EKODECK®

# Ekodeck® Castellated Panel

## Product Manual

No oiling, staining or sealing

UV Stabilised - Won't fade to grey

15 year warranty

ekodeck.co.nz

# Ekodeck® Castellated Panel

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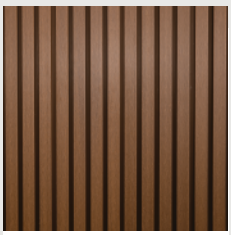
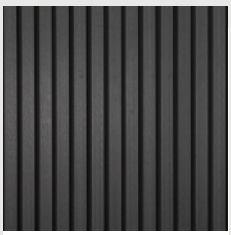
# Ekodeck® Castellated Panel

PROFILES & COLOURS

## Colours



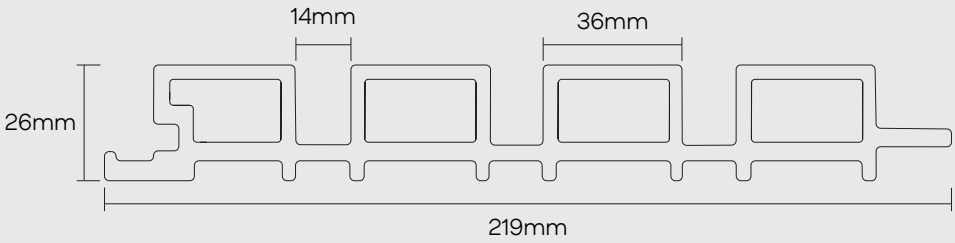
Hazelwood



Carbon

## Castellated Panels

| COLOUR | SIZE | ITEM NO | PROFILE |
|---|---|---|---|
| Hazelwood | 219×26×1800mm | 0745747 | |
| Carbon | 219×26×1800mm | 0745746 | |



# Ekodeck® Castellated Panel

PRODUCT INFORMATION

## Read this first

Being a composite product, Ekodeck® Castellated Panels behave and have different characteristics to timber. To achieve a safe and long lasting Ekodeck® Castellated Panel installation, it is important to read the following guide in full.

## Warnings

1. It is the sole responsibility of the homeowner, contractor or the installer to determine the specific requirements, effectivenes[SS], suitability and safety with regard to any application or use of Ekodeck® products.
2. Ekodeck® Castellated Panels are not designed to be a freestanding product. They must be installed safely and correctly to fixed posts/rails.
3. The posts/rails must comply with all the relevant regulations and aspects of the Building Code of New Zealand. All supports must be securely anchored to the ground (not floating).
4. Ekodeck® Castellated Panels must be mechanically fastened to each support. Any single piece of Ekodeck® Castellated Panel must be installed over at least 2 spans (i.e. 3 posts/rails).
5. Ekodeck® Castellated Panels should not:
   A. Be used as a structural or load bearing member.
   B. Be used in any potentially stressed situation such as a security or safety balustrade or decking.
   C. Be applied directly to a solid surface such as concrete or brick walls.

Carry this side up

Install this side

## Safety

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

## Natural variances & colour

Ekodeck® Castellated Panels are made by combining reclaimed timber with a mix of new and recycled plastics. They are designed to have a variation of colour and tone from one panel/batch to another. Differences in colour between panels is to be expected.
It is recommended to purchase all materials required for your project at one time.

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

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

## Light Refraction

In rare occurrences, sunlight can refract through glass or perspex creating a magnifying effect, whereby concentrated light and heat is focused on the product surface. This may lead to discolouration or damage.

This is not considered a product fault.

# Ekodeck® Castellated Panel

PRODUCT INFORMATION

## Cutting

For best results, use hardwood blades.

When using a drop saw we recommend a 60-80 tooth blade for cutting.

For best results, it is recommended to trim all panels to length once fully fastened using a straight edge and circular saw. This ensures all panels are the same length for a clean finish.

## Thermal expansion & contraction

Ekodeck® expands and contracts 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® Castellated Panels.

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.
- **Panel position:** If the panels are in direct sun light or part shade etc.
- **Panel length:** The longer the panels, the more they will expand and contract.
- **Fully fastened panels:** You will notice less movement in the panels once they are fully installed/fastened to the supports.

## Expansion gaps

It is important to take Thermal Expansion & Contraction into account when installing your panels.

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

| | | Ambient temperature during installation (°C) | | | |
|---|---|---|---|---|---|
| | | 10°C | 20°C | 30°C | 40°C |
| Panel length (m) | 1m | 2mm | 1mm | 1mm | 1mm |
| | 2m | 2mm | 2mm | 1mm | 1mm |
| | 3m | 3mm | 3mm | 2mm | 1mm |
| | 3.6m | 4mm | 3mm | 3mm | 1mm |

e.g. If temperature during installation is 20°C, the recommended end gap for a 3.6m panel is 3mm.

## General installation requirements

Allow the panels to acclimatise to your site conditions. This allows your Ekodeck® Castellated Panels to adapt to the ambient heat typical of your location.

## Thermal deflection

Due to the nature of polymers this product may exhibit a slight thermal deflection between supports.

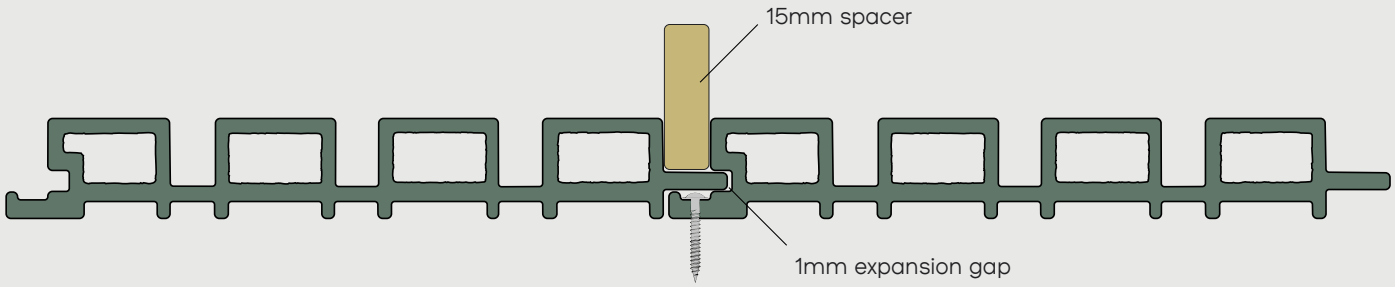
This can be caused by heat exposure to one side of a panel as opposed to the other.

The extent to which this occurs is dependent on several factors including climate and the direction which the panels are facing the sun.

This phenomenon is not considered a product fault.

## Installation & fastening

When installing Ekodeck Castellated Panels, it is recommended to use a 15mm spacer between panels to ensure there is an expansion gap, see diagram below.




### Installation requirements

| | |
|---|---|
| Centre-to-centre support spacing (max)* | 600mm |
| Centre-to-centre support spacing for ceilings (max)* | 450mm |
| Maximum unsupported overhang | 300mm |
| Minimum ground clearance | 50mm |

### Fixing Ekodeck® Castellated Panels to timber supports

Exterior-grade 10g screws of adequate length, with a flat-bottom head (ie. wafer head, pan head)

Pre-drilling an oversized clearance hole, larger than the shank of the screw in the panels is imperative.

Screw off each panel every 600mm.

*Nailing is not recommended.*

### Fixing Ekodeck® Castellated Panels to steel supports

High quality 10g screws that are appropriate for steel, with a flat-bottom head (ie. wafer head, pan head)

Pre-drilling an oversized clearance hole, larger than the shank of the screw in the panels is imperative.

Screw off each panel every 600mm.

*Wing Tek screws are not recommended.*

### Installing Ekodeck® Castellated Panels in a soffit/ceiling application

When installing in the horizontal plane as a ceiling lining, it is required to bring in the support spacing to a maximum centre-to-centre span of 450mm.

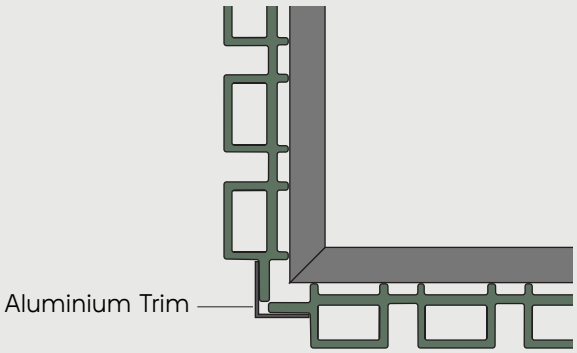
# Ekodeck® Castellated Panel

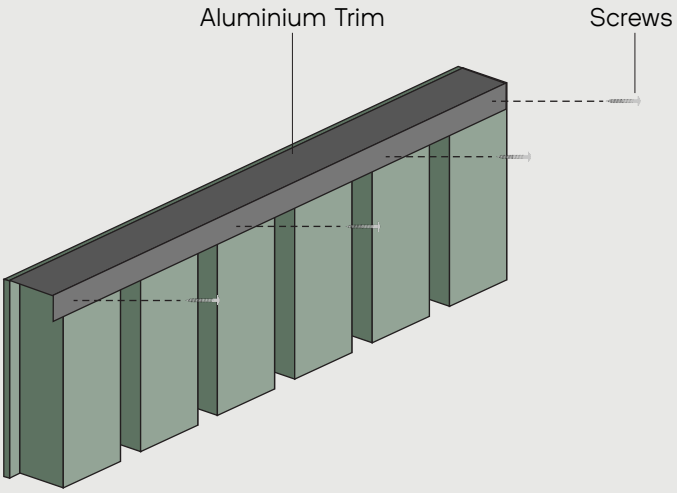
INSTALLATION

## Finishing Trims

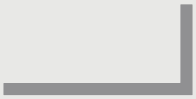
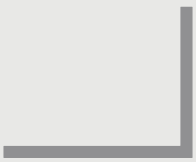
To finish off the corner, edge or top of your new Ekodeck® Castellated Panels, we recommend using one of the below aluminium trims, which can be purchased from your local Bunnings Warehouse.

For best resulsts, mechanically fasten with suitable screws.




## Aluminium Trim Options (all available from Bunnings)

| Size | Length | Colour | Item Number | Profile |
|---|---|---|---|---|
| 25×12×1.6mm | 1m | Silver | 0191477 |  |
| | 2m | Silver | 0191478 | |
| 25×20×1.6mm | 1m | Silver | 0191479 |  |
| | | Black | 0374800 | |
| | | White | 0374814 | |
| | 2m | Silver | 0191480 | |
| | | Black | 0191544 | |
| | | White | 0191545 | |

## Paint Colour Matches

| Castellated Panel Colour | Item Number | Paint Colour | Spray Can |
|---|---|---|---|
| Hazelwood | 0488950 | Mission Brown | ✓ |
| Carbon | 0488949 | Black | ✓ |

# Ekodeck® Castellated Panel

## TECHNICAL SPECIFICATIONS

| TEST | STANDARD | RESULT |
|---|---|---|
| Weight | - | 5.1kg per 1.8m length / 2.86kg/m / 13.06kg/m² |
| Burning Characteristics | 1. AS/NZS 1530.3:1999 | 1. Ignition Time (mins): NI<br>Flame propagation time (s): NA<br>Heat release integral (Kj/m²): NA<br><br>Ignitability Index (0-20): 0<br>Spread of Flame Index (0-10): 0<br>Heat Evolved Index (0-10): 0<br>Smoke Developed Index (0-10): 7 |
| | 2. AS ISO 9239.1-2003 | 2. Critical Heat Flux: 2.1kW/m²<br>Smoke Production: 20.6%/minute |

# Ekodeck® Castellated Panel

CARE & MAINTENANCE

## Overview

Ekodeck® Castellated Panels are not a self cleaning product and will need to be washed down periodically, especially in undercover or alfresco areas.

Ekodeck® Castellated Panels perform best when exposed to the elements. Rain and UV generally degrade and wash away most stains naturally.

The amount of cleaning depends on what you consider to be acceptable.

Ekodeck® Castellated Panels are an outdoor product and like any external product, the level of cleaning depends on the surrounding environment and your level of tolerance to dirt.

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

## General Clean

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

1. Wash the panels with warm water and dishwashing liquid using a soft-bristled brush.
2. Rinse your panels off with a garden hose.

We recommend a **General Clean** is performed at least annually.

**Do not** pressure wash your Ekodeck® Castellated Panels as this may cause irreparable damage.

## Surface finish & fibres

During manufacturing, Ekodeck® panels are sanded to give them a natural, textured look and feel. Residual fibres/hairs may be present on the panels because of this.

Excessive scrubbing or pressure washing may exacerbate these fibres. These will wear off over time and are not considered a product fault.

# EKODECK CASTELLATED PANELS WARRANTY
# NEW ZEALAND EXPRESS WARRANTY

## 1. DEFINITIONS

1.1. The following terms have the following corresponding meaning:

**"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 or

(b) compliance with Ekodeck's Care & Maintenance Guide.

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

**"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.

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

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

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

**"Term"** means a maximum period of 15 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.

**"You"** means the Purchaser.

## 2. THE WARRANTY

2.1 This Express Warranty is only between You and Ekodeck and is not transferable.

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

2.2.1. is of merchantable quality;

2.2.2. is free from Defects;

2.2.3. is fit for purpose;

2.2.4. complies with legislative requirements at the time of purchase; and

2.2.5. shall not split, rot, splinter or suffer structural damage.

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

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

2.3.1. Fifteen (15) calendar years from the date of original purchase by a Purchaser of the Product, with the Warranty being honoured provided the panels have been installed strictly in accordance with Ekodeck's applicable Installation Guide.

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

2.4. Ekodeck, acting reasonably, will determine whether the Product was installed strictly in accordance with Ekodeck's applicable Installation Guide having regard to the Claim.

## 3. WARRANTY CLAIM PROCEDURE

3.1. If You believe a Product has a Defect You must follow this Warranty Claim Procedure.

3.2. 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"**).

3.3. The Notice must include:

3.3.1. details with respect to the application of the Product;

3.3.2. a clear description of the alleged Defect;

3.3.3. photographs of the alleged Defect;

3.3.4. quantity of the Product claimed to be defective; and

3.3.5. 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"**).

3.4. 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.

3.5. 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.

3.6. In addition to the rights of Ekodeck in clause 3.5 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.

## 4. LIMITATIONS AND EXCLUSIONS TO WARRANTY

4.1. 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.

4.2. This warranty does not cover installation and or use of the Product for any purpose that is not an Authorised Purpose.

4.3. For the purpose of this Warranty, the following matters are excluded from the definition of a Defect:

4.3.1. 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;

4.3.2. use of the Product in an application not recommended by Ekodeck's guidelines and applicable codes or standards;

4.3.3. movement, distortion, collapse or settling of the ground or the supporting structure on which the product is installed;

4.3.4. any act of God (including flooding, earthquake, lightning and any other naturally occurring environmental or other disaster);

4.3.5. staining from foreign substances (including mould, mildew, dirt, grease, oil and any other substance);

4.3.6. improper storage, abuse or neglect of the Product by Purchaser;

4.3.7. overloading;

4.3.8. ordinary wear and tear (including natural occurring change of colour associated with time and or exposure to natural elements);

4.3.9. minor splits or cracking around screws;

4.3.10. any natural colour variance in the Product(s);

4.3.11. any cutting of the Product that compromises the structural integrity of the Product; or

4.3.12. using the Product beyond the capabilities associated with the applicable Australian Standard.

4.4. This Warranty does not extend to cover:

4.4.1. costs associated to remove any Defective Product from the Purchaser's premises, or the location of the Product;

4.4.2. any charges incurred by the Purchaser in returning any defective product to Ekodeck or in notifying Ekodeck of the alleged defective product;

4.4.3. costs associated with installing any replacement product;

4.4.4. costs associated with making a claim under this Warranty, including costs such as postage and handling; and

4.4.5. any other reasonably foreseeable costs incurred.

4.5. Ekodeck Product 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.

4.6. 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 | Installed as per Ekodeck Installtion Guide |
|---|---|
| | Claim Period |
| 100% | Purchase to end of the 5th year* |
| 80% | 6th - 7th years |
| 60% | 8th - 9th years |
| 40% | 10th - 11th years |
| 20% | 12th - 13th years |
| 10% | 14th - 15th years |

* If the Product was purchased on 1 January 2026, the 0-5 years Claim Period would run from 1 January 2026 to 31 December 2030.

## 5. GENERAL CONDITIONS

5.1. 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.

5.2. Nothing in this Express Warranty shall affect Your rights under the *Consumer Guarantees Act 1993.*

## 6. SEVERABILITY

6.1. If any term of this Warranty is held to be illegal, void or unenforceable in a jurisdiction, then:

6.1.1. 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

6.1.2. 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.

## 7. CONTACT INFORMATION

7.1 Ekodeck can be contacted at:

**Business address:** Unit 6, 11 Sabre Drive
Port Melbourne, Victoria
Australia 3207

**Phone:** 0800 466 461

**Email:** info@ekodeck.co.nz