

INSTALLATION GUIDE

Designed for Australian conditions, DecoDeck combines the natural beauty of timber decking with the strength and durability of aluminium. A first in aluminium decking systems, DecoDeck replicates the form, feel and appearance of timber with an added slip-resistant finish making it suitable for use around pools and in coastal areas. Made from non-combustible solid aluminium and with optional cover strips, DecoDeck is suitable for bushfire zones. With a dimensionally stable, easily-installed board and a realistic timber finish, DecoDeck is the ideal decking solution for an attractive timber-look deck minus the hassle of maintenance.

DecoDeck Boards Options



DecoDeck

All DecoDeck profiles and accessories are supplied in 6.5m lengths. As part of the manufacturing process, the first 10mm of both ends of the extrusion are taped and not imaged, therefore each board will need to be trimmed by up to 15mm on each end to remove the tape and provide a clean finish. After the removal of each end, the useable length of each length is 6.47m.

Performance

As part of DECO's commitment to providing compliant building products, the DecoDeck systems have been designed to meet Australia's stringent building standards. DecoDeck has been tested, assessed to and passed the following standards:

DecoDeck - Tested Performance Data					
Description	Standard	Testing Body			
Methods for fire tests on building materials, components and structures - Combustibility test for materials	AS1530.1	CSIRO			
Methods for fire tests on building materials, components and structures - Simultaneous determination of ignitability, flame propagation, heat release and smoke release	AS/NZS1530.3	CSIRO			
Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter	AS3837	CSIRO			
Methods for slip resistance test on pedestrian surface materials - Wet Pendulum Slip Resistance Test - Class: P4	AS4586-2013	SLIP CHECK			
DecoDeck - Assessed Performance Data					
Clause	Assessment Outcome				
NCC 2019 - Volume 1 - Clause C1.9 Non-Combustible building elements	Compliant				
AS 3959:2018 Construction of building in bushfire-prone areas	BAL - FZ*				

BAL 40 / BAL FZ Decking*: The gap between decking boards must be enclosed to comply with the requirements of a BAL 40 / BAL FZ rating. DECO provides cover strips to enclose the deck. Without covering the gaps, DecoDeck can be used in areas up to BAL 29.

Please Note: All testing has been undertaken using the detail provided in this installation guide and in order to claim the performances set out here within, the detail in this guide must be followed.

WARRANTY FOR DECO PRODUCTS AND FINISHES

DECO Australia warrants that DECO finishes have been applied in accordance with the Australian Standard for Architectural Powder Coating AS 3715. The warranty is for 12 years and is subject to the provisions set out in AS 3715, including maintenance and cleaning, as set out in Appendix C of the standard.

Please note that if a formal warranty certificate is required, then this must be applied for at the time of order. This is because the standard requires DECO Australia to process specimens for testing and reference at the same time as the job is processed. A warranty application form can be obtained by contacting DECO Australia by phone or email.

Contact your DECO representative on (02) 9603 1888 for more information.

Intellectual Property

This document and the information contained within it are copyright and confidential to DECO Australia®. Disclosure, use and coping in any form, except as authorised by DECO Australia® in writing are prohibited. Patents and Design Registrations Pending.



DecoDeck Suggested Installation Tools & Products

	IMPACT DRIVER A high-quality Impact Driver with an appropriate driver bit is recommended for fixing all extrusions to the structure/sub-frame.		MITRE SAW A high-quality Mitre Saw equipped with an aluminium cutting blade is recommended for cutting the boards to length and trimming the board ends.
	TABLE SAW A high-quality Table Saw is recommended for ripping the final board to the correct dimension in order to finish the installation. (May or may not be required)		SEALANT/ADHESIVE DECO recommends the use of high quality sealants and adhesives.
		10 Martin	Supplied by Installer

DecoDeck Accessories

	DC-DK102 DECK FIXING CONNECTOR Deck Fixing Connector connects and fixes between decking boards.		DC-DK103 WALL STARTING CONNECTOR Wall Starting Connector allows the decking system to start next to a wall/building.				
	DC-DK105 94MM DECKING END CAP Aluminium end caps provide an aesthetic finish at the end of the decking board, making it look like a timber board. DECO can colour match end caps to the desired finish.		DC-DK205 134MM DECKING END CAP Aluminium end caps provide an aesthetic finish at the end of the decking board, making it look like a timber board. DECO can colour match end caps to the desired finish.				
	PC-DKIJC PRE CUT DECK JOINER 300MM Deck joiner joins decking boards end to end for a seamless finish, while at the same time creating a strong structure for the decking. (Powder coated in black)	رسمع	DC-DK106 COVER STRIP/INSERT Cover strips are designed for two purposes: for covering the edge of the decking or for installation between decking boards, covering the gap and allowing the deck to be compliant with requirements for BAL 40 / BAL FZ (Flame zone). DECO can colour match cover strips.				
	DC-ANG3220 32 X 20 X 1.6 ANGLE Angle are used to cover the ripped boards, or the side/edges of the decking boards as a finishing option. (Optional)		DC-DKCH 32 X 25 X 3 CHANNEL Channel is one of the options for finishing the edge of the decking boards. (Optional)				
()	DC-DK114 FIXING SCREWS - METAL 1.25 x 30mm Self tapping square drive metal screws.	0	DC-DK104 FIXING SCREWS - WOOD 2.6 x 40.3mm Square drive wood screws.				
E E E	DC-DK107 #2 SQUARE DRIVE BIT 2 x 75mm square drive bit with a narrow shaft. It is highly recommended this bit be used to avoid scuffing the boards which can be caused by other bits.	L L	DC-PR01 Pop Rivet Colour matched Pop rivet provide an aesthetic finish for a channel or angle.				



Preparation

Processing of DecoDeck

WARNING - When processing DecoDeck products care should be taken and appropriate Personal Protective Equipment should be worn at all times. Failure to do so risks potential serious injury, disablement or death. It is also important that the work space is clean and free from dust, sawdust, metal fines and/or shavings. Processing of the decking boards in areas with excessive dust, sawdust, metal fines and/or shavings risks potential damage to the finished surface.

Structure/Sub-Framing and Fixing

To ensure the finished deck is stable and safe, all framing should be constructed from a material to ensure compliance with the NCC and relevant standards, and all joists must be located at a maximum of 600mm centres.

Before installing any DecoDeck products the supporting structure should be assessed to ensure that it is structurally sound and able to support the loads of the DecoDeck products that are to be installed. DECO recommends that users contact a certified Engineer to assess the supporting structure and fixings required when installing DecoDeck, especially in high-risk areas.



Determine Decking Layout

Below are two common layouts for your decking system: Option A - Exposed End and Option B - Enclosed End. Each option invovles slightly different installation methods and different accessories. Please determine the appropriate option for the installation. (more details on Page 4)



STEP 1 - Starting Options

Option A involves starting the deck without connecting it to a building. Option B involves attaching the decking board to a building behind it.

Please Note: For Option A, please skip to STEP 3 after completing STEP 1.

Option A- Exposed End

1) Determine the correct position for your board 2) Hold the board in place, using the v-groove as a guideline, and pre-drill the board and the joist 3) Screw fix the board into place.





Option B - Enclosed End

When building a deck adjoining a wall, the overall size of the deck should be measured in order to determine the starting location and the number of boards required. Measure the deck dimension (X) and divide it by 100 or 140 (depending on the board width that has been selected) to determine the number of full board widths required. Once you have determined the number of full board widths required, the remaining dimension (Y = X - {No. of full board widths x [100/140]}) can then be addressed by 1) Using a standard size section (25 x 25, 25 x 30, 25 x 40, 25 x 50 ect.) to ensure that the install finishes with a full board. OR

2) Using an angle to cover up the ripped board next to the wall.

If the dimension X allows you to fit in an exact number of full boards go to option B1, otherwise go to Option B2 or B3.



Option B1

1) Position the Wall Starting Connector by pushing it against the wall and the joist 2) Screw fix it toward the joist from the side.



Option B2

1) Cut the standard section to length and position it in place 2) Position the angle from bottom and screw fix toward the joist and the section 3) Position the Wall Starting Connector by pushing it against the standard section and the joist 4) Lastly, screw fix the Wall Starting Connector from the side



Option B3

1) Rip the board into length according to dimension Y 2) Rip the board shorter on top and screw fix the bottom section. (see DETAIL B3) 3) Apply adhesive and position the angle in desired location 4) Give constant pressure downward until adhesive is set.





STEP 2 - First Board

Cut DecoDeck board to required length and clip the first board to DC-DK103 Wall Starting Connector. Please Note: May require light tapping with rubber mallet to install.



STEP 3 - Pre-Fix Decking Board

Attach DC-DK102 Decking Fixing Connectors to the joist. Loosely fix into the joist. (This allows minor adjustment on the overall position at the end of the installation process.)



STEP 4 - Install additional DecoDeck Boards

Repeat Steps 2 to 3 until required decking boards are installed.



STEP 5 - Finishing the Decking Board

For an open end finish, pre-drill Ø2.5mm at approximately 45 degrees into the Decking Board using the v-groove as a guide and fix the screw through the hole into the joist. Slide in DC-DK106 Cover strip to the edge of the decking boards (See DETAIL A). Lastly, tighten off all the screws after all the decking boards have been adjusted into position (such as evenly spaced etc).





Decking Edge Finishing Options

DECO offers three ways to finish DecoDeck Boards. All components can be colour matched to your Decking Board.

End Caps: Press fit the end caps to the end of the decking boards; light tapping with rubber mallet may be required.

Channel: Position the channel to the correct location, using colour matched pop rivet to fix at the top / bottom or screw fix from the bottom of the boards. (depending on application). Angle: Position the angle to the correct location, using colour matched pop rivets to fix it at the top of the angle.



Flame Zone-rated Deck

When building in a BAL 40 / BAL FZ area, the gaps between your decking boards will need to be closed with a cover strip. Slide a Cover Strip into the gap between the decking boards over the top of decking connectors (use a small screw driver to lift the Cover Strip over the connectors if necessary).

Please Note: DC-DK106 Cover Strip can only be installed by sliding in from the edge of the decking before installing the end caps/finish.



Overhang Effect

An overhang effect can be easily achieved by using an angle fixing at the bottom of the decking at the edge. To create an overhang effect, screw fix the angle into position, and screw fix the decking board from below. (see DETAIL A)



Notching Decking Around Post

DecoDeck boards can be fitted around different shaped posts and structures. Measure and mark the dimension/shape of the post/structure on the decking board, then trim cut the marked area. Position the decking board and install.





End to End Deck Joiner

The Deck Joiner connects two separate Decking Boards with a flush, tight and clean surface finish. The deck joiner can be applied anywhere along the span of the deck without the support of a joist. This allows you to maximise the use of the materials and minimise the wastage, and unlike real timber, the aluminium deck joiner can also minimise the separation of boards after installation. The deck joiner can be used with all DecoDeck boards and should be installed 150 mm deep inside both boards (see SIDE & ISOMETRIC VIEW).



Achieving Different Corner Styles

Herringbone Pattern

An attractive way to join the Decking Boards at a corner is to use a 'herringbone' pattern rather than mitre cutting the boards.



Mitre Joins

When using mitre joins it is possible to join the 2 boards together by drilling through the screw flute according to the calculation (see DETAIL A). Please Note: This only works with 90 degree mitre joins .

