

# INSTALLATION GUIDE: ALUMINIUM DECKING SYSTEM

Version 1.92



 **ALIDECK™**  
Aluminium Decking

## SCOPE OF THIS GUIDE

This installation guide is intended to provide a broad overview of the installation method of **AliDeck aluminium decking boards and joists**. The information provided is, by its broad nature, relatively generic but should cover the essentials.

We are very happy to provide project-specific installation advice, if you supply us with architectural drawings of the areas where you will be installing AliDeck material we will gladly help you create a detailed installation plan. Contact the AliDeck team on **01622 235 672** for further information on this service.

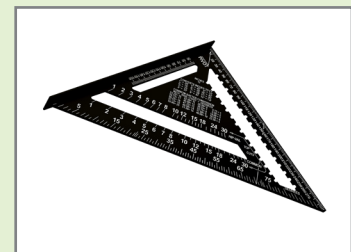
If you are installing the AliDeck Balcony Drainage System into your deck, please consult the separate installation guide for that system.



## RECOMMENDED TOOLS FOR INSTALLATION

1. Chop saw, circular saw, and/or jig saw, with blade suitable for cutting aluminium (recommended 60 to 80 tooth)
2. 4.5"/5" grinder with thin metal cutting disc
3. Cordless drill
4. HSS drill bits
5. Ratchet sockets
6. Spirit level
7. Roofing square
8. White/non-marking rubber mallet
9. Measuring tape

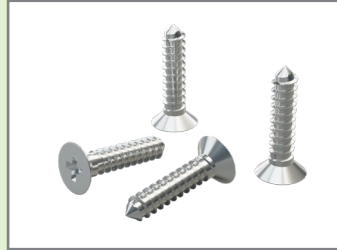
These should be all that's required for most aluminium decking installations. If your project has any particularly bespoke aspects that prove a challenge, though, please call us for advice on **01622 235 672**.



## FIXINGS

We supply the following fixings:

1. M8 x 16mm bolts (for bolting to steelwork or joists)
2. 4mm No 8 stainless steel screws (for fixing end plates to the boards, if required)
3. Fine thread and coarse thread self-drilling screws with rubber washers (for fixing to steelwork or joists)



We do not supply fixings to screw the decking to timber (you can use any standard wood screws for this). We do not supply bolts for bolting the Triple Bolt Channel to steel or for bolting the pedestals down.

## TOUCH UP PAINT

Colour-matched touch-up paint can be supplied on request. This is useful for coating cut edges and for repairing minor scratches or nicks. Please be aware this is just a touch up paint, though, and if boards are damaged over any more than 5% of the surface area, the board will require replacement.

1. Spray touch up paint, recommended for spraying the edges of cut boards
2. Brush-on touch up paint, recommended for touching up scratches

## IMPORTANT GUIDANCE NOTES

1. Please ensure that, once unpacked, the AliDeck products are protected and stacked in an appropriate way to prevent any damage prior to installation.
2. When installing decking boards ensure a minimum of 6mm to a maximum of 10mm gap is allowed between each board for drainage.
3. When installing onto waterproof membrane, ensure adequate use of spreader plates or additional padding to distribute load and protect the membrane. AliDeck cannot be held responsible for penetration or damage to waterproofing. If unsure of application, please contact us.
4. Fix all boards within the recommended maximum spans allowed, never exceed the span for each type of board. Contact us for further details if unsure.
5. When cutting boards to width, never cut into and compromise the central fixing channel as the cover clip will not be able to be installed. Consider cutting the first and last boards if required to obtain the desired overall platform width.
6. Please ensure the decking is covered with a barrier (plywood or plastic material) once installed to prevent any third-party debris, swarf, or waste material from potentially damaging the surface finish. Please remove any swarf from the decking immediately to prevent damage to the board coating.
7. If installing onto existing timber please ensure you have a clear 150mm air gap underneath the decking to ensure good airflow and prevent heat build-up.
8. Please note that aluminium can expand, albeit much less than timber or composite. Caution should be exercised in areas likely to be exposed to high levels of direct or reflected sunlight. Contact us for further advice if in doubt.
9. Do not mix boards and fixing channel clips from different batches as, due to the powder-coating process, slight discrepancies in colour can occur between batches.
10. Always follow site health and safety procedures and always wear appropriate PPE when installing AliDeck material.
11. Care should be taken to minimise the risk of galvanic corrosion by avoiding contact between dissimilar metals. Bare steel and aluminium should never be in contact. Simple steps such as coating cut edges, using plastic/polymer washers, drilling slightly oversized pilot holes for fixings, etc., can mitigate this danger. Contact us for advice if unsure.



# MAXIMUM ALLOWABLE SPANS

Please ensure the below maximum spans (centre to centre) are adhered to, if unsure please contact us.

## ALIDECK DECKING BOARDS

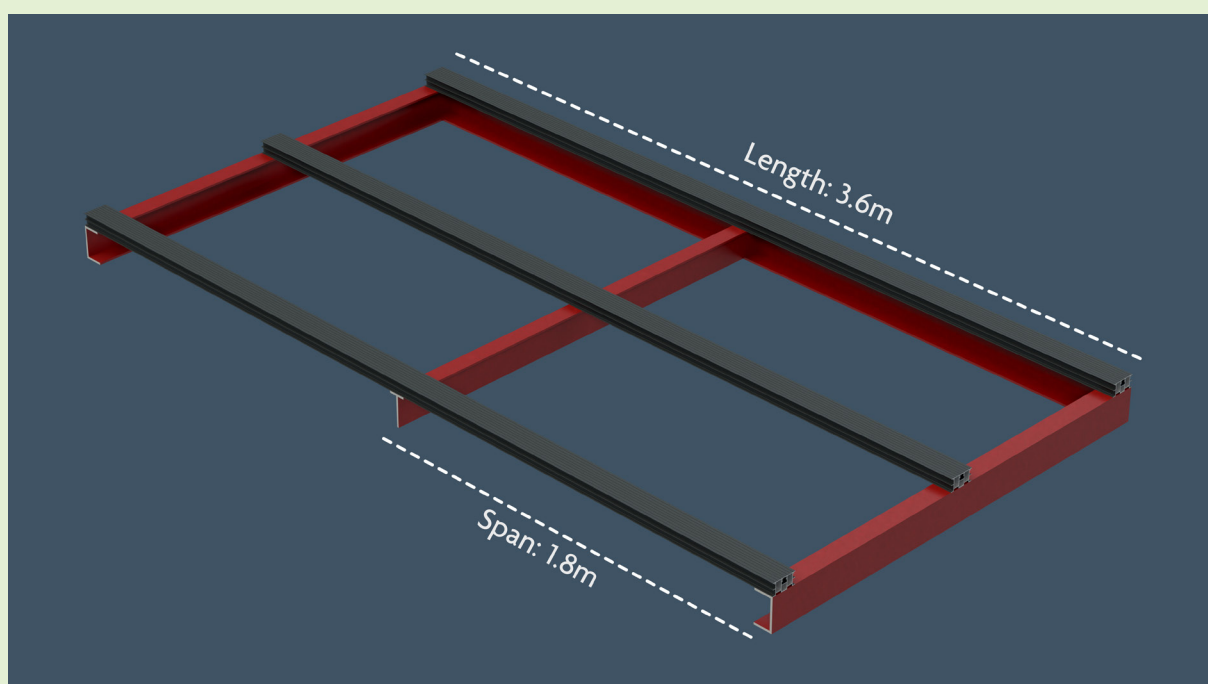
<b>Senior Board (v2):</b>	1200mm
<b>Senior Board (v1):</b>	1000mm
<b>Junior Board:</b>	800mm
<b>Lite Board:</b>	600mm
<b>XL Board:</b>	1800mm
<b>Ultra Board:</b>	800mm

The maximum span values for AliDeck Decking Boards were determined following deflection testing in accordance with BS8579:2020, which requires no more than 5mm deflection under a 2.0kN point load.

## ALIDECK JOISTS

<b>Supa Joist:</b>	3500mm
<b>Low Joist:</b>	1200mm
<b>Low Joist On Side:</b>	1500mm
<b>Lite Joist:</b>	800mm
<b>Micro Joist:</b>	300mm

The maximum span values for AliDeck Joists were determined following deflection testing in accordance with BS EN 1991-1-1, with a criteria of no more than  $L/360$  deflection under a 1.4kN point load.



# GENERAL GUIDANCE

## CUTTING BOARDS TO WIDTH:

Recommended tool: Circular saw with a blade suitable for cutting aluminium, we recommend 60 to 80 teeth. Ensure Full PPE is worn, including gloves, goggles, and ear defenders.

- Step 1:** Fix the boards down to a sturdy base
- Step 2:** Using a fence on the edge of the circular saw, set the fence to the required depth
- Step 3:** Measure and mark the boards using a sharpie or similar pen that is clearly visible
- Step 4:** Cut the board
- Step 5:** Use the deburring tool or sand/file the edge of the board to remove any sharp edges
- Step 6:** Mask the edge of the board to protect the top surface from over-spray
- Step 7:** Coat the edge of the board (3 coats) using the colour-matched touch-up spray
- Step 8:** Remove the masking tape

**Important note:** Please ensure to not cut into the central fixing channel as this will compromise the integrity of the decking board

## CUTTING BOARDS TO LENGTH:

Recommended tool: Chop saw with a blade suitable for cutting aluminium, we recommend 60 to 80 teeth. Ensure Full PPE is worn, including gloves, goggles, and ear defenders.

- Step 1:** Fix the boards down to a sturdy base
- Step 2:** Measure and mark the boards using a sharpie or similar pen that is clearly visible
- Step 3:** Cut the board
- Step 4:** Use the deburring tool or sand/file the edge of the board to remove any sharp edges
- Step 5:** Mask the edge of the board to protect the top surface from over-spray
- Step 6:** Coat the edge of the board (3 coats) using the colour-matched touch-up spray
- Step 7:** Remove the masking tape

## CUTTING AROUND DOWN PIPES, OUTLETS AND CABLES ETC:

Recommended tool: Grinder, jigsaw, arbor/hole saw with blades suitable for cutting aluminium. Ensure Full PPE is worn, including gloves, goggles, and ear defenders.

- Step 1:** Using the board to be installed either measure the position of the pipe, cable or obstacle and mark using a sharpie or similar pen that is clearly visible
- Step 2:** Fix the boards down to a sturdy base
- Step 3:** Using an appropriately sized metal arbor or hole saw cut the radius shapes on the board, then cut the straight sections using a grinder or jigsaw
- Step 4:** Use the deburring tool or sand/file the edge of the board to remove any sharp edges
- Step 5:** Mask the edge of the board to protect the top surface from over-spray
- Step 6:** Coat the edge of the board (3 coats) using the colour-matched touch-up spray
- Step 7:** Remove the masking tape

**IF IN DOUBT, PLEASE CALL THE ALIDECK TEAM ON 01622 235 672 FOR ADVICE.**

## GENERAL GUIDANCE

### JOINING ALIDECK BOARDS TOGETHER:

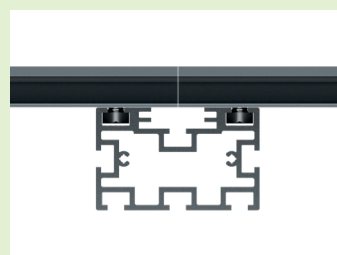
Always join a decking board over the top of either a Joist, a Triple Bolt Channel, or a steel bearer and ensure you stagger the fixing channel clip cover if possible.

When joining over the top of a Joist please ensure that both bolt channels on the top of the joist are used, one bolt channel for the left side of the join and the other for the right side of the join, then ensure the two boards are aligned, then clip in the cover across the two boards to help to align the two boards.



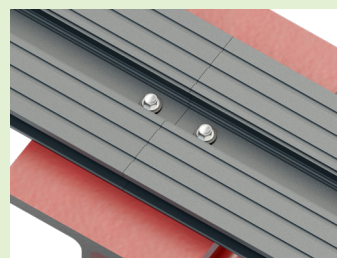
### JOINING USING LOW JOIST OR SUPA JOIST:

- Step 1:** Measure from the end of the deck board 30mm into the centre of the board and mark using a sharpie or visible pen, then drill a 10mm pilot holder
- Step 2:** Repeat the process on the second board
- Step 3:** Bolt the two boards into position, ensuring to align them
- Step 4:** Then install the clip over the top of the join so that you stagger the joints between the board and the clip as much as you can.



### JOINING ONTO A STEEL BEARER USING SELF-DRILLING SCREWS:

- Step 1:** Drill a 6mm pilot hole into the centre of the board, 20mm from the end of the board
- Step 2:** Then fix the boards down using supplied self-drilling screws with rubber washer
- Step 3:** Repeat the process on the opposite board, ensuring the boards are aligned
- Step 4:** Screw the two boards into position
- Step 5:** Then install the clip over the top of the join so that you stagger the joints between the board and the clip as much as you can



**When joining decking boards, care must be taken to allow for expansion of the aluminium under high temperatures. Please contact us for advice if unsure.**

# INSTALL METHOD - LITE, SENIOR, JUNIOR, XL, ULTRA BOARDS

**Before you begin:** Check all parts are present prior to installation process. Check all components supplied for damage and for quality. Please report any issues immediately to AliDeck.

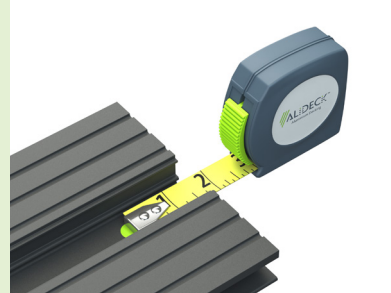
## STEP 1:

Cut your decking board and fixing channel clip cover to length if required, ensuring to paint the cut ends



## STEP 2:

Measure your fixing points on the board and mark up accordingly in the central fixings channel in the board



## STEP 3A:

If fixing with M8 Bolts, drill a 10mm pilot hole at your mark



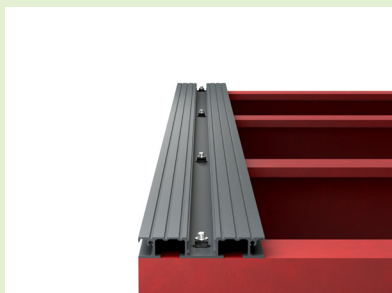
## STEP 3B:

If fixing with self-drilling screws, drill a 6mm pilot hole at your mark



## STEP 4:

Fix the board to the sub-structure, taking care to ensure firm and secure fixing is achieved



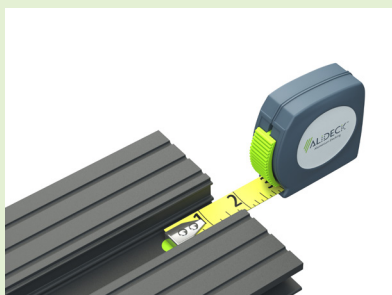
## STEP 5:

Cut your second decking board to length if required and ensure to coat the cut end with touch-up paint



## STEP 6:

Measure your fixing points on the board and mark up accordingly in the central fixings channel in the board



## STEP 7:

For board spacing, place 6mm spacers at several points along the length of the first decking board

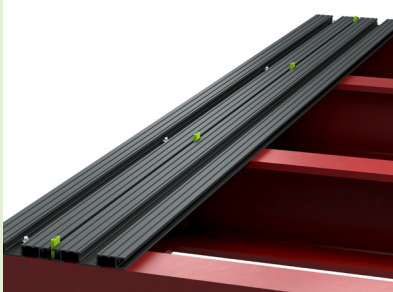




## INSTALL METHOD - LITE, SENIOR, JUNIOR, XL, ULTRA BOARDS

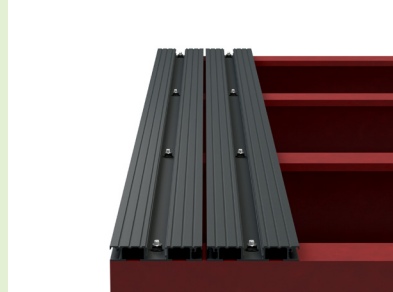
### STEP 8:

Offer up the second decking board and butt against the spacers



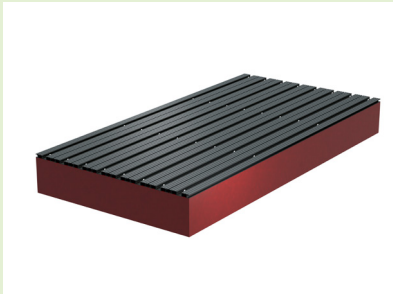
### STEP 9:

Fix the board into place, taking care to ensure firm and secure fixing is achieved



### STEP 10:

Repeat until the deck is complete, cutting the last board to width to fit if required



### STEP 11:

Using a white/non-marking rubber mallet, firmly secure the fixing channel cover clips into the boards



**Important note:** you may need to cut the last board to width to fit, if so please ensure to not cut into the central fixing channel as this will compromise the integrity of the decking board.

# INSTALL METHOD - JOISTS WITH PEDESTAL BRACKETS

**Before you begin:** Check all parts are present prior to installation process. Check all components supplied for damage and for quality. Please report any issues immediately to AliDeck.

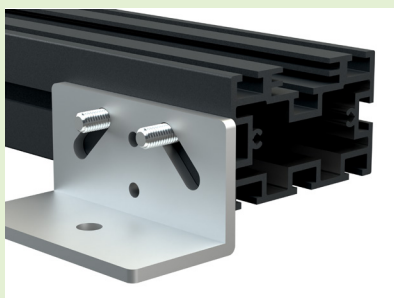
**STEP 1:**  
Cut your joist to length if required



**STEP 2:**  
Feed two M8 bolts into the central bolt channel on the joist



**STEP 3:**  
Place your Adjustable Pedestal Bracket slots over these bolts and loosely secure the nuts



**STEP 4:**  
Repeat on the opposite side of the joist, and repeat again on both sides at the other end of the joist



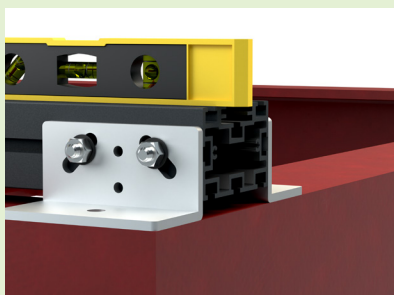
**STEP 5:**  
Place the joist onto your sub-structure and move the brackets into their approximate final position



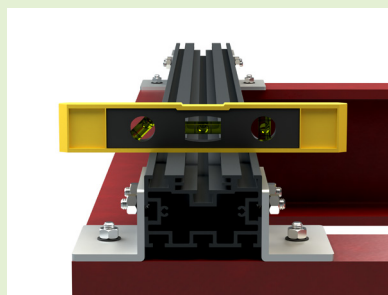
**STEP 6:**  
Tighten the bolts slightly and adjust the joist height to the correct build-up position



**STEP 7:**  
When the joist is level, tighten off the bolts fully to secure the joist in place



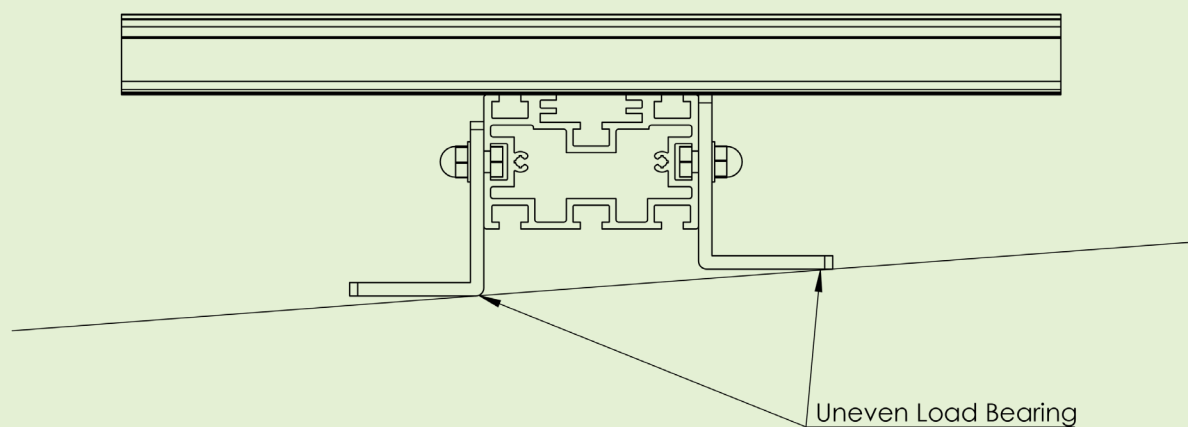
**STEP 8:**  
Check the level again and fix to your sub-structure through the base of the Adjustable Pedestal Brackets



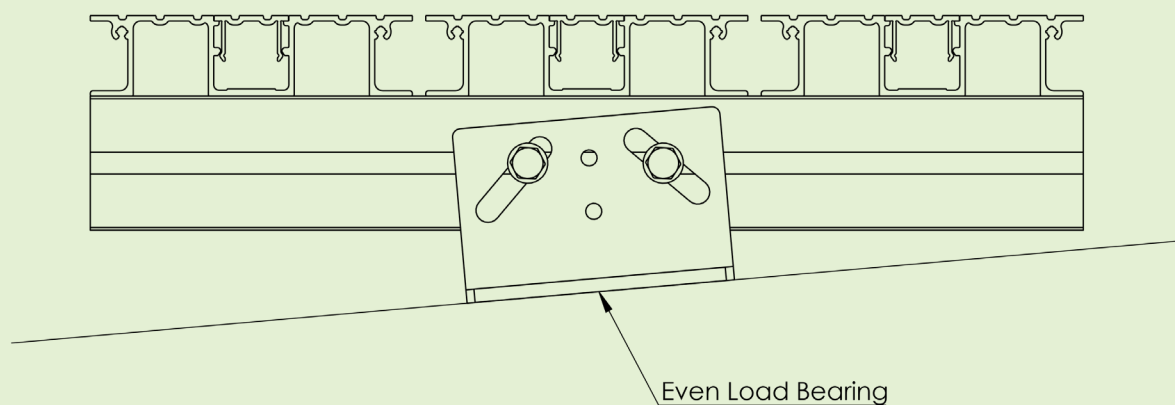
## INSTALL METHOD - JOISTS WITH PEDESTAL BRACKETS

### CORRECT USAGE OF ADJUSTABLE PEDESTAL BRACKETS ON SLOPING BASE:

#### INCORRECT



#### CORRECT







Europa & Jenner House,  
1-2 Trident Close,  
Medway City Estate,  
Rochester, ME2 4ER

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