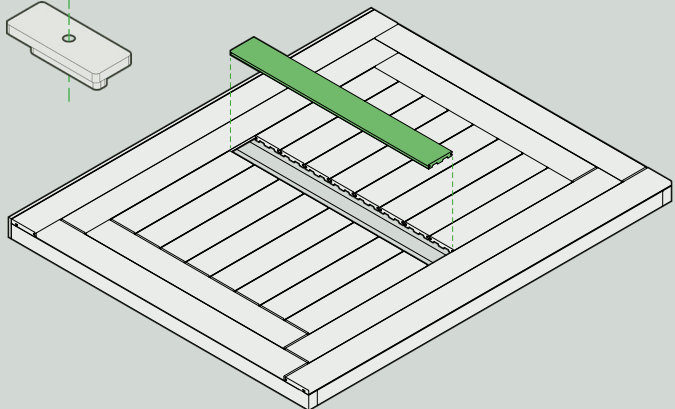
2. Position the Board

*Pro Tip: Use a track saw after the main boards are laid to trim the ends perfectly straight, ensuring a uniform gap.



3. Fastening and Gapping

Side Gapping:
Maintain a 5mm gap (using the T-clip) between the side of the breaker board and the ends of the decking boards.





ADVANCED LAYOUT

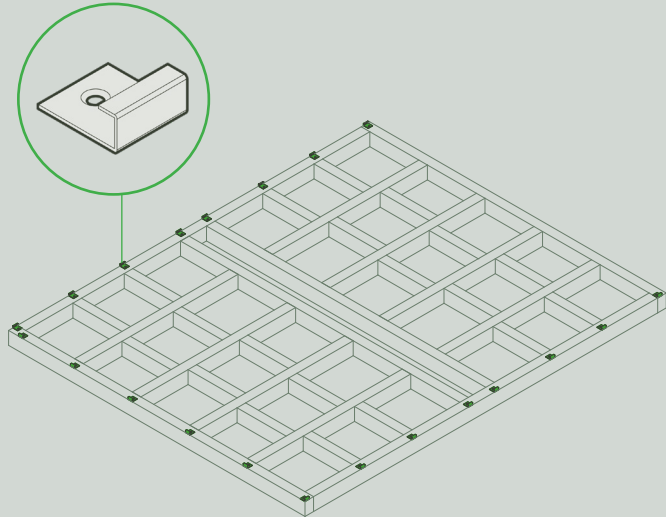
Picture Framing

Picture Framing involves installing one or more boards around the perimeter of the deck. This hides the grooved ends of the main decking boards and provides a high-end architectural finish.

(Installation Steps)

1. Install (Perimeter) Clips

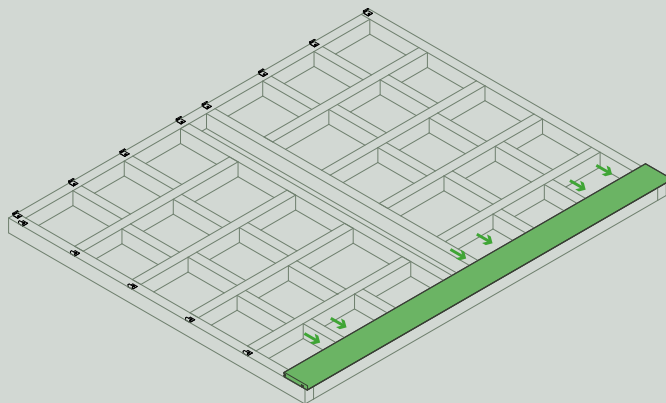
Begin by securing Starter Clips along the inner perimeter of your subframe.



2. Position the First Board

Slide the first board into the clips.

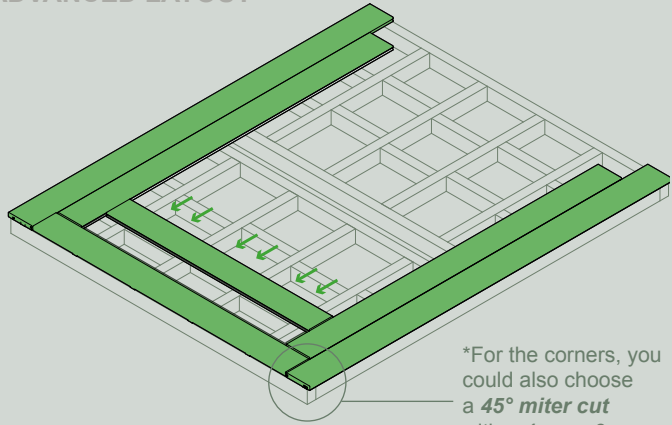
(If you are using a *Edge Board*, ensure the un-grooved side faces the outside of the deck for a clean, professional finish.)



Picture Framing **ADVANCED LAYOUT**

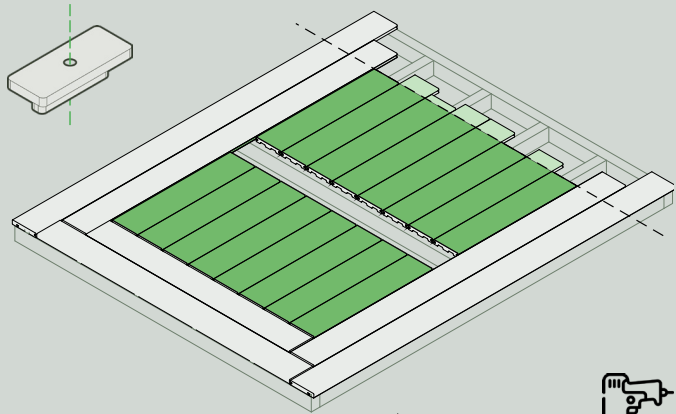
3. Make the Outer Frame

Continue installing the edge boards around the perimeter to complete the "Picture Frame."



4. Install Main Decking (Infill)

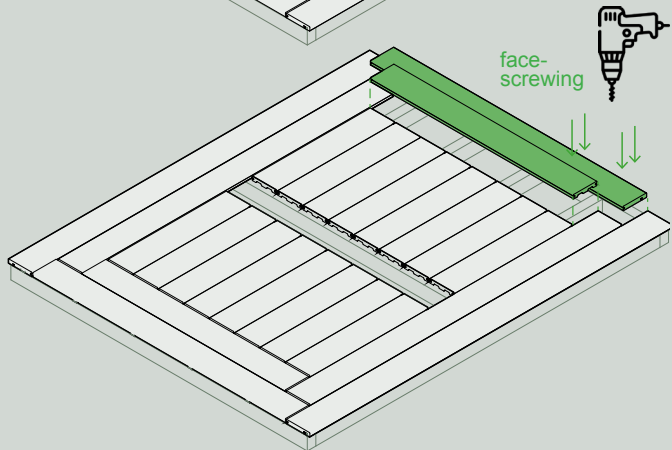
Filling the center of the deck with your Main Grooved Boards and manage expansion.



5. Secure the Final Edge Boards

Install the final boards of the frame.

These final boards are typically secured by **face-screwing** them into the joist using color-matched screws or by using a specific "rip and fix" technique.



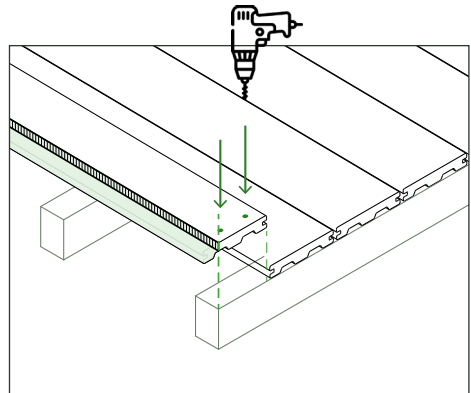
4

INSTALLATION GUIDES STEP4 Final Finishing

The final step is to install the perimeter fascia boards and secure any remaining sections. This provides a clean, vertical finish to the deck's edge and protects the subframe from the elements.

Final Decking Board

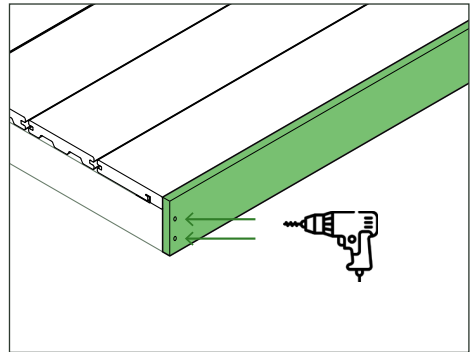
- **Rip Cut:** Trim the board lengthwise to fit the gap.
- **Maintain the Groove:** Whenever possible, keep the inner grooved edge intact to use with your T-clips.
- **Face-Screwing:** Since clips cannot be used on the cut outer edge, secure the board by face-screwing directly into the joists. Use a countersink bit and color-matched screws for a flush, professional look.



Fascia Board Installation

Install around the vertical perimeter of the deck.

- **Airflow Gap (Critical):** Do not install the fascia board flush against the decking boards. You must maintain a minimum 3mm gap between the top of the fascia and the bottom of the decking (for essential ventilation and prevents moisture buildup).
- **Fixing:** Secure the fascia to the subframe using color-matched stainless steel screws.
- **Pre-drilling:** Always pre-drill the fascia board before driving screws to prevent splitting and ensure a clean finish.
- **Spacing:** Install screws at maximum 300mm intervals.



CARE & MAINTENANCE

General Cleaning

- **Sweep:** Regularly remove leaves, dirt, and debris to prevent organic matter build-up and mold growth.
- **Wash:** Clean the surface with warm soapy water (mild dish soap) and a soft-bristled nylon brush.
- **Rinse:** Thoroughly hose down the deck to ensure all soap residue and loosened dirt are washed away.

Stain Management

- **Oil & Grease:** Treat spills immediately with a household degreaser or soapy water. Avoid letting oil sit, as it can be harder to remove once set.
- **Mold & Mildew:** If mold appears, use a specialized composite deck cleaner. Regular cleaning is the best prevention.
- **Hard Water Spots:** For white mineral deposits, use a solution of white vinegar and water, then rinse thoroughly.

Surface Protection

- **Furniture Pads:** Always use protective felt or rubber pads under heavy furniture, BBQ legs, and planters.
- **Heat Sources:** Keep fire pits and high-heat sources away from the deck. Use a heat-resistant mat under BBQs to protect the surface from embers and fat spills.
- **Avoiding Scratches:** Do not drag heavy or sharp objects across the boards. Lift and place furniture to maintain the surface finish.

Important Warnings

- **Avoid Harsh Chemicals:** Do not use bleach, strong acids, or abrasive chemical solvents, as they may discolor or damage the boards.
- **High-Pressure Cleaning:** If using a pressure washer, keep it under 1500 PSI. Maintain a distance of at least 300mm from the surface and spray in the direction of the grain.
- **No Metal Tools:** Never use metal shovels, scrapers, or sharp tools to remove dirt or ice, as they will permanently scratch the composite surface.

CUSTOMER SUPPORT

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OUR LOCATIONS

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