

DECKING

PRODUCT GUIDE
INSTALLATION
TECHNICAL SPECIFICATIONS
CARE & MAINTENANCE

IMPORTANT NOTE – READ ALL SECTIONS BEFORE INSTALLATION

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Note:

Before installing any COEN composite decking system, consult your local building codes to ensure compliance with specific regulations or restrictions. The diagrams and instructions provided in this guide are for illustrative purposes only and should not be considered a substitute for professional advice. All construction involving COEN products must comply with applicable local zoning and building codes.

Please note: The consumer accepts all risks and liability associated with the installation and use of this product.

Safety Guidelines

As with any construction project, proper safety precautions are essential. COEN recommends the following safety gear when handling, cutting, and installing its products:

- * Gloves
- * Respiratory protection
- * Long sleeves and pants
- * Safety glasses

Use of additional protective equipment may be required depending on the work environment.

Recommended Tools

COEN products can be worked with using standard woodworking tools. For best results, use blades with carbide tips. When fastening, use stainless steel or approved coated deck screws.

Installation Environment

Ensure your installation surface is clean, flat, smooth, and structurally sound. Always verify compliance with local building codes before beginning installation.

If installation is delayed, store COEN products on a flat surface — never on uneven ground.

Planning Your Deck

Careful planning will help you achieve the best results.

Since most decking structures are considered permanent (anchored or attached to a dwelling), permits and inspections are typically required.

To avoid issues:

- * Create a detailed site plan before starting construction
- * Review local building and zoning requirements
- * Factor in layout, drainage, and access

Tip: Before using a pressure washer on your decking, test it on a scrap piece to ensure it won't damage the product's coating.

Construction Limitations

COEN screening battens must not be used as:

- * Structural columns or support posts
- * Beams or joist stringers
- * Any other primary load-bearing components

All COEN products must be installed on a compliant substructure.

Note: COEN products are not suitable for installation over existing decking boards.

Static Electricity

In dry or high-altitude areas, static electricity may occur more frequently. Contact with metal objects like railings or furniture can cause minor shocks.

To reduce static:

- * Apply anti-static spray to the decking surface
- * Place anti-static mats at entrances

Heat & Fire Exposure

COEN products may be affected by high surface temperatures from external heat sources, including fire and reflected sunlight. A particular concern is Low-Emissivity (Low-E) glass, commonly used in energy-efficient windows. These windows reflect sunlight, which can cause extreme heat buildup on nearby surfaces.

This excessive heat — beyond typical environmental exposure — may result in:

- * Melting or warping
- * Sagging or discolouration
- * Accelerated weathering
- * Increased expansion and contraction

If you suspect Low-E glass may impact your COEN installation, please contact the glass manufacturer to explore options for reducing or eliminating heat reflection.

Fastening Guidelines

To ensure a secure and clean installation of COEN products:

- * Screws must be driven at a 90-degree angle into the decking surface.
- * Toe-screwing is not permitted. If a straight angle isn't possible, install an additional joist to support proper screw placement.
- * Each fastener must be on its own joist, and when two board ends meet, they must be supported by a sister batten, ensuring each end is independently supported.

Chalk Lines:

Only use white chalk or guides like string lines or straight boards for marking.

Do not use coloured chalk — it can permanently stain COEN surfaces.

Screw Type:

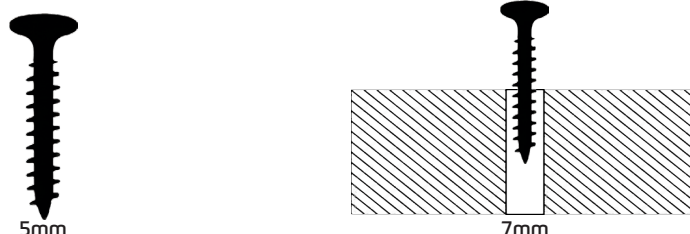
- * Always use stainless steel screws for face-fastening.
- * Composite-specific screws are strongly recommended for the best finish. Check with your local hardware supplier to ensure compatibility.
- * If face-fastening results in bulging or “mushrooming”, gently tap the affected area with a rubber mallet to flatten it and achieve a clean appearance.

Using screws not designed for composite decking may result in damage. If you're unsure which fasteners to use, consult the product manufacturer for guidance.






Face Fixing

When face-fixing COEN decking and fascia boards, it's recommended to drill a clearance hole slightly larger than the screw shank. This allows the material to expand and contract naturally with temperature changes, helping to prevent cracking or deformation.



Refer to the diagram below for visual guidance on proper clearance hole technique.



DECKING PARTS

PRODUCT	PURPOSE	IMAGE
GENESIS TERRA TOUGH DECKING	Decking board, used on all areas of the deck	
GENESIS TERRA TOUGH EDGE BOARD	Edge board, used on the edge areas of the deck	
GENESIS TERRA TOUGH FASCIA	Fascia board, used on the vertical areas of the deck	
DECKING STARTER CLIPS	Used on the first decking board (Bags of 20 - Includes Screws*)	
DECKING CLIPS	Used between each decking board (Bags of 50 - Includes Screws*)	

DECKING SCREWS**

PURPOSE	TIMBER JOIST	METAL JOIST
Used when installing decking onto joists		

*Note: Screws supplied with clips are wood fix screws only. If metal screws are required, please contact COEN prior to ordering.

**Note: All screws are based on our recommendation and if the installation requires something different than what is shown, a professional should be consulted before installing. The following installation guide will use the above screw sizes.

DECKING COLOURS

GENESIS TERRA TOUGH COLOURS*			
SHALE GREY	DRIFTWOOD	CHOCOLATE	MARINE TEAK
			

GENESIS TERRA TOUGH COLOURS*			
BRUNSWICK	GLACIER	BEACH	ALKIRA
			

*Colours are a reference only and may vary to actual product.

Framing

Step 1: Determine the decking span — (the distance between each joist.)

Important: Ensure the frame is completely level before installing any boards.

We recommend for the framing Metal / Aluminium joists or Pre-primed H3 Timber joists be used.

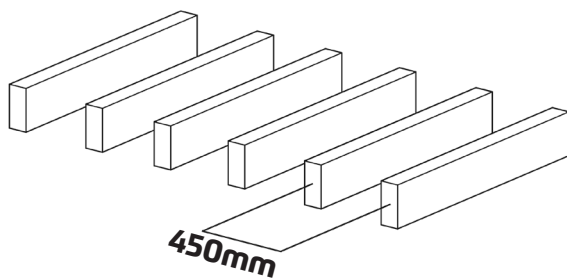
Each decking board needs to be supported by a joist NO MORE than 450mm centres, for residential applications, and 400mm for commercial applications.

Extra care is required in order to provide sufficient joisting in and around obstacles such as butt joints, breaker boards, fascia's, stairs, etc.

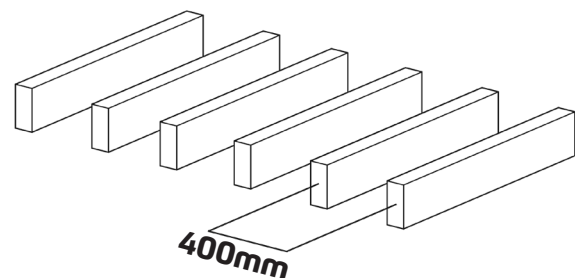
Note: Proper joist spacing is essential to prevent the deck boards from sagging. Refer to the chart below to find the correct spacing for your board profile.

Profile	Dimensions	Residential	Commercial
Terra Tough Solid Decking	140 x 25	450mm	400mm
Terra Tough Edge Board	140 x 25	450mm	400mm
Select Solid	140 x 25	450mm	400mm
Select Hollow	140 x 25	450mm	400mm
Square Edge	138 x 23	450mm	400mm

Residential



Commercial



Expansion and Contraction Values

COEN Decking boards will experience expansion and contraction with changes in temperature. Expansion and contraction are most significant where extreme temperature changes occur.

Fastening the decking boards according to the gapping requirements noted in the following table accommodates for this movement.

LENGTH IN METERS

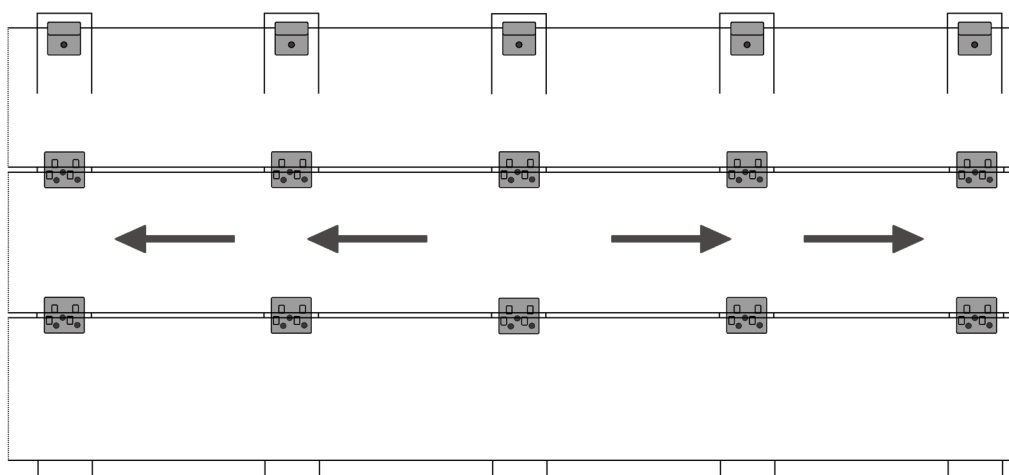
INSTALLATION TEMPERATURE IN CELSIUS	1.0	1.8	2.7	3.6	4.5	5.4	GAP (mm) To leave between the boards*	
	10	1.2	3.0	4.2	5.5	6.4		8.6
	15	1.4	2.9	3.9	5.1	5.6		7.6
	20	1.2	2.5	3.4	4.4	4.8		6.5
	25	1.0	2.0	2.8	3.7	4.0		5.4
	30	0.8	1.8	2.2	2.9	3.2		4.3
	35	0.6	1.2	1.7	2.2	2.4		3.2
	40	0.4	0.9	1.1	1.5	1.6		2.2
	45	0.2	0.4	0.6	0.7	0.8		1.1

PLEASE NOTE:

*The above shows the overall gap required. If the boards have a gap at each end, then halve the value shown

CALCULATION: Gapping = Coefficient of Linear Expansion (CLE, °C) x Length of the Board (m) x (Max. or Min. Temp. in your region - Installation Temp. °C)

The below image shows the direction in which the boards will expand and contract.



DECKING INSTALLATION

Installation Procedure

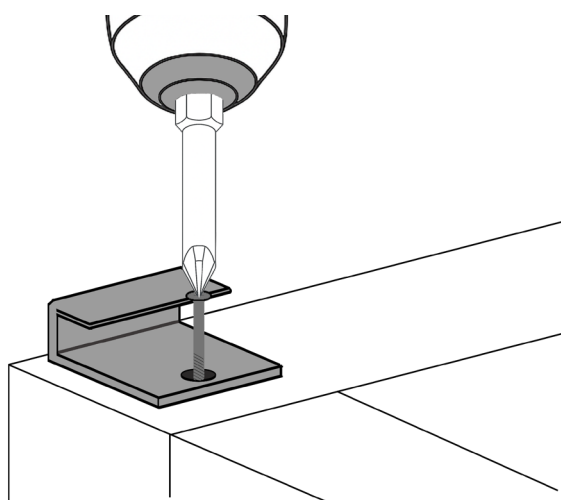
Framing

Begin by determining the decking span — the distance between each joist. Ensure the frame is perfectly level before installing any boards.

Note: Proper joist spacing is essential to prevent deck boards from flexing or sagging. Refer to the chart on page 7 of this installation guide to find the correct spacing for your specific board profile.

Decking Installation

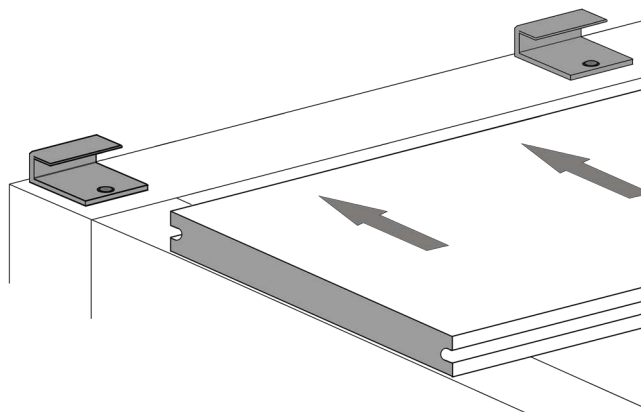
COEN decking requires a starter clip to begin the installation of the decking boards. We recommend working from the inside of the deck to the outside to ensure a clean finish.



Start by pre-drilling into the joist, then secure the starter clip in place as illustrated in the diagram on the left.

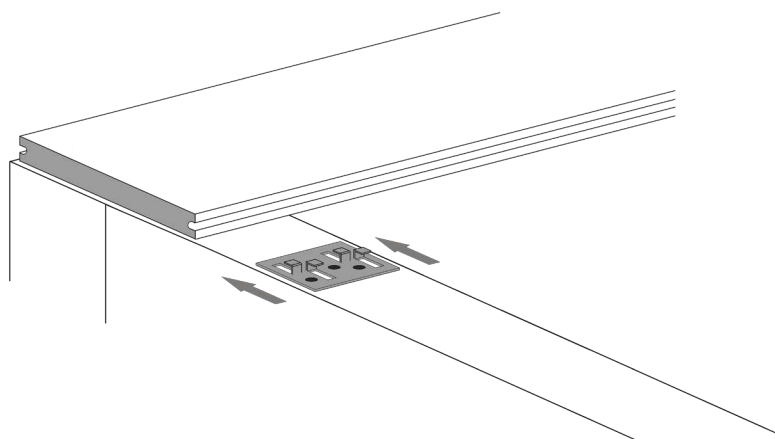
Note: A starter clip is required on each joist.

Next, insert the first board into the starter clips, making sure it sits level and flush against them, as shown in the diagram on the right.



DECKING INSTALLATION

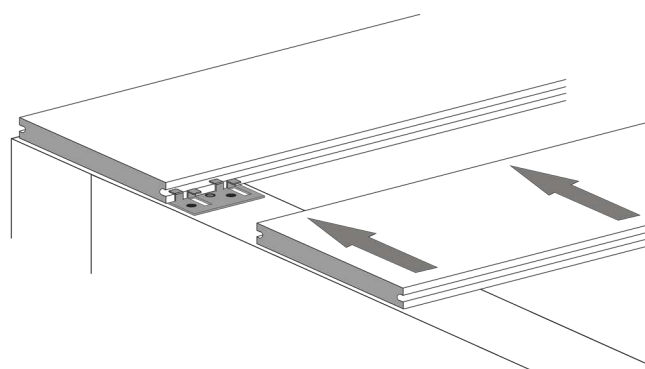
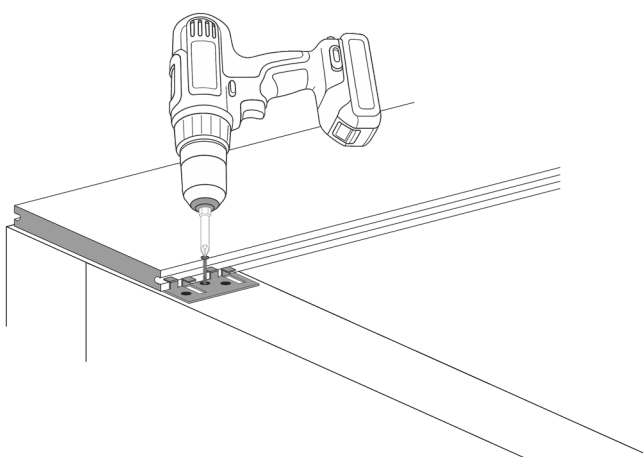
Slide the decking clips into position, ensuring the teeth are fully seated in the board's groove and the screw holes are facing outward for easy installation. One decking clip is required per joist.



Please Note:

We are using timber joists for this installation. If you are using metal / aluminium joists, please refer to page 6 of this installation guide for the correct recommended screws.

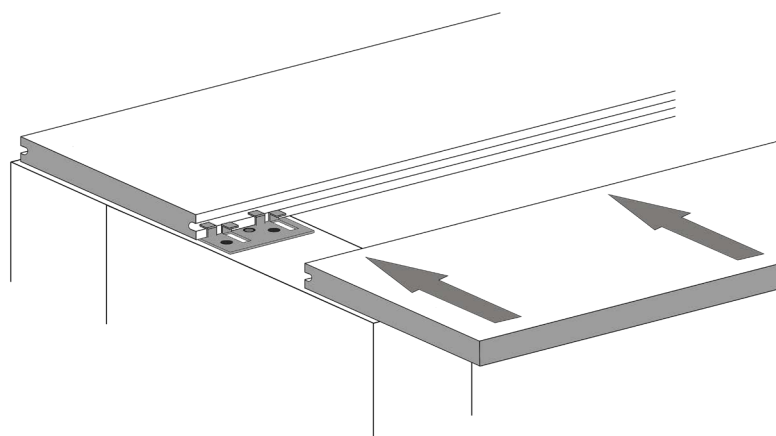
Secure the clip in place using the provided screws, then repeat the process for each remaining board.



Please Note:

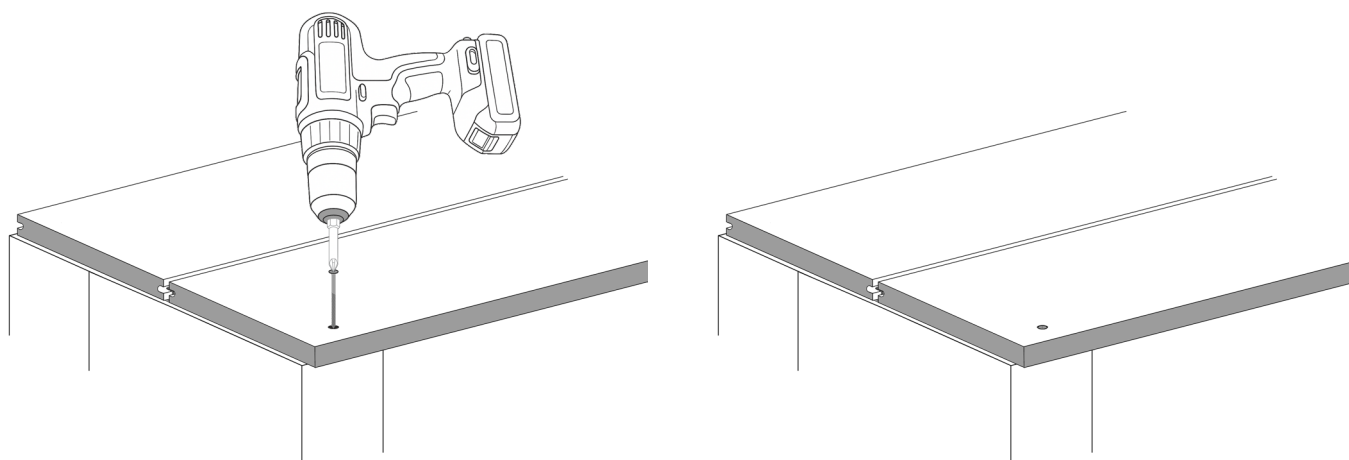
1. We recommend drilling a pilot hole before driving the screw into the joist.
2. Only one screw is required per clip.

EDGE BOARD INSTALLATION



When installing the Edge Board, use the same method as for standard decking boards. Press the board firmly into the decking clips to ensure a secure and snug fit.

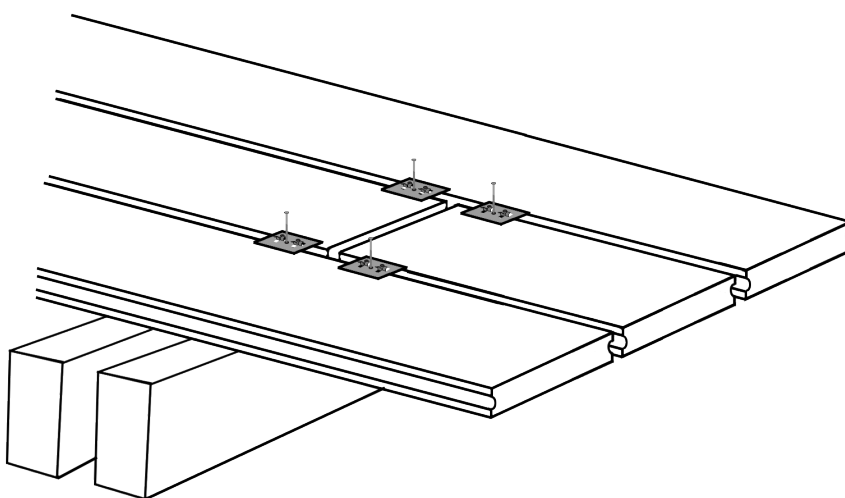
Drill a clearance hole in the board to accommodate thermal expansion, then secure it in place using a decking screw.



Please Note:

1. One screw is required per joist.
2. COEN does not supply top-fix decking screws by default. Please contact the COEN team if you require them.

BUTT JOIN INSTALLATION



Please Note:

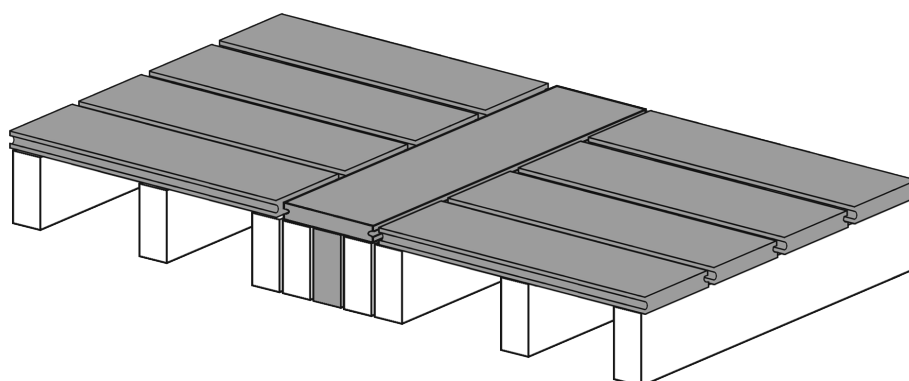
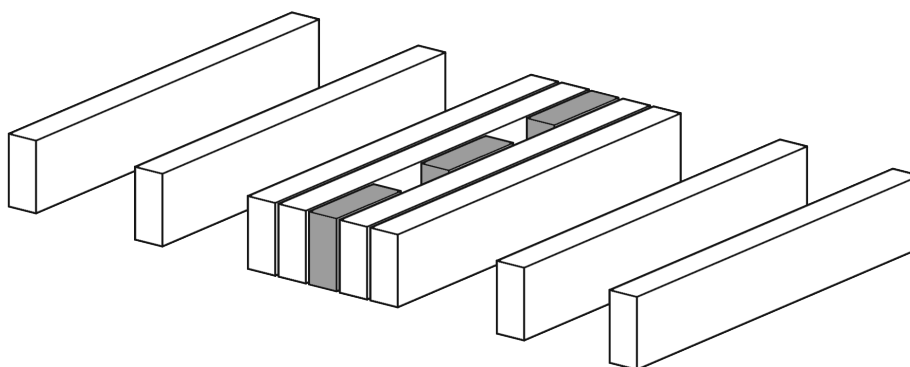
When butt-joining boards, sister joists must be used to ensure each board end is fully supported by its own joist. This prevents the boards from shifting or sliding off the structure. Failure to follow this requirement will void the warranty, as illustrated above.

Additionally, allow a minimum gap of 5mm between sister joists to ensure proper drainage and avoid swelling at the board ends.

BREAKER BOARD INSTALLATION

We recommend using a breaker board when your deck requires a span longer than two full board lengths.

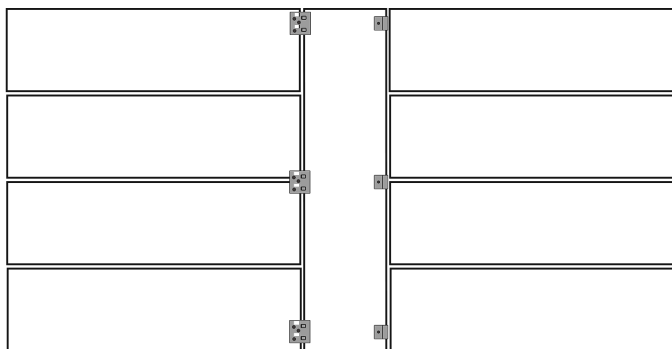
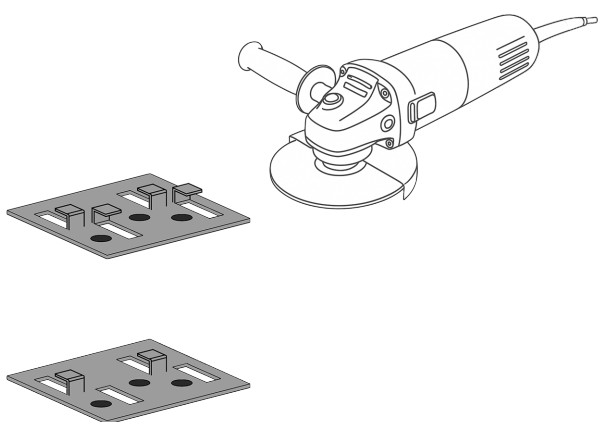
The diagrams below show the correct framework and installation methods for incorporating a breaker board, a ladder joist system is used to create a perpendicular support structure for the breaker board.



BREAKER BOARD INSTALLATION

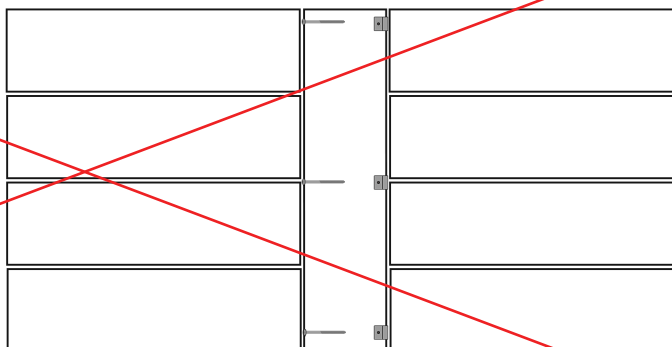
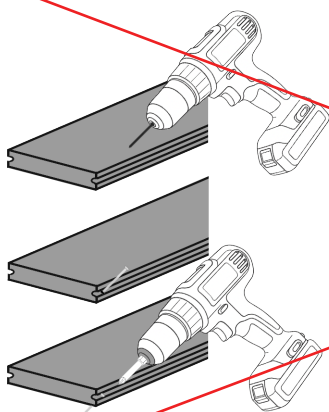
A starter clip should be used on one side of the breaker board, with a standard decking clip on the opposite side.

Note: A standard Decking Clip can be converted into a breaker board clip by simply cutting off the teeth on one side, as shown below.



Please Note:

While toe fixing the breaker board is possible, it is not recommended as it can damage the board and may void the warranty.



STAIR TREAD INSTALLATION

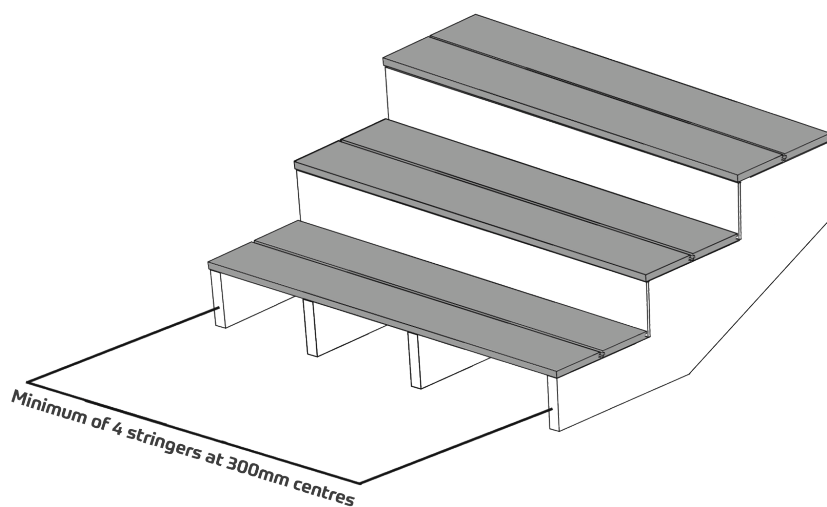
Refer to the image and table below for the maximum allowable spacing between stringers for stair tread installation.

Stair treads constructed with COEN Composite Wood must comply with all relevant national building codes. Check with your local authorities for specific regulations.

A minimum of four (4) stringers is required.

The stair tread overhang must not exceed 15 mm.

Note: Stair treads must be installed using solid-profile boards only. The use of hollow boards for stair treads is strictly prohibited and will void the warranty.

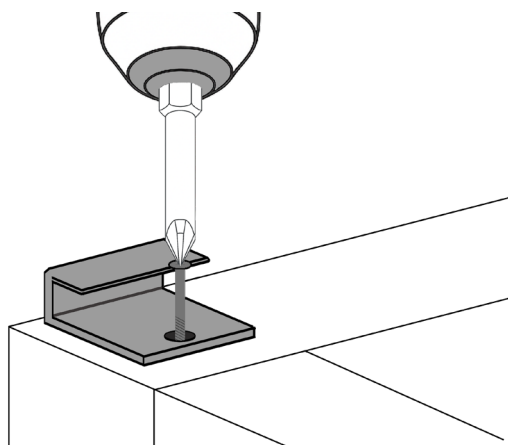


Profile	Dimensions	Spacing
Terra Tough Solid Decking	140 x 25	300mm
Terra Tough Edge Board	140 x 25	300mm
Select Solid	140 x 25	300mm

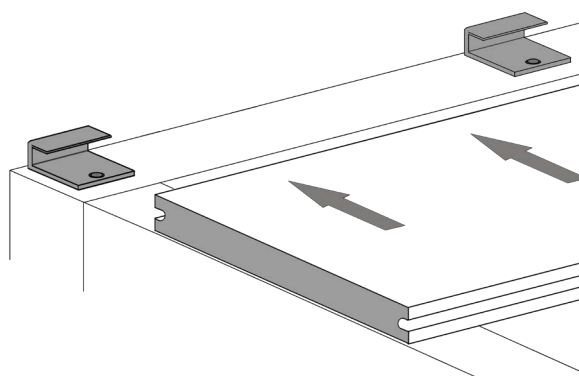
STAIR TREAD INSTALLATION

Refer to the images below for the stair tread installation process. This follows the same method as installing the first row of decking, followed by securing an edge board. For more information, see pages 9-11.

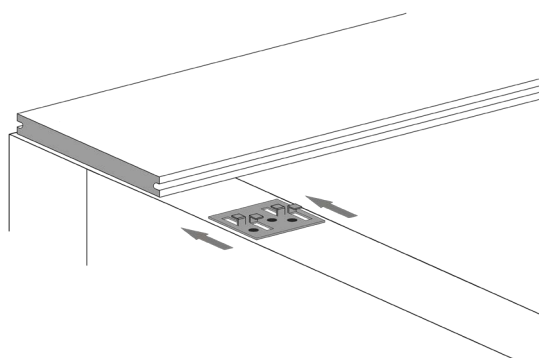
STEP ONE



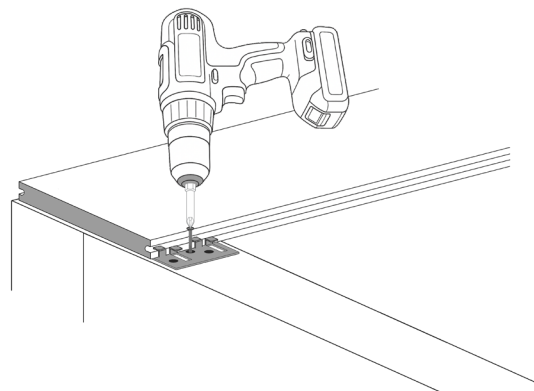
STEP TWO



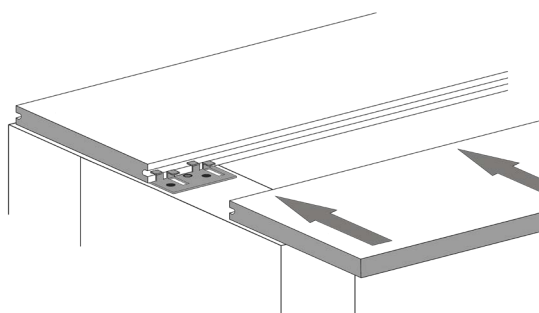
STEP THREE



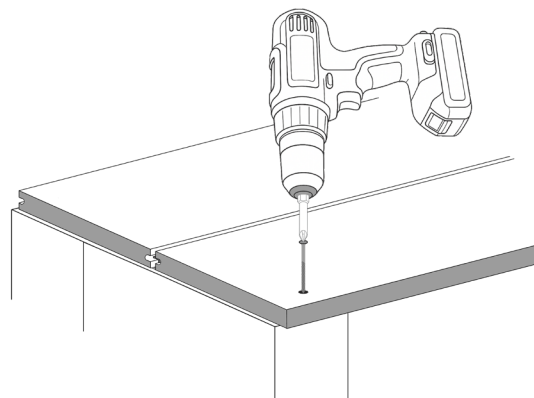
STEP FOUR



STEP FIVE



STEP SIX

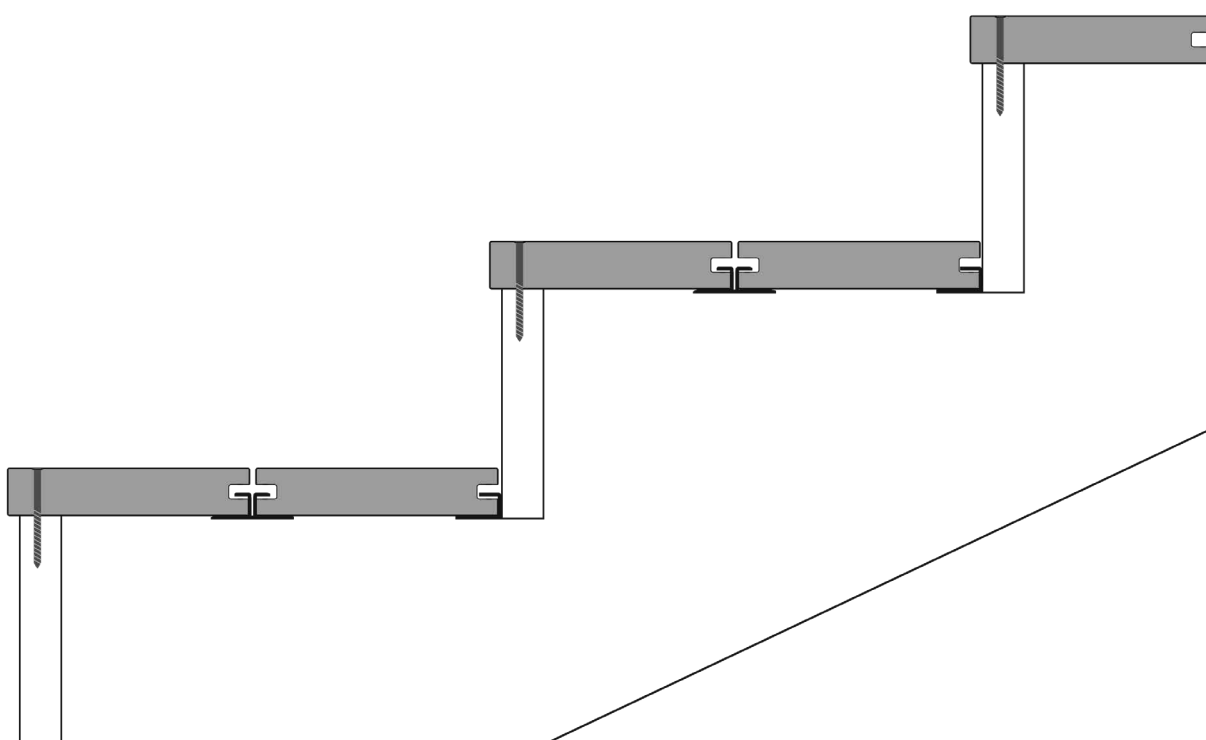


Please Note:

Clips must be installed on every stringer, and a top-fix screw with a clearance hole must be driven through the edge board into each stringer.

STAIR TREAD INSTALLATION

The image below shows a side view of a completed staircase, providing a clearer understanding of the final installation appearance.



Please Note:

COEN does not supply top-fix decking screws by default. Please contact the COEN team if you require them.

FASCIA BOARD INSTALLATION

Fascia boards that are thicker than 10 mm must be fixed with 400 mm spacing between fixing points to prevent warping or buckling.

All fascia boards must be secured with two screws positioned 40 mm from each end, regardless of thickness.

It is recommended that fascia be installed during the hottest part of the day, or after the boards have been fully exposed to direct sunlight. This ensures the boards are at their maximum thermal expansion length prior to fixing.

Pre-Drilling and Fixing Fascia Boards

All holes are required to have a clearance of at least 2mm to allow for thermal expansion.

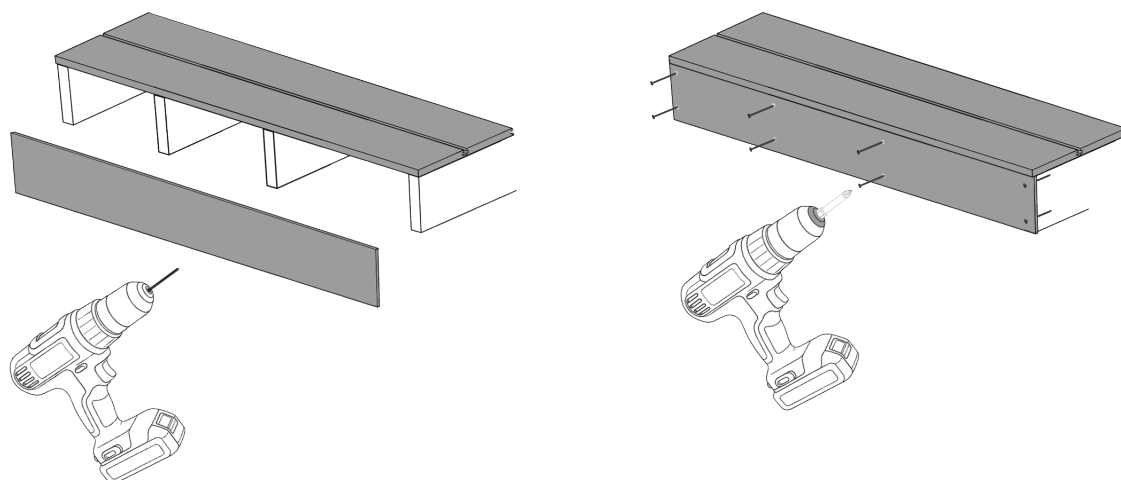
After drilling a clearance hole, secure the fascia boards

Fascia boards must be fixed through the joist and into the blocking — not into the decking.

Important Note

NEVER install fascia by screwing into the decking.

ALWAYS install fascia into the joist and ALWAYS drill a clearance hole in the board before fastening.

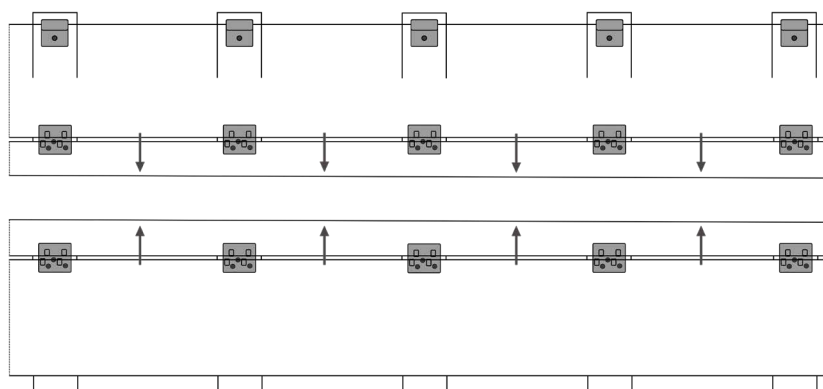


REMOVAL OF DECKING BOARD

1. Cut out the centre section of the board.

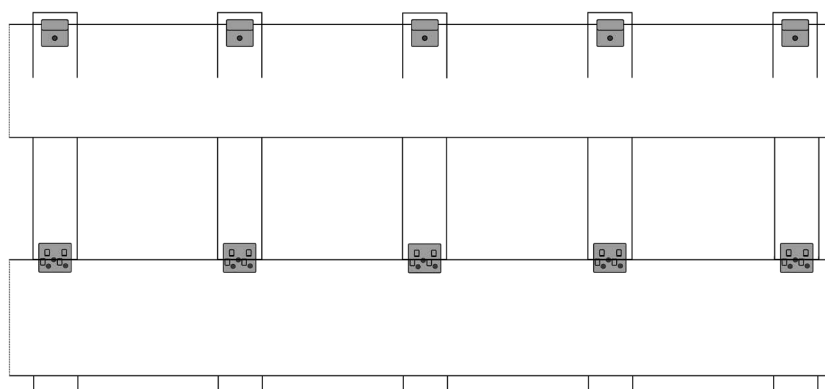


2. Remove the two halves by gently pushing the boards inward.

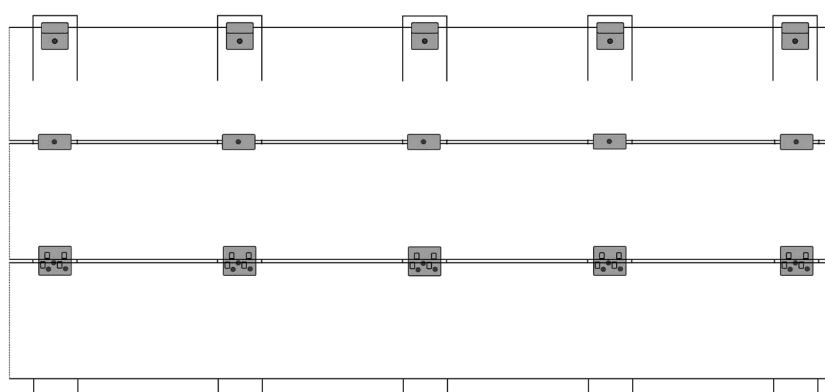


REMOVAL OF DECKING BOARD

3. Remove the clips that can be unscrewed



2. Insert the new board into the existing clips, then slide the replacement 'T' clips into position along the board and secure them from above.



Please Note:

COEN can provide 'T' clips for board replacement upon request. Please inform your COEN team member if they are needed.

TECHNICAL SPECIFICATIONS	Solid Decking (mm)	Hollow Decking (mm)
Dimensions	140 x 25mm x 5.4m	140 x 25mm x 5.4m
Boards / Pack	70	70
Minimum ground clearance	100	100
Minimum clearance over concrete	30	30
Joist centres (max distance)*	450 - 500	400 to 450
Joist centres - Light Commercial (max distance)*		350-400
Joist centres - Commercial (max distance)*	350-450	
Minimum end-gap – butt join	5	5
Minimum gap – side by side	2	2
Minimum end gap to solid structure	5	5
Minimum distance from edge of board for Top fixing	20	
Minimum distance from end of board for Top fixing	20	
Maximum overhang at end joist	15	
Number of SS Starter Clips	one/joist	one/joist
Number of SS Decking Clips/sqm	18	18
Top / Face Fix Screw (Typical Decking Screw) size	5x75mm	N/A

*If you require information of joist centre pertaining to a 'live load' please contact COEN.

STORAGE

Storage is simple. Store flat, in a dry area, under cover and out of the sun. Keep your COEN products wrapped in the packaging it arrives onto site. If you need to store your COEN products for a longer than expected period of time, or have a delay in your project, call us at COEN and we'll store your product for you at an agreed price & period of time.

Following our easy-care tips will ensure that your Decking remains the envy of your friends and neighbours for years to come.

NORMAL CARE

COEN composite wood products require periodic cleaning to keep them looking great. For dirt, dust and other residue, simply brush with a soft broom. If necessary, wash the Composite Wood down in the direction of the grain with a garden hose or a pressure washer, no more than 1,500 psi.

PROBLEM	SOLUTION
Dust and Dirt	Wash with hot soapy water and soft scrubbing brush
Mildew	Use a deck washing product or hot soapy water. Never mix any other cleaners with the deck washing product. Vinegar can be used to kill the mould.
Chalk Stain	Except white, other colours cannot be removed once on the surface, so avoid the use of chalk. Use hot soapy water with a stain-bleaching agent to wipe off.
Ice or snow	Use calcium chloride or rock salt to melt ice or snow and wash with hot soapy water.
Dirty spots or soiling	Apply a detergent with oxalic acid or phosphoric acid to spots and wipe clean after 10-15mins.
Oil	Clean immediately with a household degreasing detergent and hot soapy water.
Berry or wine stain	Scrub and dilute the stains with a mix of bleach and hot soapy water before rinsing with water.
Ink Smudge	An ink smudge is unlikely to be removed. Scrub and dilute the stains with a mix of bleach and hot soapy water before rinsing with water. This may dilute the smudge.

Note: Please note that some cleaners can lighten the colour of your composite wood, so always test any cleaner on a small portion before cleaning the entire surface.

ADDITIONAL TIPS

- Clean wall paneling regularly in order to prevent dust accumulation.
- Remove marks or stains immediately or they may become more difficult to remove after a period of time.
- Never apply harsh solvents such as acetone, gasoline, benzene, carbon tetrachloride or paint thinner.
- Never mix two or more cleaning agents when cleaning your composite wood products.
- Keep the area around your composite wood product clean and well ventilated.
- If you have any further queries, please call us at COEN – 1800 105 031 or email info@coen.com.au