



EKODECK+
DESIGNER SERIES
INSTALLATION GUIDE



INSTALLATION GUIDE

Being a composite product, Ekodeck+ behaves and has different characteristics to timber. To achieve a safe and long lasting Ekodeck+ installation, it is important to read the following guide in full.

Ekodeck+ Designer Series is a pre-finished product. Use care when storing, handling and installing to avoid damage.

Ekodeck+ boards are made for installation with the Quickfix Hidden Fastening System for Decking; providing you with a surface free of fasteners and a faster, easier installation.

This installation guide is intended to be viewed along with the installation videos found on our website www.eko-deck.com.au or by scanning the QR code on the right.



Ekodeck+ Designer Series boards are double sided. Install the board with your choice of colour facing up.



Install either side

WARNINGS

- It is the sole resposibility of the homeowner, contractor or the installer to determine the specific requirements, effectiveness, suitability and safety in regard to any application or use of Ekodeck+ products.
- 2. Ekodeck+ is not designed to be a freestanding product. It must be installed safely and correctly fixed down to a substructure.
- 3. The substructure must comply with all the relevant regulations and aspects of the Building Code of Australia. The substructure must be anchored to the ground on all sides including the house.

Ekodeck+ should not:

- Be used in a substructure application.
- Be applied directly to a solid surface such as concrete.
- Have a cantilever (overhang edge of an Ekodeck+ board) greater than 50mm.
- 4. Any single piece of Ekodeck+ must be installed over at least 2 spans (i.e. 3 joists) to keep within the structural load bearing limits of its design.
- 5. Ekodeck+ must have sufficient gaps provided between boards and at joins and edges to allow for proper thermal movement and ventilation.

NATURAL VARIANCES & COLOUR

Ekodeck+ Designer Series is made by combining reclaimed timber with a mix of new and recycled plastics. Whilst every care is taken to ensure consistency of performance and quality, natural variances will occur from one board/batch to the other in appearance, colour and texture. These variances are similar with those naturally found on timber decking and are designed to blend in and even out over time.

Ekodeck+ board dimensions are subject to normal manufacturing variations and tolerances. Reasonable variances in board dimensions are not considered a product fault and due care should be taken when installing to allow for these.

Ekodeck+ Designer Series is manufactured with Durashell™ coating and has been designed to withstand the Australian sun and will never fade to grey like timber when exposed to the elements. Like any external building material, a slight loss in brightness is to be expected.

HEALTH & SAFETY

Always use proper protective clothing and safety equipment when cutting and drilling.





Use hardwood blades

Carry this side up

GAPS & SPANS

Centre-to-centre joist spacing (max)	450mm
Min. ground clearance	90mm
Min. side gap	Auto-spaced by clip
Recommended end gap	Refer to Expansion Gaps table

^{*}Gap distances vary depending on temperature during installation. Read section Expansion Gaps to discern appropriate gapping for your project.

CUTTING

For best results, use hardwood blades. When using a drop saw we recommend a 60-80 tooth blade for cutting.

Where possible, delay any trimming of length until all boards are fully fastened and cut at the same time to achieve a uniform appearance.

VENTILATION

When designing your deck, consideration must be given to ventilation. Avoid the tendency to box or seal the deck in completely. We recommend a minimum of 90mm ground clearance.

THERMAL EXPANSION & CONTRACTION

Ekodeck+ expands and contracts in length with changes in temperature. This is normal behaviour of any wood plastic composite and is not a product fault.

It is most important to take this into consideration during installation of your Ekodeck+.

For decks up to 5.4m in length we recommend running full length boards.

For decks larger than 5.4m we recommend the use of breaker boards.

The amount of expansion and contraction you experience is dependent on several factors including:

- Climate Installing in the peak of summer or winter or large changes in temperature between day and night.
- Deck position if the deck is in direct sunlight or part shade etc.
- Board length the longer the board, the more it will expand.

EXPANSION GAPS

It is important to take Thermal Expansion & Contraction into account when gapping your boards.

The below table can be used as a guide when discerning the appropriate gap (in mm) to leave at the end of your board, depending on board length and ambient temperature during installation.

		Ambient temperature during installaion (°C)			
		10	20	30	40
Ē	1	2	1	0	0
length (m)	2	2	1	0	0
lenç	3	2	1	0	0
Board	4	3	2	0	0
Bos	5.4	3	2	0	0

Eg. If temperature during installation is 20°C, the recommended end gap for a 5.4m board is 2mm.

GENERAL INSTALLATION REQUIREMENTS

- Allow the boards to acclimatise to your site conditions. This allows your Ekodeck+ to adapt to the ambient heat typical of your location.
- During installation, if the board is warm to the touch or has been sitting in full sun (ie. hotter than ambient temperature) we advise to reduce the end gap.
- Ensure you leave a sufficient gap to solid structures, posts or walls to allow for expansion/contraction of Ekodeck and avoid damage to the boards or surroundings.

- Delay any edge/length trimming until after installation and trim at the same time.
- Where possible, cut your boards oversize.
 This will allow you more flexibility when setting your end gaps.

BREAKER BOARDS & PICTURE FRAMING

The use of breaker boards or picture framing your deck is strongly recommended.

Picture framing ensures a clean finish of your deck when using Ekodeck+ Designer Series boards.

Breaker boards enable a single-board-length installation method, which helps manage the expansion and contraction characteristics of composite boards.

Example of a picture frame design (recommended):



Example of a breaker board design (recommended for decks longer than 5.4m):



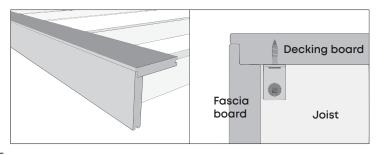
BUTT JOINTS

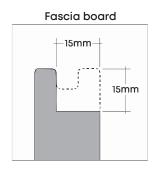
Due to the thermal expansion properties of Ekodeck+ we advise against the use of butt joints, regardless of the size of your deck.

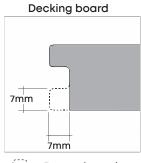
It is difficult to ensure consistent and uniform gaps across your entuire deck when using butt joints and boards of various lengths.

EDGE BOARD FINISHING

To finish your edge board and achieve a clean finish, simply route your boards as shown below:







= Routed section

FASCIA FIXING OPTIONS

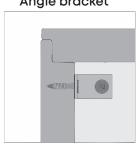
See below for various ways to fix your fascia board:

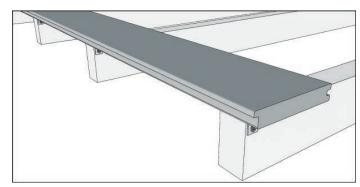
Face-fix

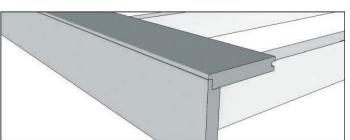


C-Clip

Angle bracket







3. You can now begin to fasten your boards using Standard and Locking Clips – refer to Fastening Boards section.

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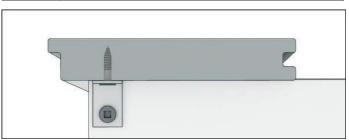
STARTING FROM A STEP OR EDGE (RECOMMENDED)

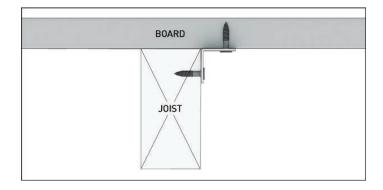
For best results, we recommend starting at the edge of your deck and working back to your wall/house. This ensures you have a full board at the edge or step of your deck where it is most exposed as well as offering a wider range of options to finish and fasten the leading edge of your board and fascia.

- 1. Finish the leading edge of your board appropriately to ensure a fascia can be installed for a clean finish. Refer to section Edge Board Finishing.
- 2. For a consistent finish free from screws, use angle brackets (not supplied) to fasten the leading edge of your edge board.

Alternatively, we recommend to pre-drill and countersink, then top-fix the board as per the table below.

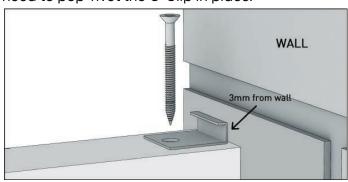
Joists	Recommended Screw
Timber	10g x 65mm 316SS countersunk screw
Steel	10g x 40mm countersunk screw suitable for steel



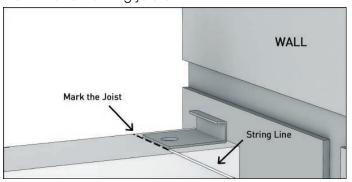


STARTING FROM A WALL

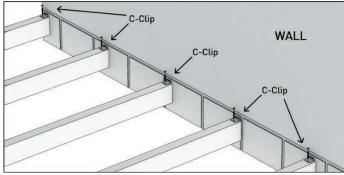
1. Position C-Clip on top of the first joist a minimum of 3mm from the wall (use a packer if necessary) and screw into place. Repeat on last joist. NOTE: If you are installing on a steel frame, you will need to pop-rivet the C-Clip in place.

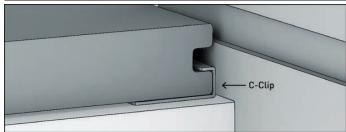


2. Run a string or chalk line from the front edge of the C-Clip between the first and last C-Clip and mark the remaining joists.



3. With the top of the joists now marked, install the rest of the C-Clips. C-Clips can be placed on every second joist if necessary. Gently push the first Ekodeck+ board into the C-Clips. You may need to angle the board slightly to push into the C-Clips.





4. You can now begin to fasten your boards using Standard and Locking Clips – refer to Fastening Boards section.

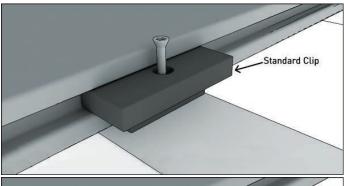
FASTENING BOARDS

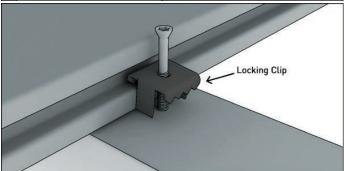
Depending on which Quickfix system you are using, the fastening of your Ekodeck+ Designer Series boards may slightly differ.

6mm QUICKFIX

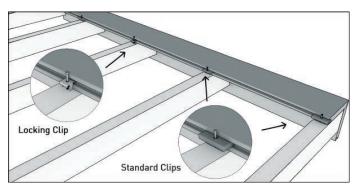
1. Insert Standard Clips and Locking Clip into the groove of the board. (Note: only use 1 Locking Clip per board, which will go in the middle of each board). Screw down approximately 2mm to hold the clips in place.







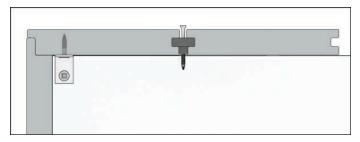
Ensure you have installed 1 (one) Locking Clip per board. Failing to install a Locking Clip will allow your boards to shift and come out of alignment.



NOTE: If you are installing on a steel frame, predrilling steel joists is necessary to avoid shearing screws during installation. The following table should be used as a guide to determine the size of drill bit needed.

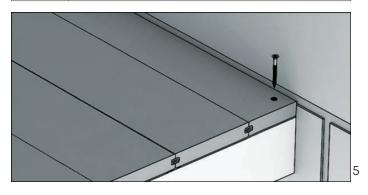
STEEL THICKNESS	DRILL BIT SIZE
1.5mm	3mm
1.5 - 2.4mm	3.5mm
2.4mm	3.75mm

2. Push the next board into position.



- 3. Repeat these steps and lay approximately 6-10 boards before screwing down properly (this is a guide only). Measure out from the 1st board to the last board to ensure that the boards are square.
- 4. Screw down this section of decking. Do not overtighten screws.
- 5. When securing the Locking Clip, ensure that the screw is tightened sufficiently so the teeth bite into the groove of the Ekodeck+ boards.
- 6. Repeat steps 1-5 until complete.
- 7. Once you reach the end of your deck, you may need to rip the last board down to fit. Secure the last edge of your board by top fixing. Be sure to pre-drill and countersink the board.

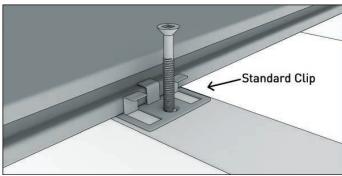
Joists	Recommended Screw
Timber	10g x 65mm 316SS countersunk screw
Steel	10g x 40mm countersunk screw suitable for steel

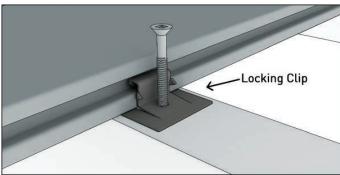


3mm QUICKFIX

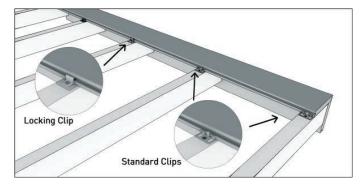
1. Insert Standard Clips and one single Locking Clip into the groove of the board. (Note: only use 1 Locking Clip per board, which will go in the middle of each board)



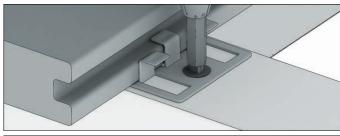


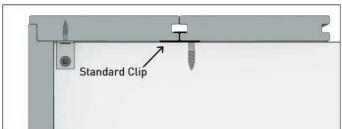


Ensure you have installed 1 (one) Locking Clip per board. Failing to install a Locking Clip will allow your boards to shift and come out of alignment.

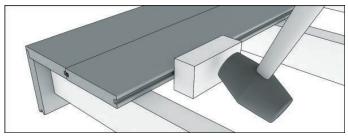


2. Screw down the clips ensuring they are tight and secure. You only need one screw per clip.



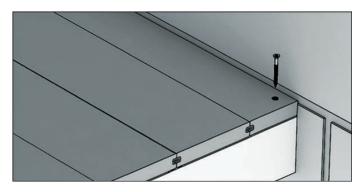


3. Gently push the next Ekodeck+ board into the clips, you may need to use a rubber mallet to seat the boards firmly in the clips.



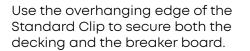
- 4. Repeat these steps until complete, periodically measuring out from the first board to ensure your deck is square.
- 5. Once you reach the end of your deck, you may need to rip the last board down to fit. Secure the last edge of your board by top fixing. Be sure to pre-drill and countersink the board.

Joists	Recommended Screw
Timber	10g x 65mm 316SS countersunk screw
Steel	10g x 40mm countersunk screw suitable for steel

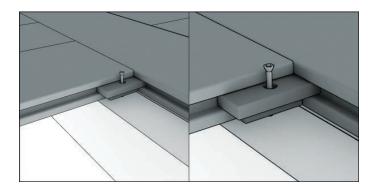


BREAKER BOARDS & PICTURE FRAMING 6mm QUICKFIX

To secure your breaker board or picture frame you can use Standard Clips.





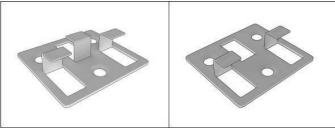


3mm QUICKFIX

To secure your breaker board or picture frame you can use one of two methods.

- NO 3mm
- Modifying Standard Clips to make them single sided.
- Using C-Clips.

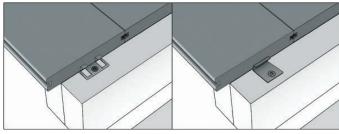
NOTE: A Standard Clip can be modified by using a punch to flatten or completely remove the single tab.



Standard Clip

Modified Standard Clip

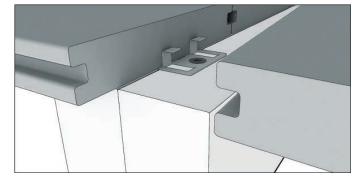
Install clips every 450mm.



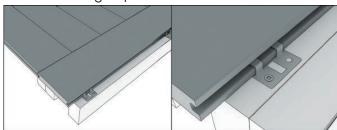
Modified Standard Clip

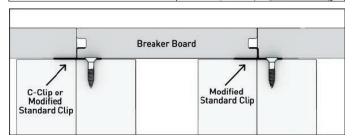
C-Clip

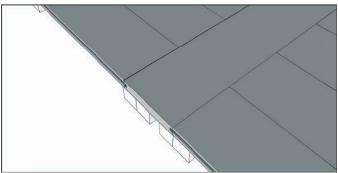
 You can now push your breaker board or picture frame board into place.



- If installing a picture frame board, secure the finishing edge of your board using brackets as seen in 'Finishing/Fascia Options. - Note: Brackets must be purchased seperately.
- If installing a breaker board and are continuing your deck, secure the second edge of your breaker board using a modified Standard Clip. Be sure to install a Locking Clip in the middle of the board.







 With your breaker board now installed, you can continue to lay the rest of your deck.

CLEANING YOUR EKODECK

It is recommended to clean your deck immediately after installation and periodically as you see fit:

- 1. Scrub the deck with hot water and dishwashing liquid using a stiff decking brush.
- 2. Rinse your deck a pressure washer is recommended.

Cleaning requirements will vary depending on product use, surrounding environment and weather exposure. We recommend a general clean is performed at least annually.



V1.4.20