



Ekodeck® Decking

Designer Series / Product Manual



No oiling, staining
or sealing



Tested & built
to last longer

25^{YRS}

Up to 25-year
warranty



ekodeck.com.au

Ekodeck® Decking / Designer Series

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


Ekodeck® Decking / Designer Series

PROFILES & COLOURS


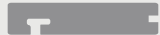





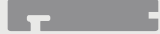



Colours

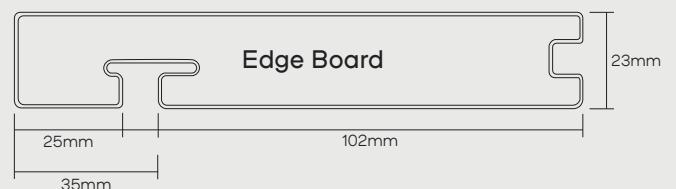
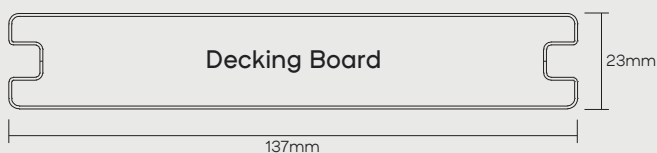


Decking Boards

COLOUR	SIZE	ITEM NO	PROFILE
 Alpine Ash	137*23*5400mm	0109384	
 Ironwood	137*23*5400mm	0109384	
 Backbeach	137*23*5400mm	0109382	
 Leatherwood	137*23*5400mm	0109382	
 Riverbank Red	137*23*5400mm	0109383	
 Estate Brown	137*23*5400mm	0109383	

Edge Boards

COLOUR	SIZE	ITEM NO	PROFILE
 Alpine Ash	137*23*5400mm	0200710	
 Ironwood	137*23*5400mm	0200713	
 Backbeach	137*23*5400mm	0200711	
 Leatherwood	137*23*5400mm	0200714	
 Riverbank Red	137*23*5400mm	0200715	
 Estate Brown	137*23*5400mm	0200712	



Ekodeck® Decking / Designer Series

PRODUCT INFORMATION

Read this first

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

Warnings

1. Ekodeck® Decking is a pre-finished product, use care when storing, handling and installing to avoid damage.
2. It is the sole responsibility of the homeowner, contractor or the installer to determine the specific requirements, effectiveness, suitability and safety with regard to any application or use of Ekodeck® products.
3. Ekodeck® Decking is not designed to be a freestanding product. It must be installed safely and correctly fixed down to a substructure.
4. The substructure must comply with all the relevant regulations and aspects of the Building Code of Australia.
5. Ekodeck® Decking should not:
 - A. Be used in a substructure application
 - B. Be applied directly to a solid surface such as concrete
 - C. Have a cantilever greater than 50mm
6. Any single piece of Ekodeck® Decking must be installed over at least 2 spans (i.e. 3 joists) to keep within the structural load bearing limits of its design.
7. Ekodeck® Decking must have sufficient gaps provided between boards and at joins and edges to allow for proper thermal movement and ventilation.

Important information - Bushfire compliance



Ekodeck® Designer Series has been tested in accordance with AS1530.8.1:2018 to achieve a BAL-19 rating. Ekodeck® Designer Series can be used in bushfire prone areas that have a bushfire attack level (BAL) of BAL-LOW, BAL-12.5 and BAL-19. Please ensure the substructure has been constructed as per AS3959:2009 requirements to ensure compliance. It is highly recommended that a copy of AS3959:2009 be obtained prior to construction in bushfire-prone areas.



Ekodeck® Designer Series boards were tested to AS1530.8.1 and achieved a BAL-19 rating using aluminium joists and 3mm Quickfix fastening system. Full test report available at ekodeck.com.au

Static electricity

All co-extruded composite decking, including Ekodeck® Designer Series can, under certain conditions, exhibit build-up of static electricity.

Low humidity and dry environmental conditions are the biggest contributing factors of static electricity build-up. Other factors include, but are not limited to, subframe materials, earthing and/or balustrading.

This phenomenon may be reduced by using an anti-static spray (such as ACL Staticide). These products are water based and may require additional applications after rain or other weather conditions. Anti-static mats or insulating touch points such as balustrades or door handles may also assist.

Generally, the static build-up tends to reduce over time as the boards wear in. Ekodeck® does not warrant against static build-up in Designer Series boards.

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Safety

Always use proper protective clothing and safety equipment.

Ekodeck® Decking boards are heavier than traditional timber. Always exercise precaution and care when lifting.

Storage & handling

Ekodeck® Decking boards must be:

- Supported at least every 600mm on a level plane.
- Laid flat especially during transportation and never at an angle.
- Never be dropped or 'dumped' when unloading.
- Stored on a flat, dry surface.
- Covered until it is time to use them for installation.



Carry this
side up

Install either side up



Natural variances & colour

Ekodeck® Decking is made by combining reclaimed timber with a mix of new and recycled plastics. It is designed to have a variation of colour and tone from one board/batch to another.



It is necessary to lay out your boards to ensure you have an even mix of both light and dark tones across the deck prior to cutting or installing to avoid large blocks of single tones. Boards cannot be exchanged or returned after they have been cut. If you do not accept the colour/finish of the board, do not cut or install it.



Ekodeck® Decking boards 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.

Surface finish & fibres

During manufacturing, Ekodeck® boards are sanded to give them a natural, textured look and feel. Residual fibres/hairs may be present on the boards because of this. Excessive scrubbing or pressure washing may exacerbate these fibres. These will wear off over time with product use and are not considered a product fault.

Slip rating

Ekodeck® Decking boards are supplied with a certified anti-slip rating as per AS4586:2013. Over time, dependent on traffic, environment and other external factors, the surface may wear. It is the responsibility of the owner to periodically test the boards to ensure anti-slip rating requirements are being met.

Surface protection

It is recommended to use surface protection on furniture and objects to avoid scratching or marking.

Pressure washing

Do not use a pressure washer on Designer Series decking boards. The use of a high-pressure washer could cause irreparable damage to your deck.

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PRODUCT INFORMATION

Gaps & spans

	Uniformly Distributed Actions	Concentrated Actions	Centre-to-centre joist spacing
Residential*	1.5kPa	1.8kN	450mm
Residential stairs & landings*	2.0kPa	2.7kN	400mm
Commercial*	2.0kPa	2.7kN	400mm
Min. ground clearance (with adequate drainage)			40mm
Min. ground clearance (without adequate drainage)			90mm
Min. side-to-side gap			Auto-spaced by clip
Recommended end gap			Refer to Expansion Gaps table
Edge Boards			Should be fully supported

*As per AS/NZS 1170.1. Refer to page 19 for more information on spans, loads and Residential and Commercial applications.

Ventilation

We recommend a minimum of 40mm ground clearance, so long as there is adequate drainage beneath the deck. Otherwise, we recommend a minimum of 90mm ground clearance.

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 trim at the same time to achieve a uniform length for all boards across your deck.

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® Decking.

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

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

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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 each end of your board, depending on board length and ambient temperature during installation.

		Ambient temperature during installation (°C)			
		10°C	20°C	30°C	40°C
Board length (m)	1m	2mm	1mm	1mm	1mm
	2m	2mm	1mm	1mm	1mm
	3m	2mm	1mm	1mm	1mm
	4m	3mm	2mm	1mm	1mm
	5.4m	3mm	2mm	1mm	1mm

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

Guidelines to best manage gaps

- During installation, if the board is warm to the touch or has been sitting in full sun (i.e. 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.
- Allow the boards to acclimatise to your site conditions. This allows your Ekodeck® to adapt to the ambient heat typical of your location.
- For each section of decking, leave your boards overlength. Fasten them down using Quickfix, then trim to length using a circular saw and straight edge to ensure all boards are the same length. This is best done after the boards have settled. (i.e. The following day after installation)

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® Decking boards.

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



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



Example of a picture frame design (recommended):

Mitre joints

When using a picture frame design on your deck, the corners of your picture framing boards can meet at an angled mitre joint.

To reduce the likelihood of gaps opening, we recommend reducing the end gap suggested by the *Expansion gaps* table by 2mm.

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 entire deck when using butt joints and boards of various lengths.

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End sealing

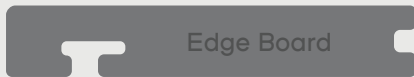
If installing around areas exposed to constant moisture, such as near swimming pools or spas, you must seal the ends with an appropriate clear, solvent-based paving or concrete sealer.

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INSTALLATION

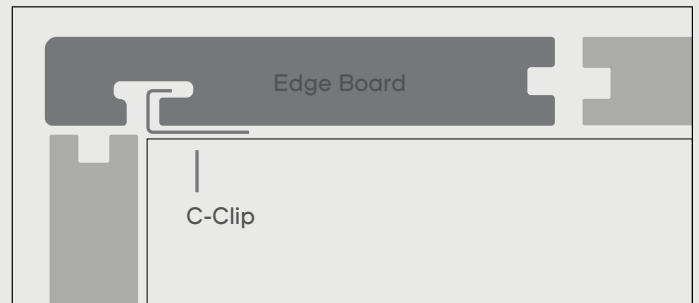
Edge board finishing

We recommend the use of Ekodeck® Designer Series Edge Boards for the edge of your deck, as well as steps. This ensures a clean finish.



Edge board installation

1. Install the leading edge of your Edge Board using C-Clips.
2. Ensure C-Clips are aligned correctly on the joists to achieve your desired overhang.
3. Install C-Clips on every joist, or every 450mm, using the supplied screws in the C-Clip pack.
4. Push Edge Board into C-Clips using the groove on the bottom of the board.
5. Continue to fasten your Edge Board and your deck using Quickfix - refer to 'Fastening Boards' section.

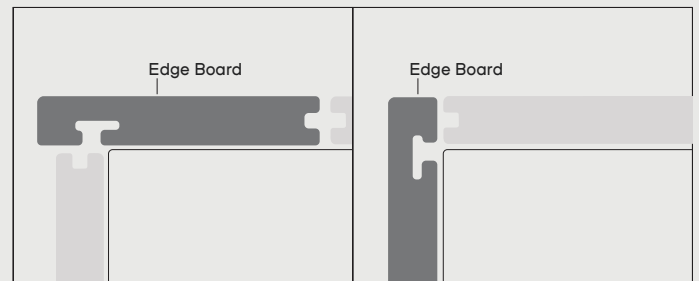


Edge board positioning

Position the Edge Board either horizontally or vertically, whichever your preference is.

Be sure to overhang the Edge Board enough to allow for a fascia to be set beneath it.

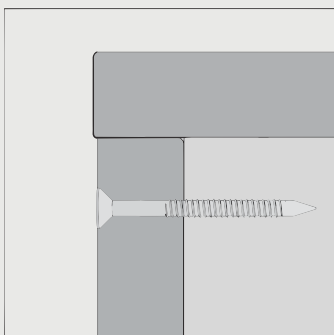
Over time, a vertical Edge Board may fill with debris - this is something to be mindful of.



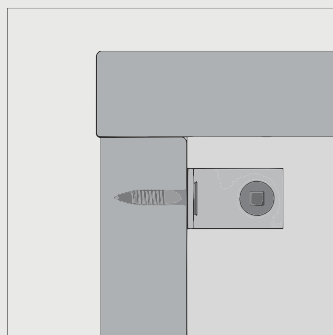
Fascia fixing options

See below various ways to fix your fascia board. Fascias should be fastened every 450mm.

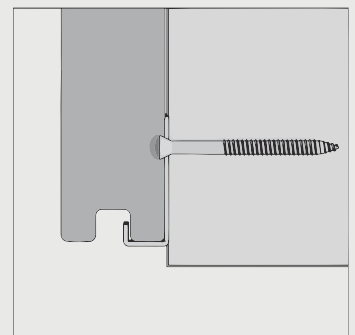
Face-fix



Angle bracket



C-Clip



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Prior to cutting & installing



It is necessary to lay out your boards to ensure you have an even mix of both light and dark tones across the deck prior to cutting or installing to avoid large blocks of single tones. Boards cannot be exchanged or returned after they have been cut. If you do not accept the colour/finish of the board, do not cut or install it.



Top-fixing

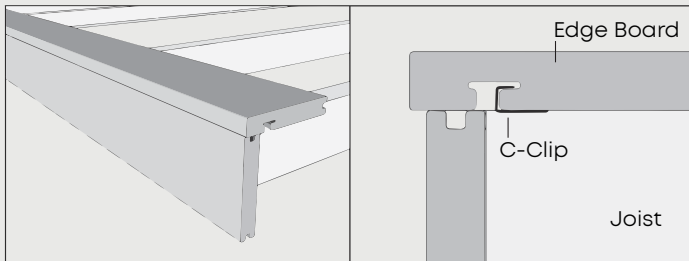
Do not top-fix the entire deck, only the fascia board or where absolutely necessary.

Top-fixing the entire deck will void your warranty.

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. To begin, install your Edge Board using C-Clips as set out in the Edge Board Installation section.



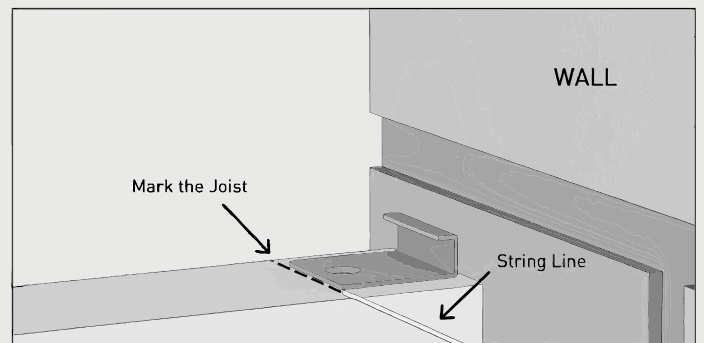
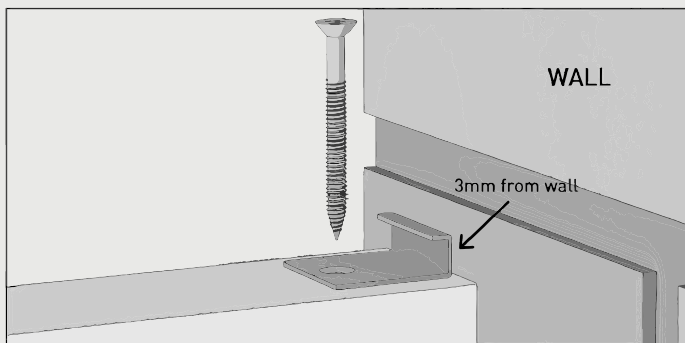
2. Consult the Fascia fixings options above and install your fascia boards if appropriate.

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

Starting from a wall

1. Position C-Clip on top of the first joist a minimum of 3mm from the wall and screw into place. Repeat on last joist.

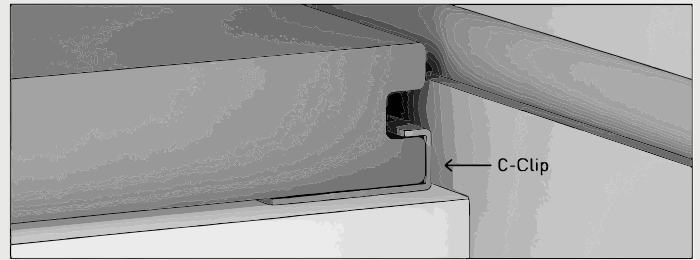
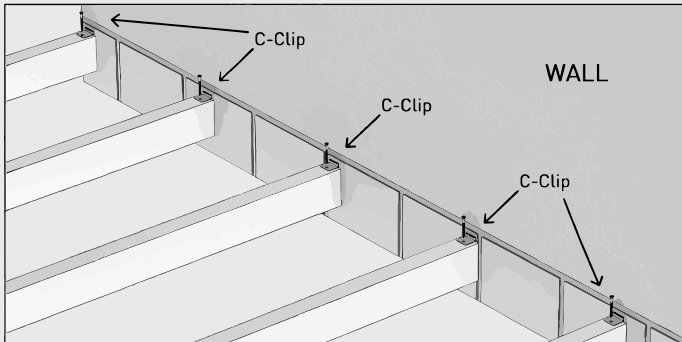
2. Run a string or chalk line from the front edge of the C-Clip between the first and last C-Clip and mark the remaining joists.



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- With the top of the joists now marked, install C-Clips on the remaining joists. If necessary, C-Clips can be placed on every second joist. Gently push the first Ekodeck board into the C-Clips. You may need to angle the board slightly to push into the C-Clips.
- You can now begin to fasten your boards using Standard and Locking Clips - refer to Fastening Boards section.

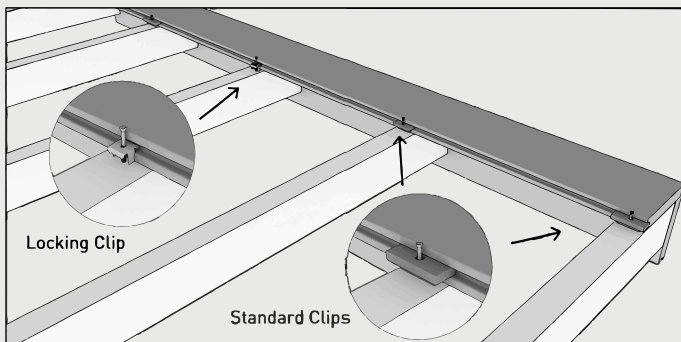
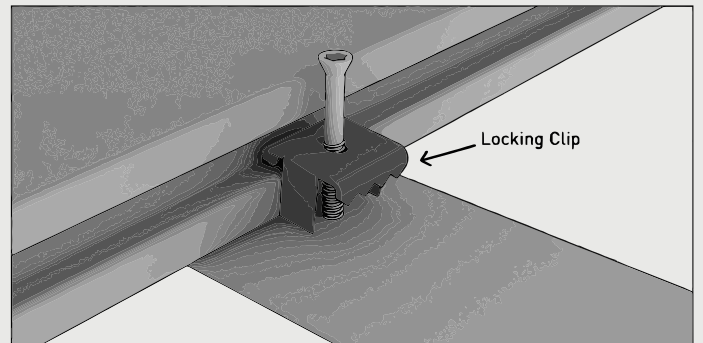
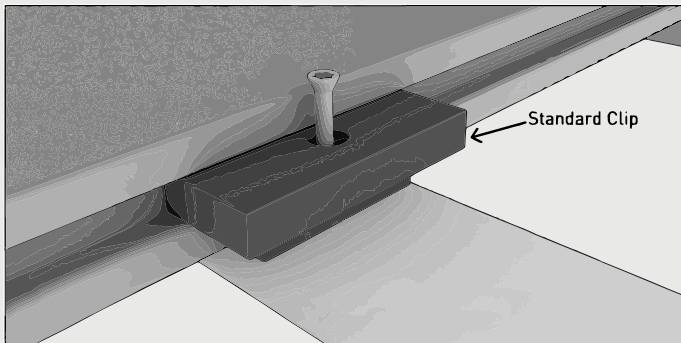


Fastening boards

Depending on which Quickfix system you are using, the fastening of your Ekodeck® boards will slightly differ.

6mm board spacing

- Insert Standard Clips and Locking Clip into the groove of the board. Note: you must use 1 (one) Locking Clip only per board, which is placed nearest the centre of each board. Screw down approximately 2mm to hold the clips in place.



Note: If installing on hardwood joists, it is recommended to predrill your joists to avoid shearing screws. If you are shearing screws, increase your predrill size.

If you are installing on a steel frame, predrilling steel joists is necessary. 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

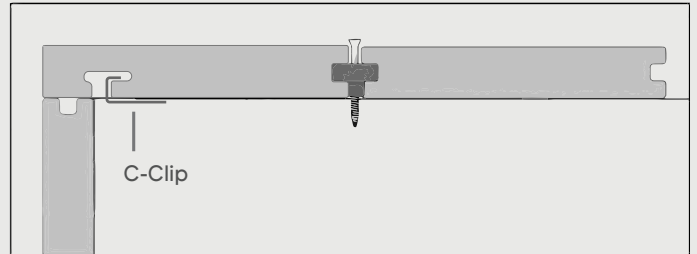
Ensure you have 1 (one) Locking Clip per board.

Failing to install a Locking Clip will allow your boards to shift and come out of alignment.

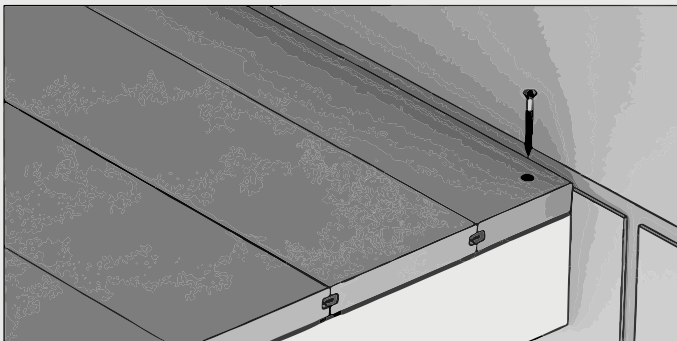
Ekodeck® Decking / Designer Series

INSTALLATION

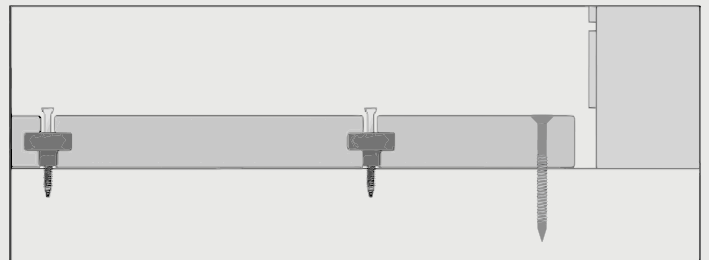
2. Push the next board into position.



3. Repeat these steps and lay approximately 6-10 boards before screwing down properly (this is a guide only). Measure out from the first board to the last board to ensure that the boards are square.
4. Screw down this section of decking. Do not overtighten screws. If the screws are pulling through the clip, you are over tightening the 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 will likely need to rip the last board down to fit. Secure the last edge of your board by top fixing. Be sure to pre-drill an oversized clearance hole, larger than the shank of the screws, countersink the board and fasten every 450mm.

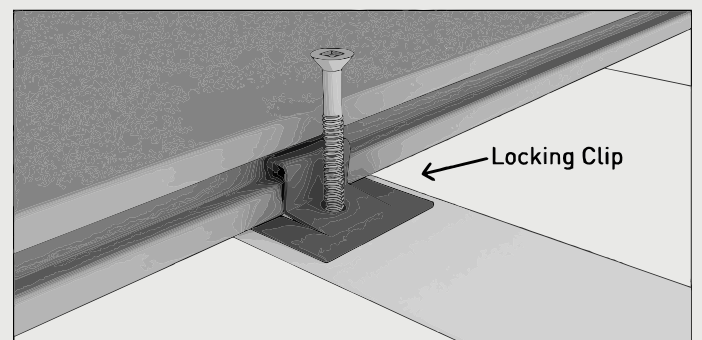
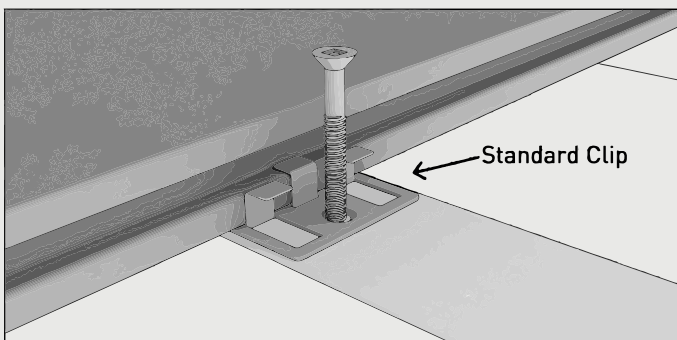


Joist material	Recommended screw
Timber	10g x 65mm 316SS countersunk screw
Metal	10g x 40mm countersunk screw suitable for metal



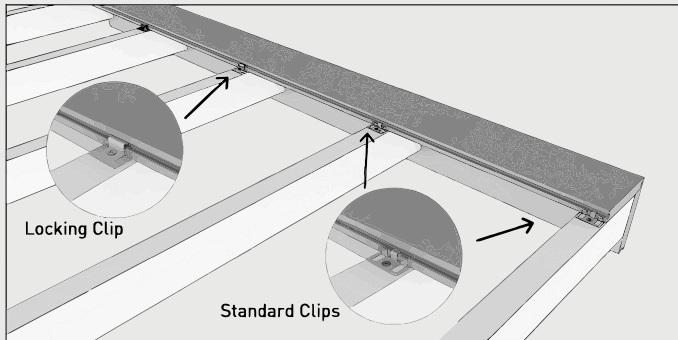
3mm board spacing

1. Insert Standard Clips and Locking Clip into the groove of the board. Note: you must use 1 (one) Locking Clip only per board, which is placed nearest the centre of each board. Screw down approximately 2mm to hold the clips in place.



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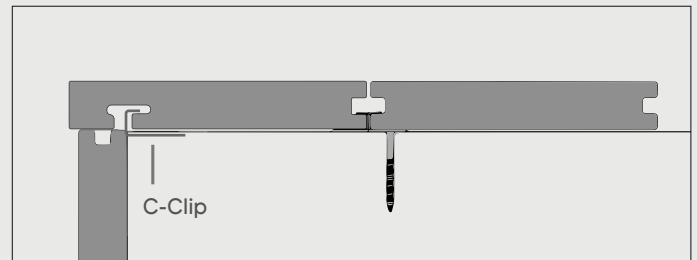
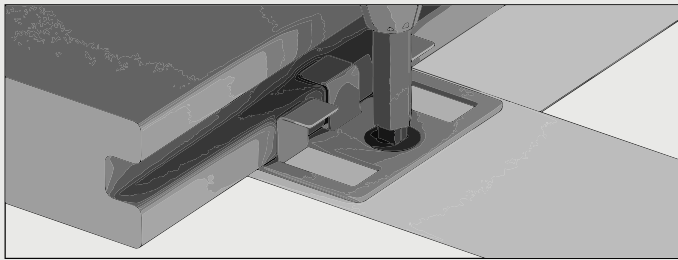
Ensure you have 1 (one) Locking Clip per board.

Failing to install a Locking Clip will allow your boards to shift and come out of alignment.

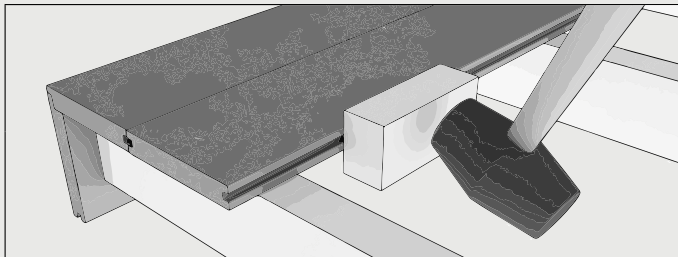
Note: If installing on hardwood joists, it is recommended to predrill your joists to avoid shearing screws. If you are shearing screws, increase your predrill size.

If you are installing on a steel frame, you may need to predrill.

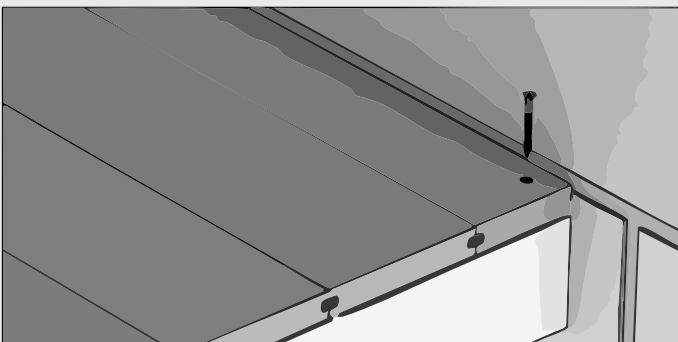
2. Screw down the clips ensuring they are tight and secure.



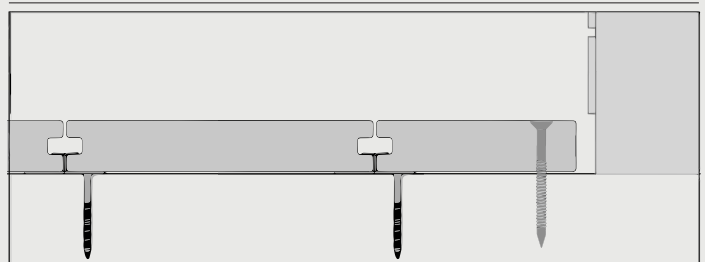
3. Push the next Ekodeck® board into the clips. You may need to use a rubber mallet and block to seat the boards firmly in the clips.



4. Repeat steps 1-3 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 will likely need to rip the last board down to fit. Secure the last edge of your board by top fixing. Be sure to pre-drill an oversized clearance hole, larger than the shank of the screws, countersink the board and fasten every 450mm.



Joist material	Recommended screw
Timber	10g x 65mm 316SS countersunk screw
Metal	10g x 40mm countersunk screw suitable for metal



Ekodeck® Decking / Designer Series

INSTALLATION

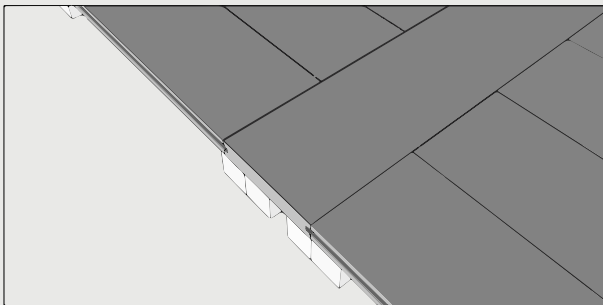
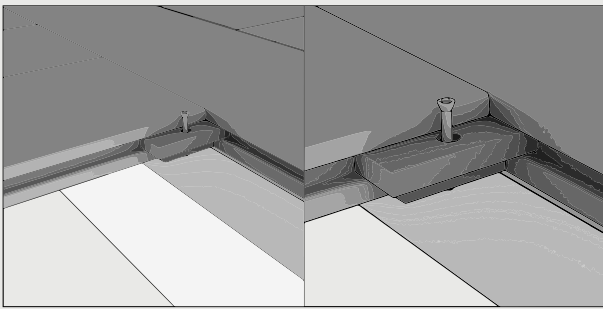
Breaker boards & picture framing

Depending on which Quickfix system you are using, installing breaker boards and picture frame boards will slightly differ.

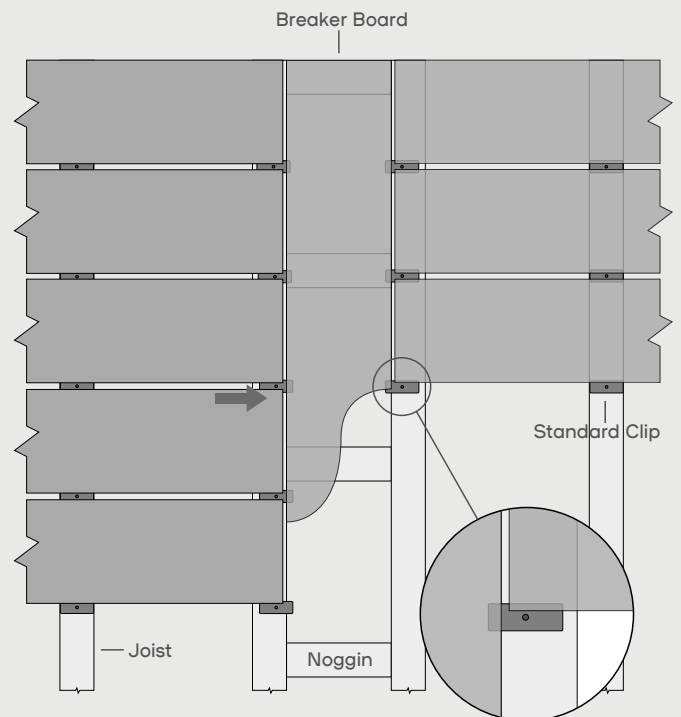
6mm board spacing

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

Use the overhanging (short) edge of the Standard Clip to secure the breaker board.



Suggested framework and clip placement

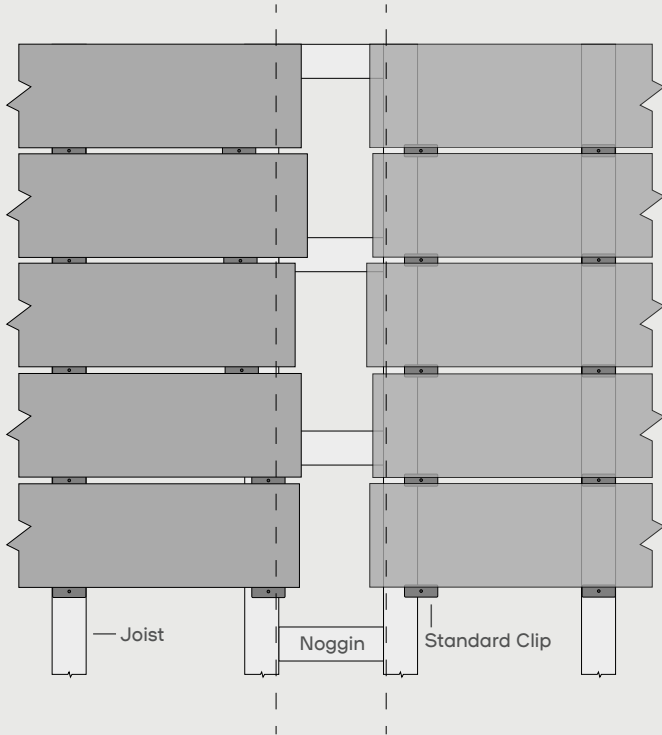


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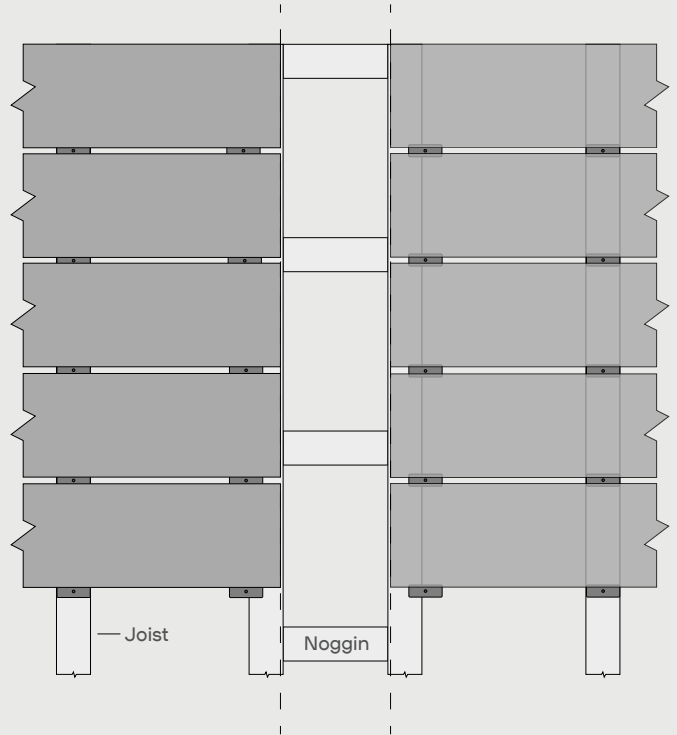
Step 1/4

Cut boards over-length. Install using Quickfix.
Leave last row of Standard Clips unfastened.



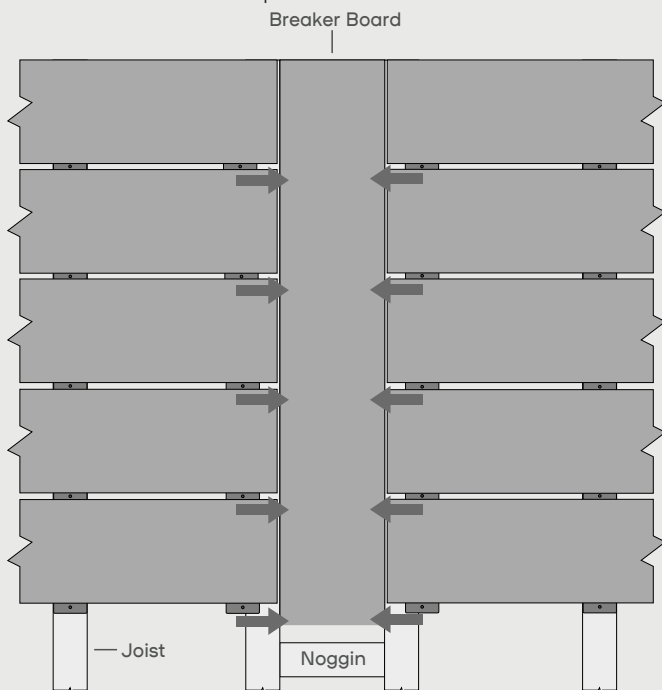
Step 2/4

Mark out breaker board location.
Trim boards to length using circular saw and straight edge.

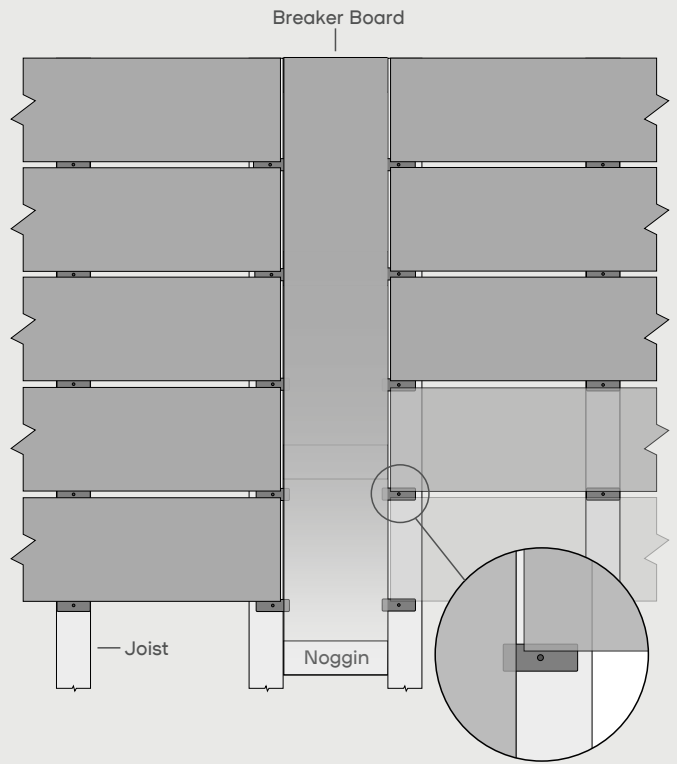


Step 3/4

Drop in breaker board.
Slide end of standard clips into breaker board and screw down.



Step 4/4



Ekodeck® Decking / Designer Series

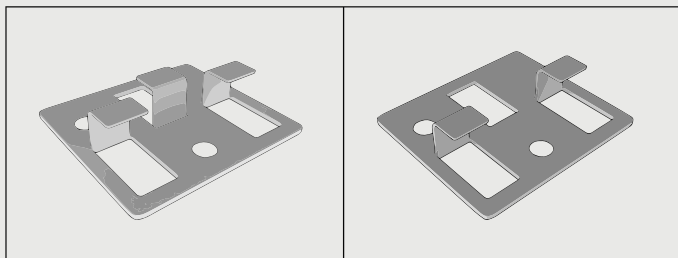
INSTALLATION

3mm board spacing

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

- Modifying Standard Clips to make them single sided.
- Using C-Clips.

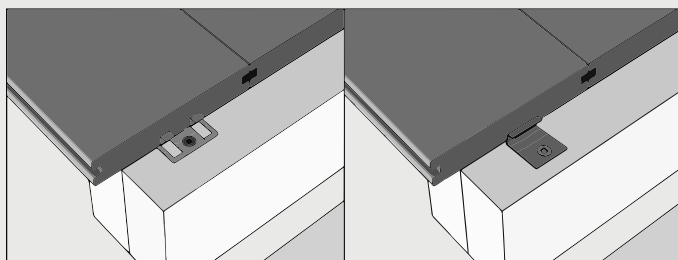
A Standard Clip can be modified by using a punch to flatten or completely remove the single tab



Standard Clip

Modified Standard Clip

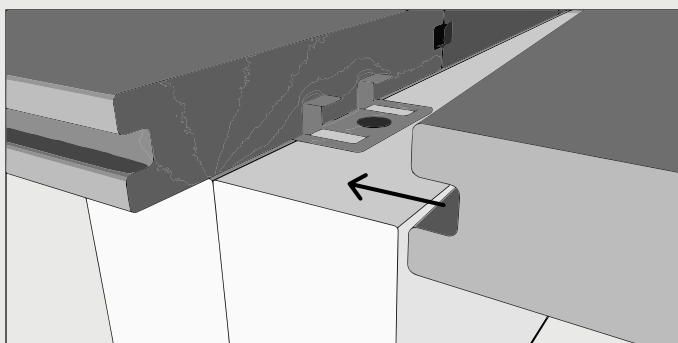
- Install clips every 450mm.



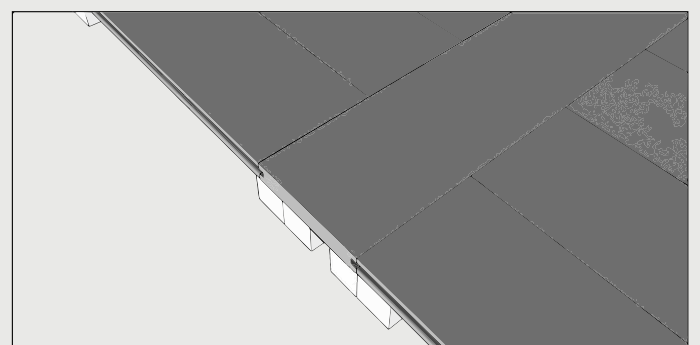
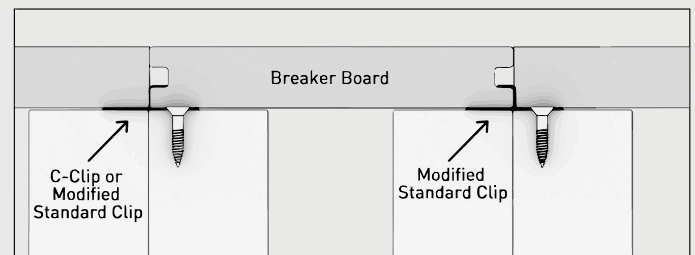
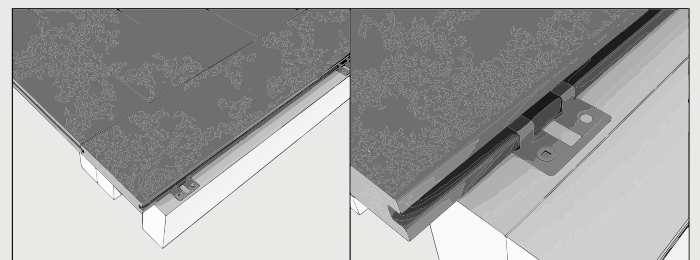
Modified Standard Clip

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.'
- 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.

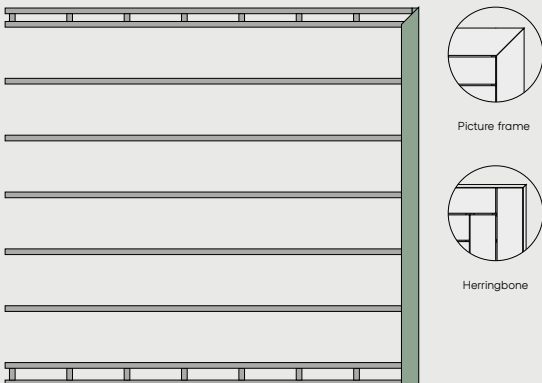
Ekodeck® Decking / Designer Series

INSTALLATION

Order of installation

Step 1: Mitre the corner of your first picture frame board and install.

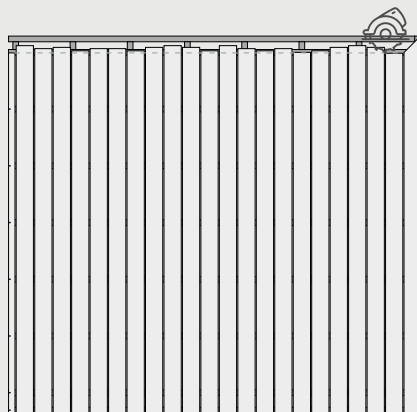
An alternative to better manage expansion and contraction is a herringbone corner.



Step 3: Trim decking boards to length all at once using a circular saw and guide.

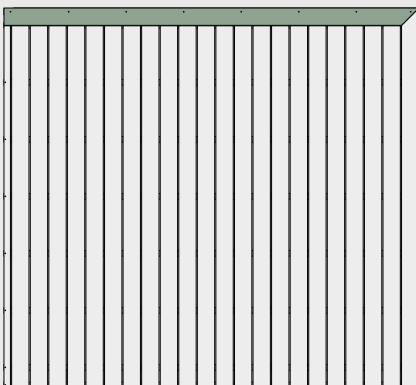
Handy Hint: Set the depth of your circular saw so as to not cut your joists.

Handy Hint: A length of Ekodeck® can be used as a straightedge to give you a straight cut.



Step 4: Mitre the corner of your final picture frame board and install.

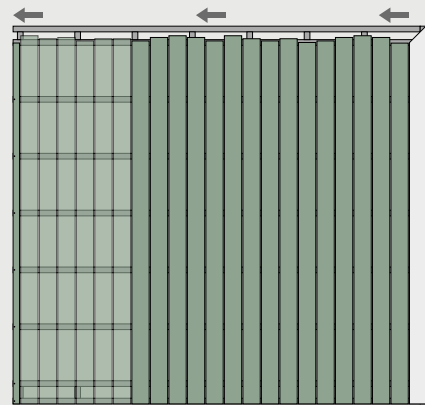
Note: You should be able to fasten the leading edge of your picture frame using C-Clips. Failing this, you may need to fix down the outside edge of the edge board by top fixing.



Step 2: Cut all your decking boards slightly over-length and install - moving from the outside edge

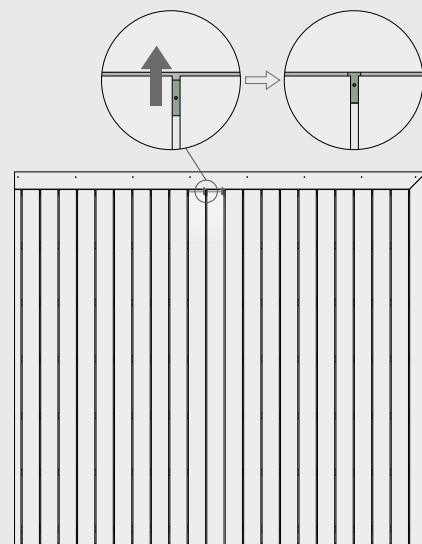
(where you just installed the framing board) and moving back towards the house.

The last board installed along the house will most likely need to be ripped down to fit, and will need to be top-fixed with screws every 450mm along the last edge.



Handy Hint: Cut the first and last boards to length, this ensures you can get your circular saw in position.

Step 5: Slide the ends of the Standard Clips into side of the framing board and screw down.



Ekodeck® Decking / Designer Series

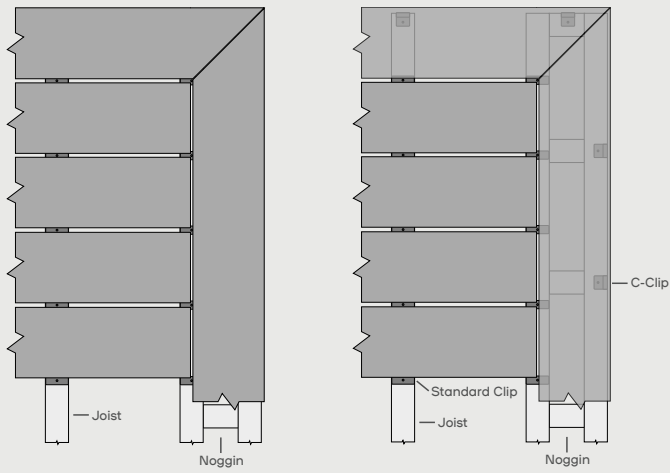
INSTALLATION

Finishing Options

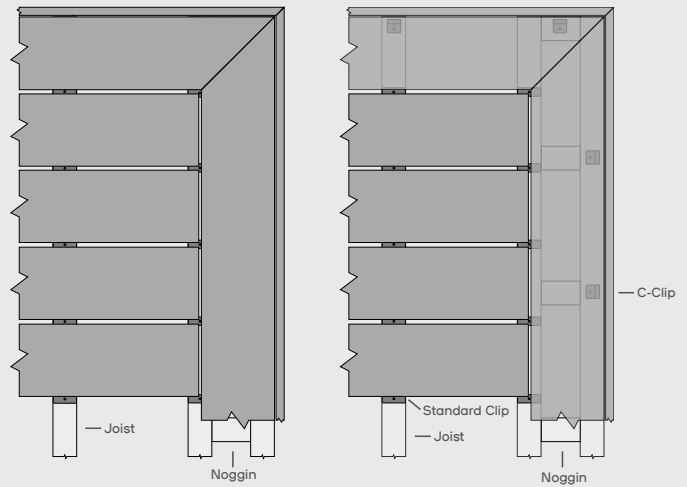
There are a variety of designs to choose from when it comes to finishing the corners and edges of your Ekodeck® Designer Series deck.

The following examples are shown using the 6mm Quickfix system.

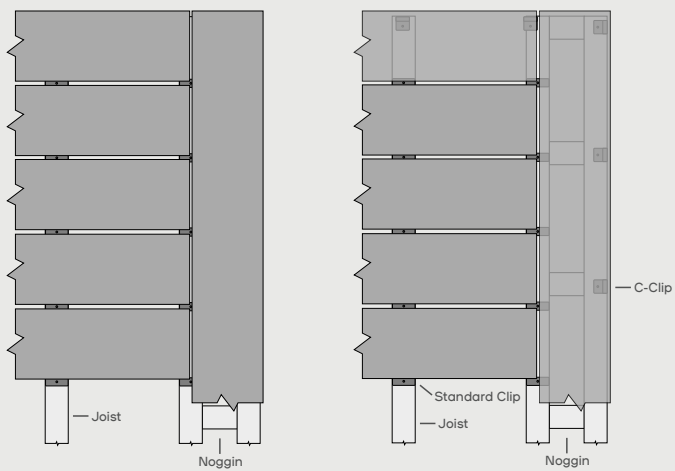
Picture framing



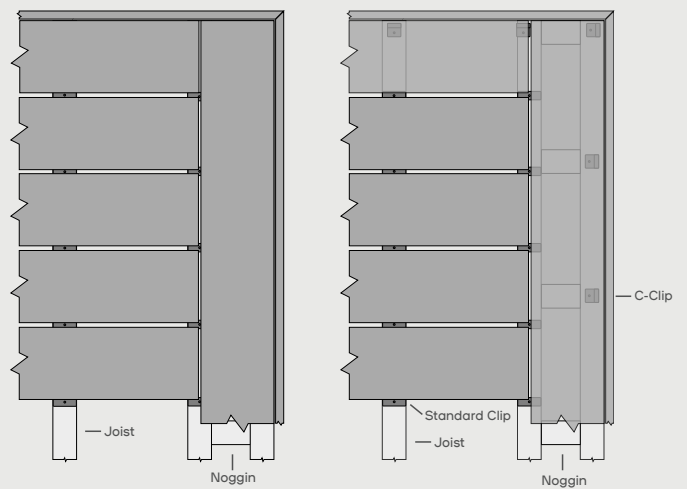
Picture framing with fascia board



Single border



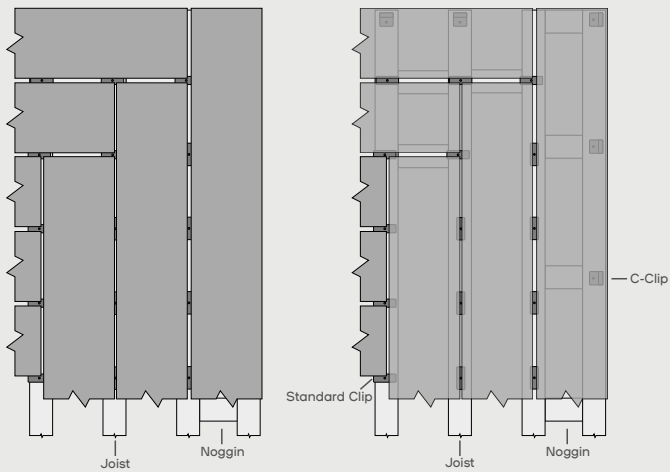
Single border with fascia board



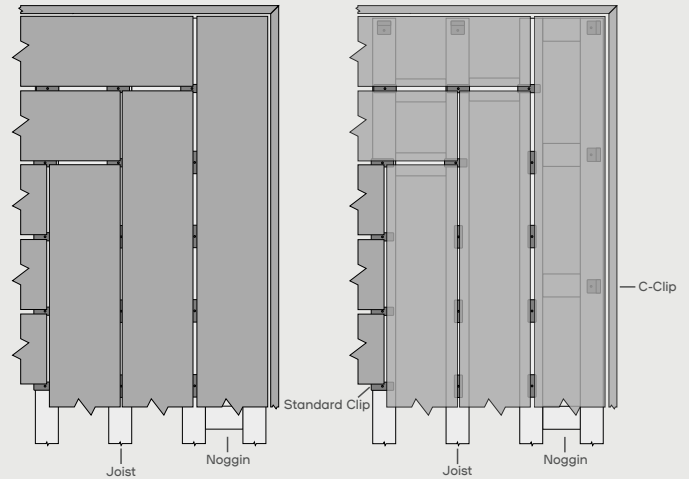
Ekodeck® Decking / Designer Series

INSTALLATION

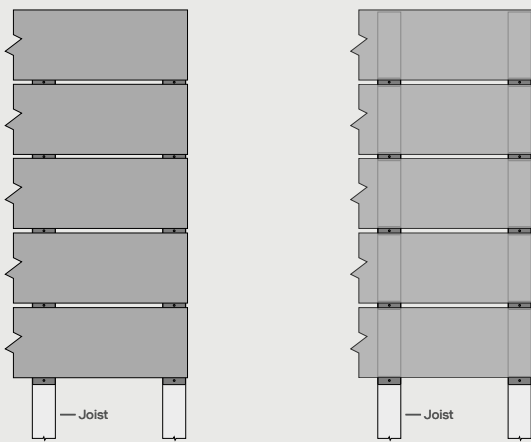
Herringbone detail



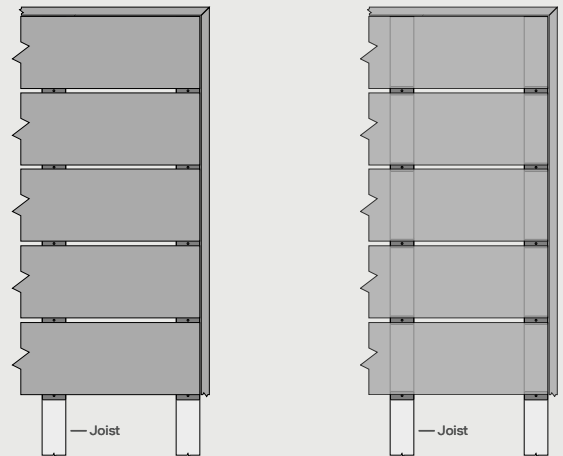
Herringbone detail with fascia board



No framing



No framing with fascia board



Ekodeck® Decking / Designer Series

TECHNICAL SPECIFICATIONS

TEST	STANDARD	RESULT					
CodeMark Certification	-	CM40388					
Global GreenTag™	-	Global GreenTag™ GreenRate Level C					
Structural Design: Concentrated Loads & Spans*	AS/NZS1170.0:2002		Uniformly Distributed Actions	Concentrated Actions	Joist Span		
		Residential	1.5kPa	1.8kN	450mm		
		Residential Stairs & Landings	2.0kPa	2.7kN	400mm		
		Commercial	2.0kPa	2.7kN	400mm		
Bushfire Rating (BAL)	AS1530.8.1:2018	Bushfire Attack Level (BAL) - 19					
Burning Characteristics	1. AS ISO 9239.1-2003	1. Critical flux (transverse): 9.7kW/m ² Critical flux (longitudinal): 5.8kW/m ² Smoke Production: 150%/minute					
	2. AS 1530.3:1999	2. Ignition Time (mins.): 10.8 Flame propagation time (s): 155 Heat release integral (Kj/m ²): 683.5 Ignitability Index (0-20): 9 Spread of Flame Index (0-10): 3 Heat Evolved Index (0-10): 10 Smoke Developed Index (0-10): 8					
Weight	-	20.3kg per 5.4m length / 3.76kg/m / 26.29kg/m ²					
Density	ASTM D792-13 Method B	1.201g/cm ³					
Coefficient of Linear Thermal Expansion	ASTM D696-08	3.19×10 ⁻⁵ cm/cm/°C					
Slip Resistance	1. AS4586:2013 Oil-wet inclining platform method	1. R10					
	2. AS4586:2013 Wet pendulum test method	2. P5					
Luminance Reflectance Value (LRV)	AS 1428.1-2009 Appendix B (also compliant with AS/NZS 1428.4.1-2009)	Alpine Ash	Ironwood	Leatherwood	Backbeach	Riverbank Red	Estate Brown
		In Dry: 19.10	In Dry: 10.73	In Dry: 14.45	In Dry: 24.21	In Dry: 9.46	In Dry: 8.42
		In Wet: 18.35	In Wet: 9.59	In Wet: 11.95	In Wet: 22.24	In Wet: 5.94	In Wet: 6.15
UV Resistance	ASTM G154, or EN 15534-1:2014 Section 8.1	720h, Grey Level = 4-5					
Weathering Test	ISO 4892-2:2013 cycle 1	After 720-hour test, there was no visual chalking on the surface					

*See page 20 for more information

Ekodeck® Decking / Designer Series

TECHNICAL SPECIFICATIONS

TEST	STANDARD	RESULT
Mould Resistance	ISO 16869:2008 Plastic Assessment of the effectiveness of fungistatic compounds in plastic formulations	0 (no growth)
Janka Hardness	ASTM D1037-12	10.78
Falling Mass Impact Resistance	BS EN15534-1:2014 + A1: 2017 Section 7.1.2.1 EN15534-4: 2014 Section 4.5.1	Type: Solid profile max/crack length (mm): no crack Max. Residual indentation (mm) 0.8
Abrasion/Wear Resistance	ASTM D4060-14	Mass/Weight loss, 40.5mg
Creep Recovery	ASTM D7031-17	Creep recovery: 84% (requirement >75%) = PASS
Reach	EU Reach Regulation N01907/2006 Article 33(1) Obligation to provide information of safe use	PASS

Ekodeck® Decking / Designer Series

ENGINEERING EVALUATION

ENGINEERING EVALUATION: EKODECK® DESIGNER SERIES DECKING BOARDS, 137MM X 23MM

This document serves as a report from a professional engineer in accordance with Clause A5G3(1)(e) of the National Construction Code 2022 Volumes One, Two & Housing Provisions pursuant to demonstrating that Ekodeck Designer Series, installed in accordance with the requirements detailed below contributes to a building or structure achieving NCC 2022 B1P1(2)(b) & H1P1(2)(b).

Deemed-to Satisfy clauses B1D3(b)(iii) reference AS/NZS 1170.1 for the determination of imposed actions. AS/NZS 1170.1 Table 3.1 provides reference values of imposed floor actions.

In all cases the design and use of Ekodeck® Designer Series must be independently verified, accounting for all relevant performance requirements, including, but not limited to, suitability for the particular application and strength of the supporting structure.

The Ultimate Limit State (ULS) & Serviceability Limit State (SLS) performance of Ekodeck® Designer Series have been verified based on:

- Testing in accordance with the principles of AS/NZS 1170 series at an Accredited Testing Laboratory (Reports 230608005SHF-001, GZHH00510151); and,
- Calculation of design capacities of the Ekodeck® Designer Series by a professional engineer in accordance with AS/NZS 1170.1, Appendix B; and,
- Comparison with the design action effects based on combinations of actions for strength and serviceability for the imposed floor actions provided in AS/NZS 1170.1, Table 3.1.

Ekodeck® Designer Series shall be installed in accordance with Ekodeck® Decking Designer Series / Installation Guide, V6.23 onto supports;

- with minimum bearing width of 45mm; and,
- with minimum support spacing / design concentrated action combinations, of;
 - 450mm/1.8kN, 400mm/2.7kN, 350mm/3.6kN, 300mm/4.5kN,
- with each board installed over at least two (2) spans.

Ekodeck® Designer Series is suitable for external decking application in accordance with the following AS/NZS 1170.1 Table 3.1 imposed floor actions and maximum support spacings.

Ekodeck® Decking / Designer Series

ENGINEERING EVALUATION

EKODECK® DESIGNER SERIES DECKING SYSTEM Performance to AS/NZS 1170.1:2002. T.3.1

Type of activity / occupancy for part of building or structure	Specific uses	Uniformly distributed actions (kPa)	Concentrated actions (kN)	Max. joist spacing c/c (mm)
A Domestic & residential activities (see also Cat C)				
A1 Self-contained dwellings	General areas, private kitchens and laundries in self-contained dwellings	1.5	1.8	450
	Balconies used for floor type activities in self-contained dwellings: (a) less than 1m above ground level (b) other	1.5	1.5kN/m run along edge	450
A2 Other	Stairs ⁽²⁾ and landings in self-contained dwellings.	2.0	2.7	400
	Balconies used for floor-type activities with community access.	Same as areas providing access but not less than 4.0	1.8	450
B Offices & work areas not covered by elsewhere				
	Balconies used for floor-type activities.	Same as areas providing access but not less than 4.0	1.8	450
C Areas where people may congregate				
C1 Areas with tables	Public, institutional & communal dining rooms & lounges, cafes & restaurants ⁽⁵⁾	2.0	2.7	400
C2 Areas without obstacles for moving people	Balconies used for floor-type activities.	Same as areas providing access but not less than 4.0	1.8	450

AS/NZS 1170.1, Table 3.1 Notes - Design and Installation:

- (1) for AS/NZS 1170.1 T.3.1 domestic & residential activities, 1.8 concentrated action shall be applied over an area not less than 350mm² (Refer to Note 1, AS/NZS 1170.1:2002, Table 3.1); and, 2.7kN concentrated actions, shall be applied over an area not less than 0.01m² (Refer to AS/NZS 1170.1:2002, Cl.3.3(b)).
- (2) Where a stair tread or landing is structurally independent of the adjoining elements, it shall be capable of withstanding a line load of 2.2kN/m of span of tread or landing. Boards shall be fully supported at stair treads or landings.
- (5) Fixed seating is seating where the removal of the seating and the use of the space for other purposes is not likely.

Analysis Notes:

- a) ULS strength combination 1.2G+1.5Q.
- b) Design governed by serviceability deflection from concentrated action on a single board.
- c) SLS deflections for distributed & concentrated actions G+ψQ (ψ=0.7).

Ekodeck® Decking / Designer Series

ENGINEERING EVALUATION

-
- d) Recognition & acceptance of deflection is at the discretion of the designer/user. Deflections are limited to; 2.7mm, SPAN/150 for 1.8kN action; 2.7mm, SPAN/132 for 2.7kN action.
 - e) Floor vibration deflection limited to 2mm for 1.0kN point load & max. support spacing 450mm.
 - f) Modelled as 2-span continuous beam, each board supported on 3-joists.
 - g) Mean tested values of MOE and MOR with Material Reduction Factor = 1.1.
 - h) A Creep Factor of 4.0 is assumed, the long-term deflection from a significant concentrated action can be up to 4-times the short-term deflection and are best located over supports rather than at mid-span of the boards.

The analysis performed covers only those matters and products listed and excludes any other matter or product. The information presented in this report is valid for the shortest of the following periods:

- Until the product/system becomes modified in any way; or
- Until superseded by more recent technical information or by other certification; or
- Until Installation Guide, V6.23 is superseded; or
- Until the particular referenced parts of the NCC are superseded in the NCC or in State or Territory Building Regulations; or
- Until the particular referenced Standards are superseded.

Ekodeck® Decking / Designer Series

CARE & MAINTENANCE

Overview

Ekodeck® Designer Series is not a self cleaning product.

It will require periodic cleaning, especially in undercover or alfresco areas.

Cleaning requirements of your Ekodeck® Designer Series product will vary depending on product use and weather exposure. Ekodeck® Designer Series can stain, especially if not cleaned regularly.

Whilst Ekodeck® Designer Series' Durashell™ coating resists most stains, we still recommend foreign substances be cleaned off immediately to avoid potential risk of staining or discoloration.

This guide will give you some basic principles that will help you maintain the natural beauty of your Ekodeck® Designer Series.

Warnings

- Do not use a pressure washer on your deck.
- Do not sand your deck.

Doing so can cause irreparable damage to your deck.

Surface Protection

It is recommended to use surface protection on furniture and objects to avoid scratching or marking your Ekodeck®.

This product is not impervious to scratching.

Slip Rating

Ekodeck® Decking boards are supplied with a certified anti-slip rating as per AS4586:2013.

Over time, dependent on traffic, environment and other external factors, the surface may wear.

It is the responsibility of the owner to periodically test the boards to ensure anti-slip rating requirements are being met.

General Clean

A **General Clean** is essential immediately after installation to remove surface debris from transport and installation, and periodically as you see fit:

1. Wash the deck with warm water and dishwashing liquid using a soft-bristled indoor broom, moving in the direction of the grain.
2. Rinse your deck thoroughly - a low pressure garden hose is recommended.
3. For best results, push any remaining water off the deck. A squeegee is recommended.

We recommend a **General Clean** is performed at least annually to minimise potential surface oxidation.

Note: Do not use a high-pressure washer as it could cause irreparable damage to your deck.

Stubborn Stains

If you are left with some stubborn stains after a **General Clean**, using a stain remover may be necessary.

We recommend the use of an aerosol car/engine degreaser to remove oil-based stains. Spray the affected area and lightly scrub with a soft cloth to remove the stain.

Follow with a **General Clean** to wash away the degreaser, being sure to apply a mixture of dishwashing liquid and warm water to your deck and let sit for 15 minutes before cleaning.

This product is not impervious to staining.

Ekodeck® Decking / Designer Series

CARE & MAINTENANCE

Mould

Mould is often caused by a surrounding environment of constant moisture and shade. A dirty deck will also promote the growth and spread of mould.

If mould grows on your Ekodeck Designer Series, we recommend the use of **30 Seconds Mould Off** to remove it.

It is recommended to clean your deck more regularly if mould reoccurs.

Weathering

Ekodeck® is a colour-fast and UV-stabilised product that will not lose its colour.

Like any outdoor building material, there may be a slight colour shift upon initial exposure to UV. This may be noticeable in areas where pots, mats or other furniture has been left for extended periods of time. This is to be expected and is not a product fault.

Painting, Oiling or Sealing

We do not recommend the use of any oils, stains, sealants, paints or any type of coating on Ekodeck®.

Any coatings applied to an Ekodeck® product are done so at own risk.

Ekodeck® Decking / Designer Series

WARRANTY

EKODECK DESIGNER SERIES

WARRANTY

MANUFACTURER'S WARRANTY (WARRANTY AGAINST DEFECTS)

1. AUSTRALIAN CONSUMER LAW (IF APPLICABLE)

- 1.1 Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
- 1.2 We offer this warranty in addition to your other legal rights and remedies. This warranty does not exclude, restrict or modify any condition, warranty, right or remedy implied by law, including the Australian Consumer Law which cannot be excluded, restricted or modified.

2. DEFINITIONS

- 2.1 The following terms have the following corresponding meaning:
- "Application"** means either Commercial Application or Residential Application as applicable.
- "Australian Consumer Law"** means Schedule 2 to the *Competition and Consumer Act 2010 (Cth)*.
- "Authorised Purpose"** includes, as determined by Ekodeck in their sole discretion, the following:

- (a) installation of the Product in accordance with the applicable Ekodeck Installation Guide and Ekodeck Engineering Evaluation Certificate; and or
- (b) use of the Product in a Residential Application or a Commercial Application; and or
- (c) compliance with Ekodeck's Care & Maintenance Guide.

"Care & Maintenance Guide" means the care & maintenance procedures published by Ekodeck on Ekodeck's website: www.ekodeck.com.au

"Commercial Application" shall refer to any use of the Product in commercial enterprise and in circumstances that do not fall within the definition of Residential Application.

"Defect" means a defect in the design, the workmanship, or the materials or a failure of the whole or part of the Product.

"Defective Product" means a Product that suffers from a Defect.

"Ekodeck" means Ekologix Australia Pty. Ltd. ACN 133 471 619 or any trading entity of Ekodeck.

"Ekodeck Engineering Evaluation Certificate" means the engineering certificate published by Ekodeck on Ekodeck's website: www.ekodeck.com.au

"Installation Guide" means the Product installation instruction and procedures published by Ekodeck on Ekodeck's website: www.ekodeck.com.au

"Product" means the product to which this Manufacturer's Warranty is attached when originally purchased from an authorised Ekodeck distributor.

Ekodeck® Decking / Designer Series

WARRANTY

"**Purchaser**" means any original end user of the Product who purchased the Product for an Authorised Purpose from an authorised Ekodeck distributor.

"**Residential Application**" shall refer to the use of the Product at a natural person's domicile and where the Product was purchased solely for personal, domestic or household use.

"**Term**" means a maximum period of 10 years or 25 years, as applicable, calculated from the date of purchase of the Product as stated on your receipt or invoice, subject to compliance with Ekodeck terms and this Warranty.

3. THE WARRANTY

3.1 This Warranty is not transferable; it applies only to the Purchaser that purchased the Product from the authorised Ekodeck distributor, as determined by Ekodeck.

3.2 Ekodeck warrants to the Purchaser that the Product when used for an Authorised Purpose:

- 3.2.1. is of merchantable quality;
- 3.2.2. is free from Defects;
- 3.2.3. is fit for purpose;
- 3.2.4. complies with legislative requirements at the time of purchase; and
- 3.2.5. shall not split, rot, splinter or suffer structural damage.

(Hereafter collectively referred to as the "**Warranty**").

3.3. The Warranty commences on the date that the Purchaser purchases the Product and expires on the following corresponding date:

3.3.1. Ten (10) calendar years from the date of original purchase by a Purchaser of the Product used in a Commercial Application; or

3.3.2. Twenty-five (25) calendar years from the date of original purchase by a Purchaser of the Product used in a Residential Application.

(Hereafter collectively referred to as the "**Warranty Period**").

3.4. Ekodeck, acting reasonably, will determine whether the Product was used in a Residential Application or Commercial Application having regard to the Claim.

4. WARRANTY CLAIM PROCEDURE

4.1. During the Warranty Period, the Purchaser must provide written notification together with supporting documents to Ekodeck within 30 days from the Purchaser discovering the Defect ("**Notice**").

4.2. The Notice must include:

- 4.2.1. details with respect to the application of the Product;
- 4.2.2. a clear description of the alleged Defect;
- 4.2.3. photographs of the alleged Defect;
- 4.2.4. quantity of the Product claimed to be defective; and
- 4.2.5. proof of original receipt (or other evidence displaying the date of purchase, with such further evidence to be to the reasonable satisfaction of Ekodeck).

(Hereafter collectively referred to as a "**Claim**").

Ekodeck® Decking / Designer Series

WARRANTY

- 4.3. Upon receipt of the Claim, Ekodeck will contact the Purchaser as soon as practically possible to investigate the Claim, where Ekodeck will seek to establish the cause of the Claim.
- 4.4. If a Defect is found, Ekodeck may, at its sole discretion, repair the Defective Product, supply new or like-for-like board, parts or components to replace the Defective Product (or part thereof). If an identical part or component is not available, Ekodeck may repair or supply parts and components of similar quality, grade and composition. The provision of replacement boards relates only to the supply of product and does not include any costs associated with removal, disposal, or installation.
- 4.5. In addition to the rights of Ekodeck in clause 4.4 of this Warranty, Ekodeck may, at its sole discretion, elect to refund all or part of the purchase price paid by Purchaser for the Defective Product.
- 5. LIMITATIONS AND EXCLUSIONS TO WARRANTY**
- 5.1. Where a Defect arises due to mould or mildew, the Warranty Period is limited to two (2) years from the Date of Purchase, irrespective of any other provision in this Warranty.
- 5.2. This warranty does not cover installation and or use of the Product for any purpose that is not an Authorised Purpose.
- 5.3. For the purpose of this Warranty, the following matters are excluded from the definition of a Defect:
- 5.3.1. improper installation, maintenance or handling of the Product and/or failure to abide by Ekodeck's installation or maintenance guidelines, including but not limited to improper gapping;
 - 5.3.2. use of the Product in an application not recommended by Ekodeck's guidelines and applicable codes or standards;
 - 5.3.3. movement, distortion, collapse or settling of the ground or the supporting structure on which the product is installed;
 - 5.3.4. any act of God (including flooding, earthquake, lightning and any other naturally occurring environmental or other disaster);
 - 5.3.5. staining from foreign substances (including mould, mildew, dirt, grease, oil and any other substance);
 - 5.3.6. improper storage, abuse or neglect of the Product by Purchaser;
 - 5.3.7. overloading;
 - 5.3.8. ordinary wear and tear (including natural occurring change of colour associated with time and or exposure to natural elements);
 - 5.3.9. minor splits or cracking around screws;
 - 5.3.10. any natural colour variance in the Product(s);
 - 5.3.11. any cutting of the Product that compromises the structural integrity of the Product; or
 - 5.3.12. using the Product beyond the capabilities associated with the applicable Australian Standard.

Ekodeck® Decking / Designer Series

WARRANTY

- 5.4. This Warranty does not extend to cover:
- 5.4.1. costs associated to remove any Defective Product from the Purchaser's premises, or the location of the Product;
 - 5.4.2. any charges incurred by the Purchaser in returning any defective product to Ekodeck or in notifying Ekodeck of the alleged defective product;
 - 5.4.3. costs associated with installing any replacement product;
 - 5.4.4. costs associated with making a claim under this Warranty, including costs such as postage and handling; and
 - 5.4.5. any other reasonably foreseeable costs incurred.
- 5.5. Ekodeck board dimensions and colour are subject to normal manufacturing variations and tolerances. Reasonable variances, as determined by Ekodeck, in Product dimensions and colour are not considered a defect under this Warranty and are specifically excluded. Due care should be taken when installing Ekodeck Products to allow for such variance.
- 5.6. The maximum value of any Claim of any one claim or total of all claims made by a Purchaser with respect to the purchase of the Products is limited to the dollar equivalent of the percentages referred to in the below table:

Maximum Value of all or any Claim Amount	Commercial Application	Residential Application
	Claim Period	Claim Period
100%	Purchase to end of the 5 th year*	Purchase to end of the 10 th year*
80%	6 th year	11 th - 13 th years
60%	7 th year	14 th - 16 th years
40%	8 th year	17 th - 19 th years
20%	9 th year	20 th - 22 nd years
10%	10 th year	23 rd - 25 th years

* If the Product was purchased on 1 July 2025, the 0-5 years Claim Period would run from 1 July 2025 to 30 June 2030.

6. GENERAL CONDITIONS

- 6.1. Ekodeck® or any of its affiliated employees or agents will not be liable for any direct, indirect, special or consequential loss or damage arising out of the use of, or handling of any Ekodeck Product whatsoever, including any direct, indirect, special or consequential loss or damage suffered as a result of the negligence of Ekodeck, except those which cannot be excluded by law.

7. SEVERABILITY

- 7.1. If any term of this Warranty is held to be illegal, void or unenforceable in a jurisdiction, then:
- 7.1.1. where the term can be read down so as to give it a valid and enforceable operation of a partial nature, it must be read down to the extent necessary to achieve that result, and

Ekodeck® Decking / Designer Series

WARRANTY

7.1.2. in any other case the term must be severed from this Warranty for that jurisdiction in which event the remaining terms operate as if the severed provision had not been included.

8. CONTACT INFORMATION

8.1 Ekodeck can be contacted at:

Business address: Unit 1, 20-26 Sabre Drive
Port Melbourne, Victoria
Australia 3207

Phone: +61 3 9639 7774

Email: info@ekodeck.com.au