# INSTALLATION & MAINTENANCE INFORMATION













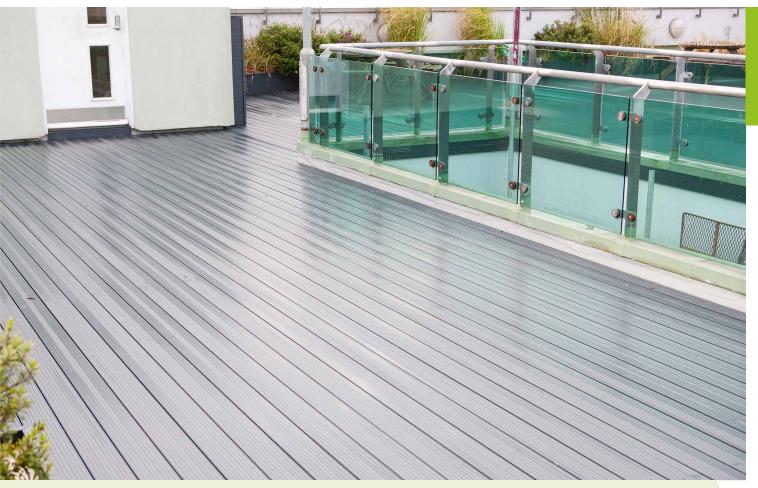


## SCOPE OF THIS GUIDE

This installation guide is intended to provide a broad overview of the installation method of AliDeck aluminium decking boards, joists, drainage, cladding, rail and fencing products. 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.





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## WE ARE TRAIL-BLAZERS

## Leading the way forward

AliDeck is a UK company that is part of the Milwood Group, aluminium extrusion specialists that have been in the industry for over 25 years. We launched our first patented aluminium decking system in 2015 and have since developed and expanded our range of aluminium metal decking and other balcony components due to popular demand.

Having risen to become the UK's leading supplier of balcony component systems, we enable our customers to design and manufacture safe and cost-effective balconies. We are well equipped to supply in bulk and keep over 200 dies and profiles in stock ready to dispatch on demand. This includes our full range of aluminium metal decking boards, joists, pedestals, soffit cladding, and our balcony balustrade and Juliet systems.

We continually improve our systems and products to make sure we offer the best service and decking systems available in the UK. Our customerfocused ethos is what drives us to be the very best to ensure you come back to us time and time again.

We have offices and warehouses across the UK in Essex, Kent and Leicestershire and employ over 60 staff, many of whom have been with the group for over 10 years.

The AliDeck Head Office and Distribution Centre is located in Rochester in Kent for prompt delivery timescales.

We offer free installation training for our customers please contact us on **01622 235672** to find out more.

#### Our **Promise**

#### **Decking and Balcony Project Success.**

Everything we do is focused on helping you to make your projects a success, every time. Right specification product solution

✓ Right implementation plan

Valuable project outcomes

What sets us apart is our commitment to hands-on service. We meet clients on-site, provide free installation training, and foster partnerships that benefit everyone involved. Our team is ready to assist with custom design meetings, either in person or virtually, ensuring your project runs smoothly from start to finish.

Unlimited Technical Support with dedicated email contact: Customers have access to ongoing technical support, ensuring they have the assistance they need throughout the lifespan of their decking projects. Plus a dedicated email contact install@alideck.co.uk for any specific email install related questions and queries.

## Achieve Project Success With AliDeck

We design, manufacture and supply aluminium decking and balcony component systems. What drives us is to make a real difference together with our customers, by championing better solutions and outcomes that are valued and appreciated by all involved in decking and balcony projects.



At AliDeck we enable our customers to make their decking and balcony projects a success every time.

We do this by helping them to purchase the right specification products and plan and implement installation as cost effectively as possible.

Our unique Three Stage Process is how we achieve this. By working closely with our customers from the first point of contact to understand their goals and what success looks like for them, we are able to value engineer the right system solution and create operational efficiencies to maximise the project outcome.

#### **OUR PROCESS**



#### UNDERSTAND PROJECT NEEDS & SUCCESS

From the first point of contact, we will work closely with you to understand Your Project Success Criteria and outline the goals you need to achieve for your project to be a success.



#### VALUE ENGINEER THE RIGHT SOLUTION

We will create Your Project Success Plan, a tailored proposal that is the optimal specification of products for project success, both in terms of cost-effectiveness and outcome.



## CREATE OPERATIONS EFFICIENCIES AND THE RIGHT END RESULT

Once your order is placed we will implement Your Project Success Pack, a detailed schedule for completion of your AliDeck project and will work hand-in-glove together with you to successful completion.

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The AliDeck System is a comprehensive range of aluminium decking boards, designed for use on steel or concrete inset balconies but also ideal for use in any decking application, such as terraces or on walkways.

Constructed from T6 6063 grade aluminium and manufactured in the UK, AliDeck decking boards are non-combustible and fire-rated A2-s1, d0 and A2fl-s1 so are fully compliant with all fire performance requirements in Building Regulations.

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.

#### Benefits

- Fire Rating: A2-s1, d0 and A2fl-s1
- Slip Resistance: Low Risk
- Coating Thickness: 60-80 Microns
- Standard Stock Lengths: 4m & 6m
- Warranty: 30 years
- Life Expectancy: 60 years

#### **Senior Ridged Balcony Board**

- Dimensions: 120mm x 30mm
- Span: 1200mm to meet BS8579:2020
- Weight: 2.175 kg per linear metre

#### **Senior Flat Balcony Board**

- Dimensions: 120mm x 30mm
- Span: 1200mm to meet BS8579:2020
- Weight: 2.196 kg per linear metre



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#### **Junior Ridged Balcony Board**

- Dimensions: 120mm x 20mm
- Span: 800mm to meet BS8579:2020
- Weight: 1.762kg/linear metre



#### **Lite Balcony Board**

- Dimensions: 120mm x 20mm
- Span 600mm to meet BS8579:2020
- Weight: 1.295kg per linear metre



#### **Ultra Balcony Board**

- Dimensions 175mm x 20mm
- Span 800mm to meet BS8579:2020
- Weight: 1.912 kg per linear metre

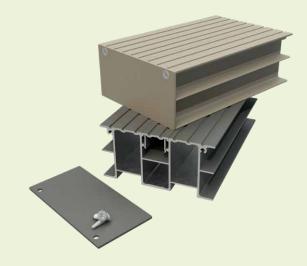
#### **Junior Flat Balcony Board**

- Dimensions: 120mm x 20mm
- Span: 800mm to meet BS8579:2020
- Weight: 1.759kg/linear metre



#### **XL Balcony Board**

- Dimensions: 120mm x 60mm
- Span: 1800mm to meet BS8579:2020
- Weight: 3.09 kg per linear metre





## AliDeck JOISTS

AliDeck Decking Joists are designed for use on steel or concrete inset balconies but also ideal for use in any decking application, such as terraces or on walkways.

Constructed from T6 6063 grade aluminium and manufactured in the UK, they are non-combustible and fire-rated A2-s1, d0 and A1 when supplied uncoated in mill-finish so are fully compliant with all fire performance requirements in Building Regulations.

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 2.0kN point load.

#### **Benefits**

- Fire Rating: A2-s1, d0 and A2fl-s1
- Slip Resistance: Low Risk
- Coating Thickness: 60-80 Microns
- Standard Stock Lengths: 6m
- Warranty: 30 years
- Life Expectancy: 60 years

#### **Supa Joist**

- Dimensions: 80mm x 105mm
- Span: Up to 3500mm
- Weight: 4.93kg per linear metre



#### **Low Joist**

- Dimensions: 80mm x 50mm
- Span: Up to 1200mm horizontally and 1500mm vertically
- Weight: 3.11kg per linear metre



#### **Lite Joist**

- Dimensions: 80mm x 30mm
- Span: Up to 800mm
- Weight: 1.926kg per linear metre



#### **Micro Joist**

- Dimensions: 50mm x 20mm
- Span: Up to 300mm
- Weight: 0.719kg per linear metre



#### **Eco 30 Joist**

- Dimensions: 80mm x 30mm
- Span: Up to 600mm
- Weight: 1.187kg per linear metre

#### **Eco 50 Joist**

- Dimensions: 80mm x 50mm
- Span: Up to 1000mm
- Weight: 1.576kg per linear metre



## AliDeck PEDESTALS



Our fire-resistant decking pedestals are class A fire rated. Constructed from T6 6063 grade aluminium and manufactured in the UK, AliDeck decking pedestals are non-combustible and fire-rated A1 due to being supplied uncoated in mill-finish, so are fully compliant with all fire performance requirements in Building Regulations.

#### **Adjustable Pedestal Bracket**

- Height Range: 30mm to 200mm
- Base Diameter: 100mm x 50mm



#### Jumbo Adjustable Pedestal Bracket

- Height Range: up to 300mm
- Base Diameter:
   100mm x 50mm





#### **Spreader Plates**

This simple aluminium plate is used to spread the imposed load of the AliDeck decking system when installing onto waterproof membranes.

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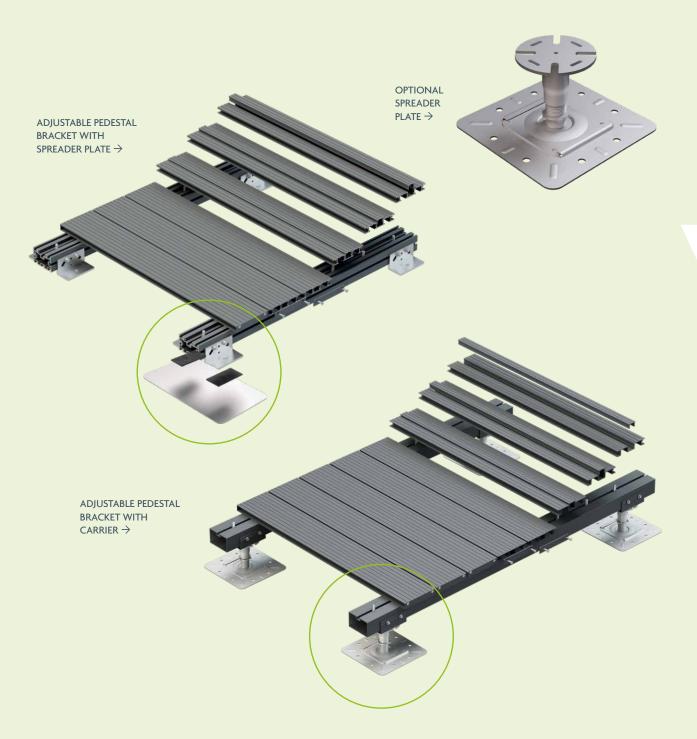
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**NOTES** 

## Adjustable Pedestal Bracket with Optional Carrier

- Height Range: 26mm to 275mm
   With Optional Carrier & Spreader Plate
   Base Diameter: 100mm x 100mm





## AliDeck SYSTEMS



Non-combustible decking systems are available to suit your exact requirements, with cost, application, and performance in mind. Board spans range from 600mm to 1800mm, joist spans range from 300mm to 3500mm, and build-up heights range from 40mm to 1000mm or higher.

## Senior Board with Low Joist & Adjustable Pedestals

# Board Span: 1200mm Joist Span: 1200mm Build-Up: 80-330mm

## Junior Board with Low Joist & Adjustable Pedestals



## Senior Board with Lite Joist & Adjustable Pedestals



## Junior Board with Lite Joist & Adjustable Pedestals



## Lite Board with Lite Joist & Adjustable Pedestals

## Junior Board with Micro Joist & Adjustable Pedestals





## Lite Board with Eco 30 Joist & Adjustable Pedestal with Carrier

## Lite Board with Eco 50 Joist & Adjustable Pedestal with Carrier







Board Span: **800mm** ←→

Joist Span: **1000mm** ←→

Build-Up: **106-355mm** ↑



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#### Recommended Tools

## FOR INSTALLATION

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**.



Chop Saw with blade suitable for cutting aluminium (recommended 60 to 80 tooth)



Circular Saw with blade suitable for cutting aluminium (recommended 60 to 80 tooth)



**Jig Saw**with blade suitable for cutting aluminium
(recommended 60 to 80 tooth)



4.5"/5" Grinder with thin metal
Cutting Disc



**Cordless Drill** 



**HSS Drill Bits** 



**Racket Sockets** 



**Spirit Level** 



**Roofing Square** 



White / Non-Marking Rubber Mallet



**Measuring Tape** 

Please tick

## **FIXINGS**

We supply the following fixings:

- 1. M8 x 16mm bolts (for bolting decking to 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 decking 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

NOTES

## IMPORTANT GUIDANCE NOTES

		Please tick
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	2. When installing decking boards ensure a minimum of 5mm to a maximum of 8mm gap is allowed between each board for drainage.	
3	When installing onto waterpoof 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	I. 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.	
į	b. 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.	ot 🗌
•	5. 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 swar from the decking immediately to prevent damage to the board coating. When fixing with self-drilling screws a 6mm clearance hole must be installed in the deck board before fixing.	f
7	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	B. 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 doub	
ġ	2. 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.	
1	0. Always follow site health and safety procedures and always wear appropriate PPE when installing AliDeck material	
1	<ol> <li>Care should be taken to minimise the risk of galvanic corrosion by avoiding contact between dissimilar metals.</li> <li>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.</li> </ol>	
	NOTES	

## 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.





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## JOINING USING LOW, LITE 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 hole
- 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 MICRO OR ECO JOIST**

- **Step 1:** Measure from the end of the deck board 15mm into the centre of the board and mark using a sharpie or visible pen, then drill a 6mm pilot hole
- **Step 2:** Repeat the process on the second board
- **Step 3:** Fix 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.

Please tick



### 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

Please tick



## **INSTALL METHOD**

## Lite, Junior, Senior, XL, Ultra Boards – Bolting to Steel

Please tick

**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:

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



**STEP 4:** 

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



#### STEP 5:

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



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 5mm spacers at several points along the length of the first decking board.

## Lite, Junior, Senior, 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.

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## INSTALL METHOD

## Joists with Wind-Up Pedestals -Concrete Base

Please tick

**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.

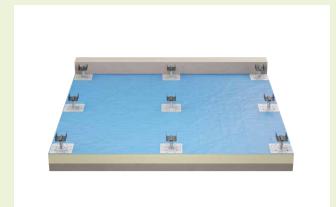


#### STEP 1:

If required, install Spreader Plate over bottom of Pedestal & apply Fire Tape to the bottom of Plate / Pedestal.

STEP 2:

Install Joist Carrier to the top plate of the Pedestal using 2x M8X20m Bolt, Nut & Washers.



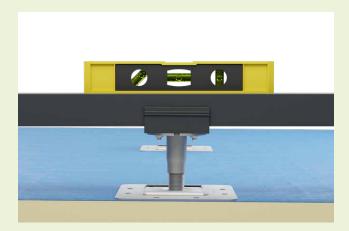
#### STEP 3:

Position the Pedestals referring to your CAD. Refer to General Guidance #2.



#### **STEP 4:**

Adjust the top plate of the Pedestals to the approximate build-up height required.



#### STEP 5:

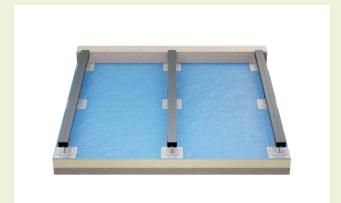
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Dry-fit 1st Joist into Joist Carriers and note fall & build-up height. Remove the Joist and adjust Pedestal Top Plate as necessary. Dry-fit the Joist again and check levels. Repeat previous until required fall & build-up height is achieved. Leave Joist in place unsecured for now.



#### STEP 6:

Lock the Pedestals into position by tightening the knurled Locking Nut against top plate of Pedestal.



#### **STEP 7:**

Repeat Steps 5 & 6 for remaining Joists & Pedestals. Level each Joist relative to the previous one to ensure correct fall / build-up height is achieved.



#### **STEP 8:**

Refer to General Guidance #1. Secure all Joists using x4 M8X20m Self-Drilling screws, x2 each side on the Joist Carrier guiding line for each Pedestal.

#### **NOTES**

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## **INSTALL METHOD**

## Joists with Wind-Up Pedestals -Steel Base

Please tick

**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:

If required, refer to your CAD and mark & measure holes for the pedestals. Drill holes using a 10mm Drill Bit.



STEP 2:

Secure Pedestal to frame using 4x M8 Bolts, Nuts & Washers.



STEP 3:

Adjust top plate of Pedestal to approximate build-up height required.



#### STFP 4

Dry-fit Joist onto Pedestal and adjust the top plate to achieve required build-up height.

## Joists with Wind-Up Pedestals -Steel Base



#### STEP 5:

Check Joist level & if satisfied, lock Pedestal by tightening the knurled Locking Nut against the top plate. Leave joist unsecured for now.



#### STEP 6:

Repeat Steps 4 & 5 for remaining Pedestals. Level each Joist relative to each other to achieve correct build-up height.



#### **STEP 7:**

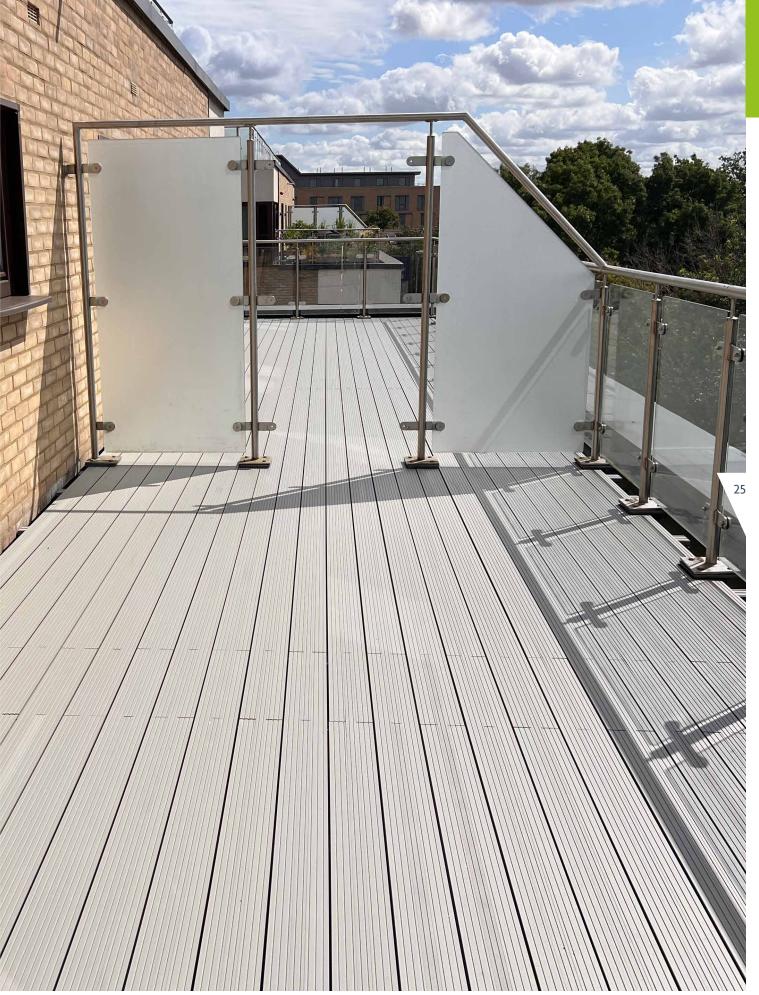
Refer to General Guidance #1. Insert 2x M8 Bolts per Pedestal into Joist and secure to top plate using M8 Nuts & Washers.



#### **STEP 8:**

Double Check levels to ensure correct build-up height is maintained.

#### **NOTES**



## **INSTALL METHOD**

## Joists with Adjustable Pedestal Brackets

Please tick

**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.



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.

### Joists with Adjustable Pedestal Brackets contd.



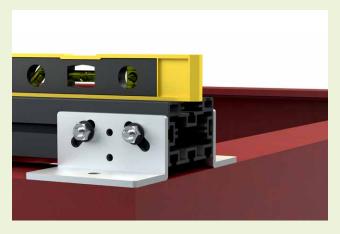
#### STEP 5:

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.

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## AliDrain SYSTEMS

Compliance is a major part of any building project and drainage is no exception. The BS8579:2020 Standard addresses the issue of balcony drainage and outlines a requirement that free draining balconies should be avoided for safety and comfort reasons.

## Deck-Level Piped Drainage Dual Gutter Option

Gutters positioned at either end of the balcony, with dual downpipes and overflows.



#### **Piped Soffit Drainage**

With Flow Cladding Boards & Wide Gutters.

#### Piped Soffit Drainage Wrap-Around Gutter Option

Gutters wrap around three sides of the balcony, with single downpipe and overflow.



#### **Edge Drainage**

With Flow Cladding Boards & Extended Flow Cladding Gutters.

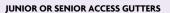


In order to satisfy your warranty and insurance providers drainage requirements for balconies, terraces and walkways, contact us today for project specific calculations.

#### **Access Gutters and Drainage Channels**

Our range of Access gutters and drainage channels will guarantee a compliant system no matter what your drainage requirements are.







JUNIOR OR SENIOR WIDE ACCESS GUTTERS



JUNIOR DRAINAGE CHANNEL



SENIOR DRAINAGE CHANNEL

#### Flow Cladding Boards and Soffit Gutters

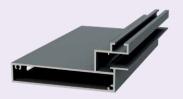
Our cladding boards and soffit gutters can be used with any of our decking and joist solutions. Giving you a wide choice of options depending on your aesthetic or design needs.



WIDE FLOW CLADDING GUTTER



FLOW CLADDING BOARD



EXTENDED FLOW GUTTER

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## IMPORTANT GUIDANCE NOTES

	Please ensure that, once unpacked, the AliDeck products are protected and stacked in an appropriate way to prevent any damage prior to installation.	
٧	The Balcony Drainage System is not intended to be a water-tight solution and there remains the possibility that water may track back or around the installed parts. Careful installation can significantly mitigate the risk. Please contact the AliDeck team for advice if unsure.	
t	The closed-cell foam bungs we supply can be used to block the recesses in the decking board profiles to eliminate the risk of water tracking back on the board undersides. We also supply an aluminium endplate to further mitigate the risk of water trackback.	
	t is essential that the sides of Drainage Channels are sealed with Sikaflex sealant during installation. AliDeck cannot be held responsible for problems that arise on installations where this step has been overlooked.	
	t is vital that all Drainage Channels terminate fully into the Drainage Gutters. Do not notch into Drainage Channels as this will allow water to freely escape.	
٧	We recommend that all balcony designs are submitted to any relevant building control organisation for verification as early as possible in the design process. This is so that any objections to the proposed drainage can be understood and overcome, which we are happy to help you achieve.	
	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.	
i	It is essential that an overflow provision that is <b>equal to or greater than</b> the capacity of the main outlet is provided to each Drainage Gutter. We have developed our <b>Elevated Overflow</b> part as our standard and recommended compliant overflow provision.	
9. <i>F</i>	Always follow site health and safety procedures and always wear appropriate PPE when installing AliDeck material.	
	Care should be taken to minimise the risk of galvanic corrosion by avoiding contact between dissimilar metals.  Galvanised 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.	
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## **GENERAL** GUIDANCE

#### **CUTTING GUTTERS AND CHANNELS** 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 Gutter or Channel to be cut to a sturdy base
- **Step 2:** Measure and mark the products using a sharpie or similar pen that is clearly visible
- Step 3: Cut the Gutter or Channel, allowing for thickness of the end plates to seal the gutters
- **Step 4:** Use the deburring tool or sand/file the cut edges to remove any sharp edges
- **Step 5:** Mask the edge of the Gutter or Channel to protect the top surface from over-spray
- Step 6: Coat the cut edges (3 coats) using the colourmatched touch-up spray
- Step 7: Remove the masking tape
- Step 8: Seal individual gutters at each end



#### **CUTTING HOLES INTO GUTTERS FOR** THE OUTLET AND OVERFLOW:

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

- **Step 1:** Fix the Gutter or Channel to be cut to a sturdy base
- Step 2: Measure and mark the products using a sharpie or similar pen that is clearly visible
- **Step 3:** Using the correct size metal arbor or hole saw cut the radius shapes on the Gutter underside. Using a 55mm size metal arbor or hole saw, cut the radius shapes on the gutter underside
- **Step 4:** Use the deburring tool or sand/file the cut edges to remove any sharp edges
- **Step 5:** Mask the edge of the Gutter to protect the top surface from over-spray
- Step 6: Coat the cut edges (3 coats) using the colourmatched touch-up spray
- Step 7: Remove the masking tape







It is important to secure the Gutter Access Lids after installation to prevent them being easily removed by children. This can be achieved as follows;

- **Step 1:** Drill a 4mm pilot hole through the rear part of the Access Lid at the building end
- **Step 2:** Counter-sink this pilot hole and paint the exposed metal with colour-matched touch-up paint
- **Step 3:** Use the supplied counter-sunk self-drilling screw to secure the Access Lid to the Gutter profile
- **Step 4:** Apply colour-matched paint to the screw head to finish

When the Gutter needs to be cleaned, simply removing this screw will allow the Access Lid to be opened.

Please tick



#### **USING THE FOAM BUNGS:**

The Drainage Channels and Board recesses can be blocked with closed-cell foam bungs. These are supplied slightly oversized and are simply inserted into the area to be bunged.

Please tick



#### **ELEVATED OVERFLOW:**

Our standard Elevated Overflow has been designed to provide a compliant overflow that is equal to the capacity of the main outlet. It is to be used at the point in the Gutter furthest from the building and the outlet must evacuate any water away from the building.

Please tick



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## SECTION 2

## Flow Capacity

The **AliDeck Balcony Drainage System** is a water management system, integrated within the decking level of a balcony. The system is composed of two main parts; the **Drainage Gutter** and the **Drainage Channel**.

Water can flow from the decking surface into the Drainage Channels and then travel to the balcony ends where it falls into the Drainage Gutters. Once in the Gutters, water is evacuated to the RWP via a standard outlet. We have also produced an Elevated Overflow which can be sited in the Gutters at the furthest point possible from the building to provide overflow provision matching the capacity of the main outlet.

We have performed capacity calculations for the Balcony Drainage System. As the components of the system are not hydraulically linked, the calculations were performed in two parts; an analysis of the Drainage Channel at varying lengths and gradients, and an analysis of the Drainage Gutter at varying lengths and gradients. The resultant data allows us to quickly understand the performance of the full system on any designed balcony.

The calculations were performed to **BS EN 12056-3:2000**, using the 1 in 50 year return period rainfall intensity for London of 0.06 litres per second per square metre.

Please tick

Please tick

## Manufacturer Recommended Install Method

It is important that all balcony designs using the Balcony Drainage System are verified with AliDeck's flow capacity data. We can perform an analysis to confirm the compliance of the design if supplied with detailed architectural drawings. This should be done at the earliest design opportunity. Contact us on **01622 235 672** for more information.

Drainage Channels **must** be sited between every decking board and **must** run the entire length of every decking board. Sealant **must** be applied to both sides of Drainage Channels as they are installed. Drainage Gutters **should** be positioned at both ends of the decking boards when the deck is laid level and each Gutter **must** have an outlet and overflow installed.

If the Drainage Channels are only guttered at one end, due to being laid to a suitable fall to facilitate self-cleaning, the un-guttered end of the Drainage Channels **must** be blocked with the closed-cell foam bungs we supply to prevent water freely escaping. We recommend the fall be laid towards the gutter.

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## INSTALL METHOD

#### Standard Access Gutters

Please tick

**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.



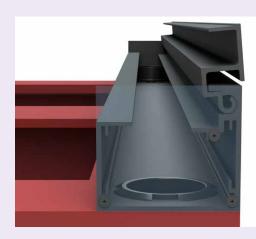
#### STEP 1:

Cut your Drainage Gutters and Channels to the length required, ensuring to paint the cut ends.



#### STEP 2:

Using an arbor saw of the appropriate size, cut holes for the outlet and overflow in the Gutters..



#### STEP 3:

Fit the outlet and overflow before placing the Drainage Gutter into position on the balcony substructure.



#### **STEP 4:**

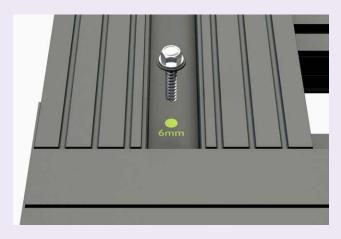
Fix the End Plates to both ends of the Drainage Gutters and seal internally with Sikaflex sealant.

#### **NOTES**



#### STEP 5:

Lay the first decking board, overlapping the Gutters but allowing 1-2mm clearance to the Access Lid.



#### STEP 6:

Fix the board to the Gutters using self-drilling screws through pre-drilled 6mm pilot holes in the board.



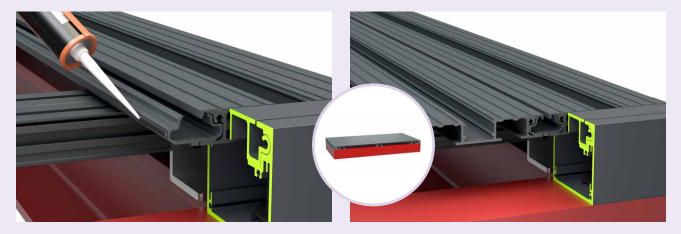
#### **STEP 7:**

Run a bead of Sikaflex sealant along the side of the Drainage Channel that will meet the decking board.



#### STEP 8:

Place the Drainage Channel into the side of the decking board and align the ends.



#### STEP 9:

Run a bead of Sikaflex sealant along the exposed side of the Drainage Channel.

**STEP 11:** Repeat until the deck is complete.

#### **STEP 10:**

Lay the second decking board, ensuring a tight fit between the boards and Drainage Channel.

## **INSTALL METHOD**

#### Wide Access Gutters

Please tick

**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:

36

Cut your Drainage Gutters and Channels to the length required, ensuring to paint the cut ends.



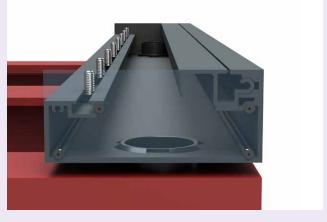
#### STEP 2:

Using an arbor saw of the appropriate size, cut holes for the outlet and overflow in the Gutters.



#### STEP 3:

Slide M8 bolts into the Gutter bolt channels, enough for each decking board.



#### **STEP 4:**

Fit the outlet and overflow before placing the Drainage Gutter into position on the balcony substructure.

#### **NOTES**

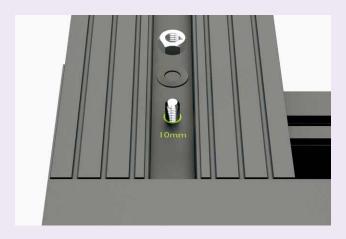


#### **STEP 5:**

Fix the End Plates to both ends of the Drainage Gutters and seal internally with Sikaflex sealant.



Lay the first decking board, overlapping the Gutters but allowing 1-2mm clearance to the Access Lid.



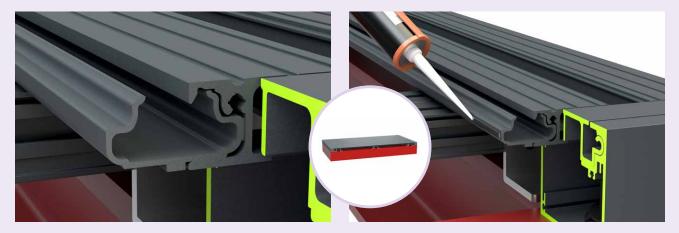
#### **STEP 7:**

Fix the board to the Gutters using the M8 bolt through predrilled 10mm holes in the board.



#### **STEP 8:**

Run a bead of Sikaflex sealant along the side of the Drainage Channel that will meet the decking board.



#### STEP 9:

Place the Drainage Channel into the side of the decking board and align the ends.

#### **STEP 10:**

Run a bead of Sikaflex sealant along the exposed side of the Drainage Channel.

**STEP 11:** Lay the second decking board, ensuring a tight fit between the boards and Drainage Channel.

## 45 Degree Corners

Please tick

**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:

38

Cut your Drainage Gutters to the length required, ensuring to paint the cut ends.

STEP 2:

Install Joining Plates 1 & 2 into the channels on the Gutter and seal internally using Sikaflex sealant.



#### STEP 3:

Using an arbor saw of the appropriate size, cut holes for the outlet and overflow in the Gutters.



#### **STEP 4:**

Install Joining Plates 1 & 2 into the channels on the Gutter and seal internally using Sikaflex sealant.

#### **NOTES**



STEP 5:

Fit the outlet and overflow before placing the Drainage Gutter into position on the balcony substructure.



#### STEP 6:

Connect the second Gutter onto the Joining Plates on the first Gutter, seal internally using Sikaflex sealant.



Fix each Joining Plate through the face of the Gutters using pop rivets or self-drilling screws.



# AliClad Flow Soffit Piped Drainage

Please tick

**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:

40

Measure and cut soffit boards, rails, and gutter to required length. Deburr and paint cut ends.

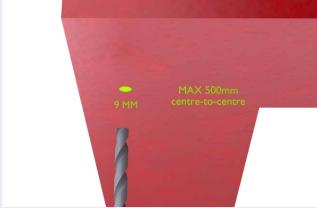
#### STEP 2:

Mark holes for downpipe spigot and overflow spigot and cut using appropriate size Arbor saw.



#### **STEP 3:**

If using side support rails, mitre the support rail profiles to create a frame. When inserting boards one support rail must be joined to the rear rail and gutter profiles.



#### **STEP 4:**

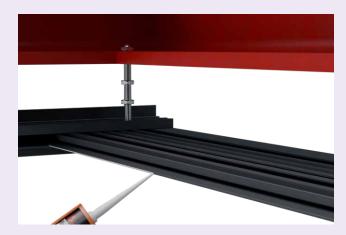
Drill 9mm pilot holes into sub-structure for rail & gutter. Centre-to-centres must not exceed 500mm and must be spaced evenly as possible.

#### **NOTES**



#### STEP 5:

Insert 2x M8 half-nuts onto required M8 fixings before hanging the soffit frame.



#### **STEP 7:**

Start from one end & slide in first soffit board. Add a bead of silicone along the interlocking edge of the next board to mitigate risk of leaking.



Level frame to fall and secure frame by tightening all M8 fixings, see General Guidance. Ensure system is rigid and fixed in place.



#### STEP 6:

Slide prepared M8 fixings into rail and gutter bolt channels. The type of fixing will depend on required hanging height. Hang rail and gutter profiles onto sub-structure & loosely secure with M8 half-nut on fixings.



#### **STEP 8:**

Continue to install boards as above. Fix every 4th board in place at each end with a 5.5mm CSK in fixing channel. Do not penetrate drainage channels.



If required, apply small bead of silicone to gutter ends and install gutter endplates.

### AliClad Flow Soffit Piped Drainage contd.



**STEP 11:**Connect downpipe to water waste system.



**STEP 12:** If safe to do so, use a mild detergent & soft cloth to clean soffit surface.

Important note: You may need to cut the last board to width, please ensure to not cut into the fixing channel and compromise board integrity.

NOTES

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# AliClad Flow Soffit Edge Drainage

Please tick

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:

Measure and cut soffit boards, rails, and gutter to required length. Deburr and paint cut ends.



#### STEP 2:

If using side support rails, mitre the support rail profiles to create a frame. When inserting boards one support rail must be joined to the rear rail and gutter profiles.



#### STEP 3:

Drill 9mm pilot holes into sub-structure for rail & gutter. Centre-to-centres must not exceed 500mm and must be spaced evenly as possible.



#### **STEP 4:**

Insert 2x M8 half-nuts onto required M8 fixings before hanging the soffit frame.



#### STEP 5:

Slide prepared M8 fixings into rail and gutter bolt channels. The type of fixing will depend on required hanging height. Hang rail and gutter profiles onto sub-structure & loosely secure with M8 half-nut on fixings.



#### **STEP 7:**

Continue to install boards as above. Fix every 4th board in place at each end with a 5.5mm CSK in fixing channel. Do not penetrate drainage channels.



#### STEP 9:

If required, apply small bead of silicone to gutter ends and install gutter endplates.



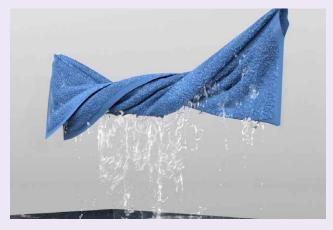
#### STEP 6

Start from one end & slide in first soffit board. Add a bead of silicone along the interlocking edge of the next board to mitigate risk of leaking.



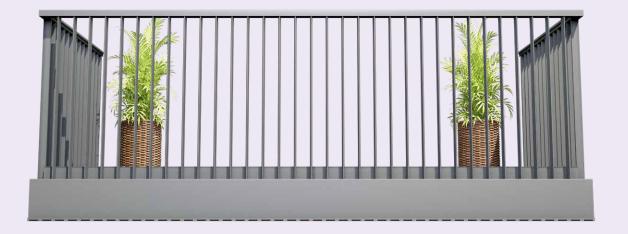
#### **STEP 8:**

Level frame to fall and secure frame by tightening all M8 fixings, see General Guidance. Ensure system is rigid and fixed in place.



#### **STEP 10**:

If safe to do so, used a mild detergent & soft cloth to clean soffit surface.





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# AliClad SYSTEMS

The AliClad System is a range of innovative balcony soffit cladding solutions developed by the makers of the AliDeck range of non-combustible aluminium decking and soffit cladding systems, the UK's leading balcony metal flooring provider.

Fire-rated to A2-s1, d0, AliClad is compliant with the new fire performance requirements for external wall systems in Approved Document B. These crucial safety features aside, our 30-year warranty and 60-year expected lifespan provides our customers with the peace-of-mind they require.

#### **Benefits**

- Fire Rating: A2-s1, d0
- Material 6063 T6 Structural Grade **Aluminium**
- Standard Stock Lengths: 6m
- Warranty: 30 years
- Life Expectancy: 60 years

#### **AliClad Flow**

- Length: 6 metres
- Width: 120mm
- Depth: 12.5mm

- Weight: 1.281 kg per linear metre
- Span: 1.5m • Stock Length: 6m





#### • Length: 6 metres • Width: 100mm

**AliClad Decor** 

- Depth: 45mm
- Span: 1.5m
- Stock Length: 6m
- Weight: 1.52 kg per linear metre







#### **AliClad Lite**

- Length: 6 metres
- Width: 120mm
- Depth: 10mm
- Span: 1m
- Stock Length: 6m
- Weight: 1.02 kg per linear metre





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# SECTION 5

# IMPORTANT GUIDANCE NOTES

		Please tick
1.	Please ensure that, once unpacked, the AliClad products are protected and stacked in an appropriate way to prevent any damage prior to installation.	
2.	. When installing the Lite soffit boards ensure a maximum of 5mm gap spacing is allowed between each board for drainage.	
3.	Fix all boards within the recommended maximum spans allowed, never exceed the span for each type of board. Contact us for details if unsure.	
4.	. When cutting boards to width, never cut into and compromise the fixing channels. Consider cutting the first and last boards if required to obtain the desired overall soffit width.	
5.	. Do not mix boards from different batches as, due to the powder-coating process, slight discrepancies in colour can occur between batches.	
6.	. Always follow site health and safety procedures and always wear appropriate PPE when installing AliClad materia	al.
7.	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.	
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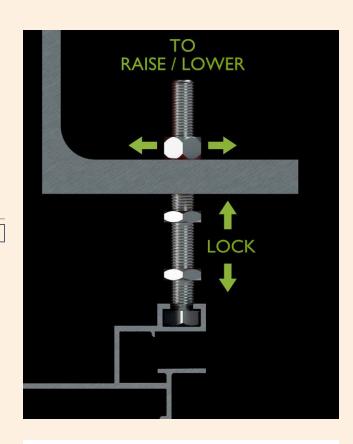
48

# GENERAL GUIDANCE

#### **INSTALLING FLOW SOFFITS TO FALL:**

- **Step 1:** Tighten all top M8 half-nuts to raise frame to required height at front & back profiles so frame is level
- **Step 2:** Loosen the gutter-side M8 half-nuts to required fall. We recommend an 1:80 fall
- **Step 3:** Tighten the lower-inside M8 half-nuts to the boards to lock the bottom of the soffit frame
- **Step 4:** Tighten the remaining inside M8 half-nuts to the steelwork frame to secure the soffit frame

Please tick



### ADDITIONAL FLOW SPAN SUPPORT OVER 1.2M:

- **Step 1:** When installing boards into rails, insert M8 half-nut for every 4th board into the bolt-channel on the soffit board
- **Step 2:** Pre-drill 10mm holes into AliDeck Joist matching the inserted M8 half-nut spacing
- **Step 3:** See AliDeck Joist Installation Section within this guide
- Step 4: Pass M8 studding through hole in joist and insert 2x M8 half-nuts onto lower half studding. Raise frame as normal
- **Step 5:** Insert studding into soffit board M8 Half-nut and tighten. Secure to Joist with M8 half-nut
- **Step 6:** Incline and lock frame to fall as above for all bolts & studding



### AliClad Flow

Please tick

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.



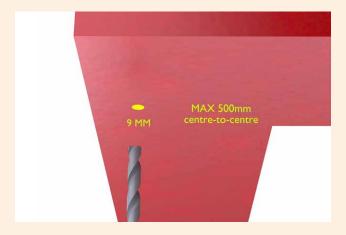
#### STEP 1:

Measure and cut soffit boards, rails, and gutter to required length. Deburr and paint cut ends.



#### STEP 2:

If using side support rails, mitre the support rail profiles to create a frame. When inserting boards one support rail must be joined to the rear rail and gutter profiles.



#### STEP 3:

Drill 9mm pilot holes into sub-structure for rail & gutter. Centre-to-centres must not exceed 500mm and must be spaced evenly as possible.



#### **STEP 4:**

Insert 2x M8 half-nuts onto required M8 fixings before hanging the soffit frame.

#### **NOTES**



#### **STEP 5:**

Slide prepared M8 fixings into rail and gutter bolt channels. The type of fixing will depend on required hanging height. Hang rail and gutter profiles onto sub-structure & loosely secure with M8 half-nut on fixings.



#### **STEP 7:**

Continue to install boards as above. Fix every 4th board in place at each end with a 5.5mm CSK in fixing channel. Do not penetrate drainage channels.



#### STEP 9:

If required, apply small bead of silicone to gutter ends and install gutter endplates for water-tight seal.



#### STEP 6:

Start from one end & slide in first soffit board. Add a bead of silicone along the interlocking edge of the next board to mitigate risk of leaking.



#### **STEP 8:**

Level frame to fall and secure frame by tightening all M8 fixings, see General Guidance. Ensure system is rigid and fixed in place.



#### **STEP 10:**

If safe to do so, used a mild detergent & soft cloth to clean soffit surface.

Important note: You may need to cut the last board to width, please ensure to not cut into the fixing channel and compromise board integrity.

### AliClad Lite

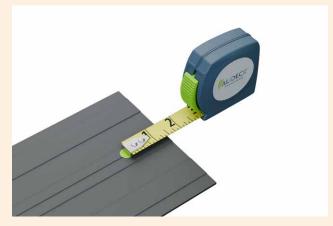
Please tick

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 soffit board to length if required, ensuring to deburr and paint the cut ends.



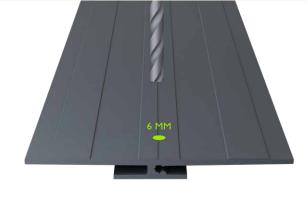
STEP 2:

Measure your fixing points on the board and mark up accordingly in the centre of the fixings channel.



STEP 3:

Drill a 6mm pilot hole through the soffit board at your mark.



#### **STEP 4:**

Affix the board to the sub-structure using self-drilling screws. We recommend 5.5mm CSK.

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### AliClad Lite contd.



**STEP 5:** Prepare the next board. Interlock into 1st board and secure as previous.



**STEP 6:** Repeat installation for all remaining boards.



**STEP 7:** Install option edging if required using the same method above (angle, flashing etc.).



**STEP 8:**Using a mild detergent and damp cloth wipe the boards down to remove any debris & swarf, where safe to do so.

Important note: You may need to cut the last board to width, please ensure to not cut into the fixing channel and compromise board integrity

NOTES

### AliClad Decor

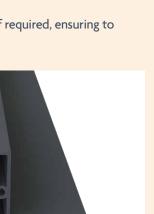
Please tick

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.



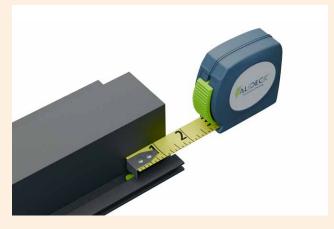
#### STEP 1:

Cut your soffit board to length if required, ensuring to deburr and paint the cut ends.



#### **STEP 3:**

Drill a 6mm pilot hole through the soffit board at your mark.



#### STEP 2:

Measure your fixing points on the board and mark up accordingly in the centre of the fixings channel.



#### **STEP 4:**

Affix the board to the sub-structure using self-drilling screws. We recommend 5.5mm CSK.

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### AliClad Decor contd.



STEP 5:

Prepare the next board. Interlock into 1st board and secure as previous.



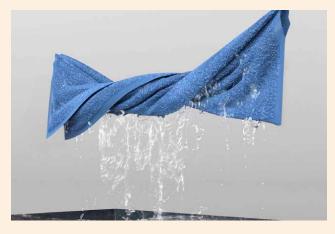
STEP 6:

Repeat installation for all remaining boards.



#### **STEP 7:**

Install option edging if required using the same method above (angle, flashing etc.).

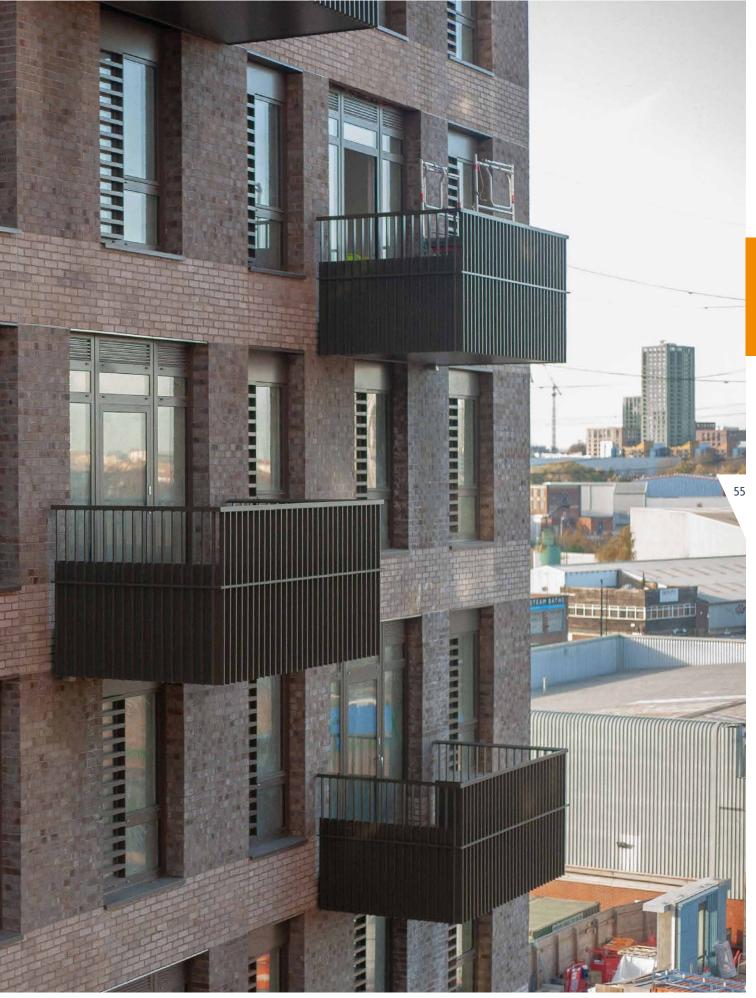


#### STEP 8:

Using a mild detergent and damp cloth wipe the boards down to remove any debris & swarf, where safe to do so.

Important note: You may need to cut the last board to width, please ensure to not cut into the fixing channel and compromise board integrity.

NOTES	



# AliRail SYSTEMS

AliRail is an innovative external aluminium metal balustrade system, which has been designed to deliver cost-effective, off-the-shelf balustrade solutions for steel bolt-on or slide-on balconies and for concrete tray or inset balconies. Our components, balustrade railings and Juliet balconettes have been engineered to deliver excellent aesthetics, durability, and safety.

#### Vertical Infill Balustrade Top-Fix PFC 0.74kN Option

Load tested in accordance with BS 6180: 2011 (0.74kn/m horizontal line load, 0.5kN infill point load, 1.0kN/m² infill distributed load).



## Vertical Infill Balustrade Plate-Fix 0.74kN Option

Load tested in accordance with BS 6180:2011 (0.74kN/m horizontal line load, 0.5kN infill point load, 1.0kN/m² infill distributed load).



#### Vertical Infill Balustrade Concrete-Fix PFC 0.74kN Option

Load tested in accordance with BS 6180:2011 (0.74kN/m horizontal line load, 0.5kN infill point load, 1.0kN/m² infill distributed load).



## Vertical Infill Balustrade Plate-Fix 1.5kN Option

Require a 1.5kN load and is tested in accordance with BS 6180:2011 (1.5kN/m horizontal line load, 1.5kN infill point load, 1.5kN/m² infill distributed load).



### Juliet Balcony System Inner Mounted Option

A contemporary Juliet balustrade system with 3 aluminium vertical infills options, available in any standard RAL colour, with LED lighting.

Specifically designed for mounting within the reveal.



#### Insight Glass (A2-s1, d0) Glass Balustrade 0.74kN

The AliRail Insight Glass system is the perfect system for residential glass balconies and load tested in accordance with BS 6180: 2011 (0.74kn/m horizontal line load, 0.5kN infill point load, 1.0kN/m2 infill distributed load).

- Glass thickness ranging from 10.8mm to 19mm
- Can be installed to A2-s1, d0
- Fast top mounted installation
- All Aluminium construction

# Juliet Balcony System Outer Mounted Option

A contemporary Juliet balustrade system with 3 aluminium vertical infills options. available in any standard RAL colour, with LED lighting options within the handrail.

Specifically designed to be outer-mounted to an external wall face.





#### **IMPORTANT GUIDANCE:**

Each System is designed individually to engineers requirements.

Specific guidance will be given on a project by project basis

Each System is a result of a collaborative effort between AliDeck, Steel Fabricators and structural Engineers

# ALIRAIL BALCONY SECTION VIEWS

AliRail metal balustrade system is a complete, fully compliant solution for all balustrade and rail requirements on steel cantilever and concrete inset balconies. Consisting of extruded aluminium components for high strength and low weight, the kit-form construction and design provides excellent versatility and a tailor-made solution for Balcony Manufacturers, Steel Fabricators, Developers & Contractors.









**BACK VIEW** 



**SIDE VIEW** 

**CROSS SECTION VIEW** 



# A-Fence SYSTEMS

Elevate your projects with our premium line of Aluminium Fencing based solutions, meticulously designed to enhance safety, aesthetics, and longevity. Our A-Fence Balcony Dividers, Fencing and Gates provide a formidable 30-year guarantee, meeting the most stringent fire safety standards (A2-s1, d0 and A2fl-s1) to provide unparalleled peace of mind.

#### **Interlocking Board Slats**

- Length: 1800mm
- Board width: 120mm
- Span between posts: 1800mm



#### **150mm Fence Slats**

- Length: 1800mm
- Board width: 150mm
- Span between posts: 1800mm







#### **100mm Fence Slats**

- Length: 1800mm
- Board width: 100mm
- Span between posts: 1800mm





- Length: 1800mm
- Board width: 50mm
- Span between posts: 1800mm







#### **Balcony Dividers**

- Length: Up to 1800mm
- Board width: 120mm
- Span between posts: **Up to 1800mm**







- Length: Up to 1800mm
- Board width: 150mm
- Span between posts: **Up to 1800mm**









Our Fencing system offers four distinct slat options 50mm, 100mm, 150mm, and 120mm Interlocking board, for your bespoke fencing designs around the whole of your project. Enjoy complete flexibility in design, with interchangeable components that seamlessly integrate into the A-Fence system including our Gate profile a necessity for any ground floor fencing project. Like the rest of our range, these fencing solutions carry a robust 30-year guarantee, meet the highest fire safety standards, and come with streamlined installation for efficient project management.

Whilst A-Fence offers a great solution for your balcony divider requirements there will be a need to install gates for access on some balconies. This is where our matching gate solution resolves this issue with seamless integration into the A-Fence system. Of course, it is manufactured from Aluminium and finished in a durable powder coat to ensure project success.

#### **Benefits**

- A 30-year guarantee.
- Fire-rated to A2-s1, d0 and A2fl-s1.
- A 1.8m span between posts for fence panels and balcony dividers, and a 1100mm width between posts for gates.
- Simple fixing for hassle-free installation.
- A modular system, allowing for flexible design and installation.
- Availability in Textured Anthracite Grey 7016 or Jet Black 9005

NOTES

### A-Fence

# **PROFILES**



**Aluminium Post** 



Aluminium Slat 50mm, 100mm, 150mm



Aluminium Slat
120mm Interlocking



Steel in-ground or on-ground base plate



**Aluminium Base Plate Covers** 



Aluminium Slat Spacer /
Cover trim



Inground post



Post caps



Stainless steel corner brackets with self drillers



**Gate Post** 



**Gate Post Plate** 



**Gate T Section Stopper** 



No. 2 Phillips screw



Post fixing screws



4.6mm x 16mm Self-Drilling screws



Sikaflex

NOTES	

### Recommended Tools

# FOR INSTALLATION

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



Chop Saw with blade suitable for cutting aluminium (recommended 60 to 80 tooth)



**Masonry Drill** 



Drill



**Impact Driver** 



**Spirit Level** 



**Plastic Sheeting** 



Rubber Mallet



Masonry Drill Bits to suit your fixings (not supplied)



4mm Drill Bit



**Mastic Gun** 



8mm Nut Driver



No. 2 Pozidrive screwdriver bit



10mm Masonry Drill Bit



**Digging Equipment** 



String Line to align post bases & tops



**Tape Measure** 

NOTES		

### Post Installation

Please tick

**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: INSTALL CONCRETE FOUNDATIONS

You have 2 options; either in-ground or on-ground installation. If on-ground option is chosen ensure the top of the foundations are level to each other, if this is not possible because you are on a hill please consider the difference in height between the two foundations and allow for this on your post length.

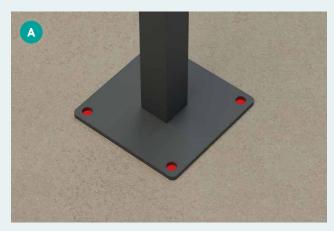
#### **TOP FIX ON-GROUND OPTION**

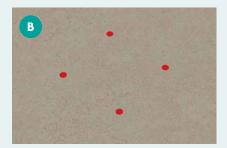
Depending on location we would recommend a concrete foundation of approximately 400mm x 400mm x 400mm, for exposed areas we would recommend 600mm x 600mm x 600mm for each post.

Once the concrete foundation has been installed and is level and has cured, the base plate can now be bolted to the foundation using fixings suitable for your environment (not supplied).

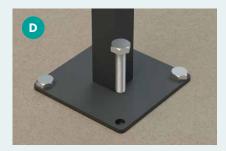
Using the base plate as a template mark out your 4 hole positions ensuring that the centre to centre dimension is correct. Drill the 4 fixing holes for each base plate with a drill bit suitable for your chosen fixings (not supplied).











#### **STEP 1: INSTALL CONCRETE FOUNDATIONS**

#### **IN-GROUND OPTION**

Excavate a hole of approximately 500mm deep x 300mm wide x 300mm wide and install your in-ground post into the centre of the hole, and ensure that your post is to be set level using your spirit level. Then back fill around the post with a suitable concrete mix, we recommend a C4 foundation grade of concrete.

If installing on a turfed area back fill as above but only backfill to 450mm. You will now have a space of approximately 50mm from under the baseplate to the top of the concrete. Now backfill the remaining 50mm with soil and re turf.

Once concrete has cured you can then move onto the next stage.





#### **STEP 2: INSTALL THE BASE PLATE COVERS, EVEN IF YOU HAVE CHOSEN** THE IN-GROUND OPTION

Simply install the base plate covers on top of the baseplate to cover over the heads of the floor fixings by sliding it over the inner post, even if you have chosen the inground options please install the base plate covers.









#### **STEP 3: INSTALL THE POSTS**

If you are installing a Gate also, ensure that the Posts are orientated so that the hinges of that Gate are always installed to the flat face of the Post.

Otherwise orient the Posts so that the flat face is pointing outwards.

Slide the aluminium post over the top of the base plate and ensure the post is plumb, consider packing up the base plate if it is not plumb.

Then using a 4mm drill bit and a cordless drill, drill a pilot hole through the drill line in the front centre of the post for the self-drilling screws 50mm above the base plate and then at 100mm centres going up the post. Ensure you have a minimum of 4 fixings per post and the screws are in the centre of the channel.





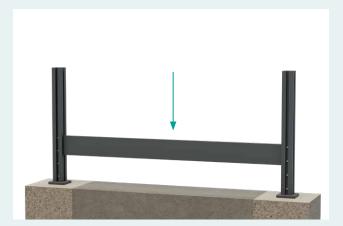


Please tick

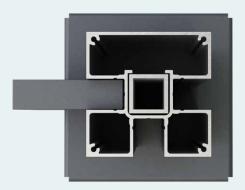
### 50mm/100mm/150mm Slat Installation

#### **STEP 1: INSTALL FENCE SLATS**

Now install your first fence slat by sliding the fence slat down from the top of the post all the way to the bottom.







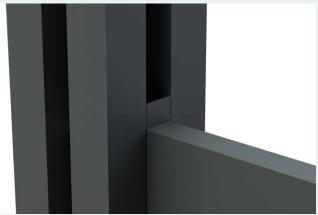
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#### **STEP 2: INSTALL SLAT SPACERS**

It is time to install the spacers (if required), the spacers are cut to various sizes depending on the height of your fence, the slats may be installed without them if installing a privacy fence. Simply press the spacers into the post channel as shown below.

Please tick





### STEP 3: INSTALL THE STAINLESS STEEL ANGLE BRACKET

Now install the angle bracket on top of the last slat. Using your No. 2 pozidrive screwdriver bit, simply install the angle bracket using the self-drilling screws, there is no need to pilot drill these fixings.

Add your final piece of trim to cover the angle bracket.





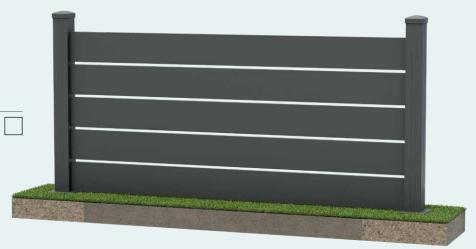
#### **STEP 4: INSTALL SECONDARY TRIMS AND TOP CAPS**

Install the secondary trims as required prior to installing the top cap.

Using the Sikaflex supplied apply a liberal amount of sealer around the inside of the top cap, then using your rubber mallet tap the top cap onto the top of the post, repeat this process to all top caps.

#### **STEP 5: CLEAN**

Using a solution of warm soapy water and a lint free cloth clean the fence and remove any fingerprints, dust or grime.



# 120mm Interlocking Slat Installation

#### **STEP 1: INSTALL 1st SLATS**

Now install your first fence Slat by sliding the fence Slat down from the top of the Post all the way to the bottom.

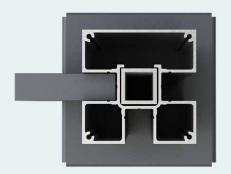
Please tick







NOTE: Ensure the Slat is in the correct orientation before installing. The indented end should be orientated to point upwards. Refer to illustration.



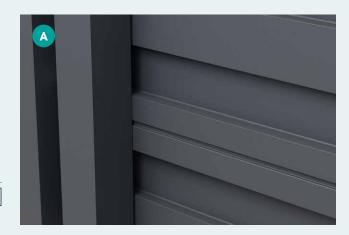
#### **STEP 2: INSTALL 2ND SLAT**

Slide in the next Slat so it rests on top of the previous one. Ensure the Slat is correctly orientated.

Once sure, use your rubber mallet to firmly tap the Slat so that both Slats are clipped together. Work along the length of the Slat to ensure proper mating.

Repeat process for all remaining Slats.

Please tick







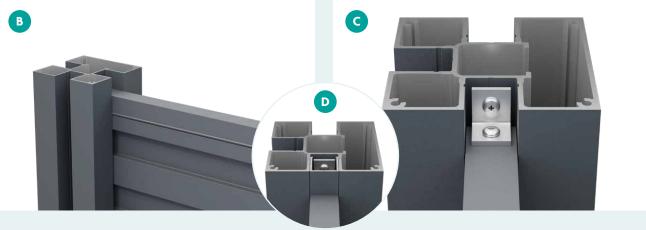
#### **STEP 3: SECURING THE PANELS**

Lay the Post Trim Finisher on the top of the final Slat, and as before use your rubber mallet to firmly tap the Post Trim Finisher onto the Slat, working the length to ensure proper mating.

Now install the L-Angle bracket on top of the Post Trim Finisher using self-drilling screws and secure it to the Post Trim Finisher and the Post. Finish by inserting a length of Post Trim Spacer to cover the fixing.

Please tick





### Gate Installation

#### STEP 1: 50 / 100 / 150MM SLAT INSTALL

Start by preparing a protected, level surface to assemble the Gate Door without damaging the powdercoat finish.

Insert both Gate Posts onto the first Slat, ensure that the Slat is sitting level with the bottom of the Gate Post for the later installation of the Endplates.

**NOTE**: It is recommended to use Sash Clamps or similar to secure the frame and ensure a proper fit when installing the Slats. Do not overtighten the assembly as this will prevent the Slats from being installed.





Depending on your design, you may need to insert Post Trim Spacers between the Slats. Do this before installing the next Slat.

Secure the first Slat to the Gate Post profiles using 2x self-drillers on either side central in the fixings channel. Use a Roofing Square to ensure the frame is straight.

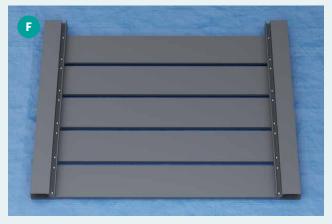




Repeat installation of the remaining Slats by sliding them into the assembled frame and securing them as before, remembering to use the Post Clip spacers to ensure a fitted finish.

Please tick







# STEP 2: 120MM INTERLOCKING SLAT INSTALL

Start by ensuring you have prepared a protected, level surface to assemble the Gate Door without damaging the powdercoat finish.

Insert both Gate Posts onto the first Slat, ensure that the Slat is sitting level with the bottom of the Gate Post for the later installation of the Endplates.

Ensure that your Slat is facing the intended direction for your design & is in the correct orientation, with the smaller indented clip facing upwards. Refer to illustration.





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# STEP 2: 120MM INTERLOCKING SLAT INSTALL CONTD.

Secure the 1st Slat with a self-drilling screw with the following dimensions on either side:

- 12mm from the top edge of the Slat profile
- 7mm from the bottom edge of the Slat profile Use a roofing square to ensure that the assembly is straight.

**NOTE:** It is recommended to use Sash Clamps or similar to secure the frame and ensure a proper fit when installing the Slats. Do not overtighten the assembly as this will prevent the Slats from being installed.









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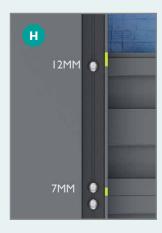
12MM

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Insert the 2nd Slat so that it rests on top the 1st. With the assembly rested upright on your protected level surface, use your rubber mallet to firmly tap the two Slats together, working along their length to ensure proper mating. Secure the 2nd Slat with a self-drilling screw 12mm from the top edge of the profile on either side. Refer to illustration. Recheck that the assembly is straight with a Roofing Square.





Repeat installation of the remaining Slats securing with a self-drilling screw 12mm from the top edge of the profile on either side, ensuring that the assembly is on a protected level surface whilst doing so.

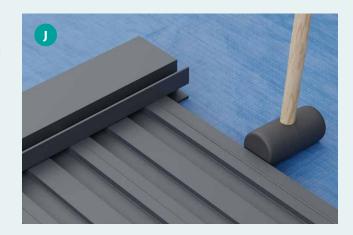
Secure the last Slat with a self-drilling screw with the following dimensions on either side:

- 12mm from the top edge of the Slat profile
- 7mm from the bottom edge of the Slat profile

Next, insert the long Post Trim Finisher into the Gate Post and rest on top of the final Slat. Use your rubber mallet to firmly tap the Post Trim Finisher onto the Slat, working the length to ensure proper mating.

Insert the short Post Trim Spacers into the Gate Post above to finish the Slat assembly.







#### **STEP 3: ATTACH TRIM**

Ensure that your Post Trim Finisher is the correct size to fit in the Gate Post. Use your rubber mallet to firmly tap in one end of the Post Trim Finisher into the Fixings channel of the Gate Post and work the length, ensuring that the Post Trim Finisher is fully inserted and flush with the surface of the Gate Post.

Please tick





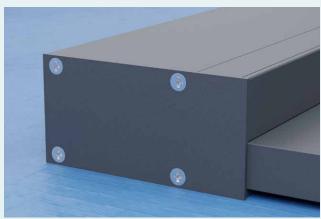
#### **STEP 4: INSTALL END PLATES**

Install the Endplates to both ends of the Gate Post profiles with self-drilling screws. Ensure that they sit flush against the Gate Post.

**DO NOT** overtighten the Endplates as this could cause the plates to warp if seated improperly.

Please tick





#### **STEP 5: ATTACH FIXTURES**

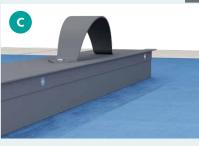
Now is the time to attach fixtures to the Gate Door. Refer to your fixture instructions to properly hang the Gate Door & attach handles, locks etc.

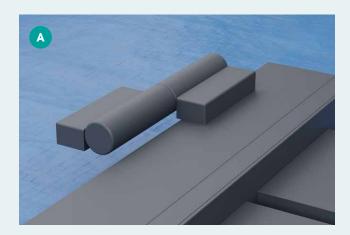
When installing the Gate Door, ensure that the Fence Post is orientated so that the hinge is always installed to the flat side of the Post.

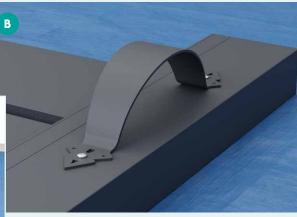
Attach the Gate T Section Stopper profile to the same side as the handle, ensuring that the profile sits flush with the length of the gate.

Secure to the Gate using suitable fixings in the inside corner of the Gate T Section Stopper profile.









#### **STEP 6: CLEAN**

Using a mild solution of warm soapy water and a lint free cloth clean the Gate Door and remove any fingerprints, dust or grime.



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# MAINTENANCE GUIDE

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## General Product Information & Advice

AliDeck decking, AliDrain, AliClad soffit cladding, AliRail balustrade and A-Fence systems are constructed from 6063 T6 grade aluminium to ensure they are fit for purpose and function correctly for many years. All of our systems are finished using a powder-coating process, developed for architectural applications.

To help the maximum life expectancy to be achieved, we have created this manual to help you understand the maintenance requirements along with important instructions which should be followed at all times.

#### **HEALTH & SAFETY**

The following Health and Safety advice should be followed at all times:

- 1. It is the sole responsibility of the maintenance person and/or customer to make sure that all training needs, safety precautions and supervision are undertaken and utilised correctly when undertaking inspections, maintenance and repairs. AliDeck cannot accept any responsibility whatsoever for any injury or damage to property or individuals as a result of the nature of personnel or equipment that is used, or if individuals do not follow correctly or otherwise disregard health and safety regulations.
- 2. If the systems are installed at a height, it is recommended that suitable guarding/equipment is used as a safety precaution to minimise the risk of persons falling. We also advise that persons do not climb onto the structures at any time and we cannot be held responsible for injuries that are caused by persons doing so.

- 3. It is the responsibility of the customer or their representatives to make sure that full care and attention is taken when working at height and your organisation's health and safety regulations should be followed as a minimum.
- 4. When third-party equipment or substances are used in the maintenance of the systems, the manufacturer guidance should be followed in its use.
- 5. In the event of product failure or any structural concerns, questions on the quality of the products, or issues in relation to repair of the product please contact AliDeck on 01622 235 672.
- 6. In the event of ice formation on the top surface of your decking, a mild solution of anti-freeze can be used.

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# Maintenance & Repair

Please tick	
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It is a requirement of our 30 year warranty that the following maintenance schedule is followed and that records of maintenance inspections are kept (inspection log supplied).

#### VISUAL INSPECTION AND LOGGING

The system installed and all its fixings, coatings, and materials should be inspected visually at least every 6 months (every 3 months in coastal environments) for:

- Physical damage
- Breakdown of the powder-coat finish
- Loose fixings

If any of the above issues are observed, please note them accordingly in your inspection log and, if possible, take photographs of the issue. If the installation is within any developer defect period, please contact the project manager in the first instance for further advice. If the installation is outside of defects period, please contact us on 01622 235 672.

# NOTES

#### **REPAIRS**

At inspection take care to look for any damage that has occurred to the powder-coated surface where it has broken through to the aluminium underneath. If damage is found, it is often possible to easily "touch-up" relatively minor damage.

- For light chips or scratches which have exposed the aluminium apply an appropriate Zinc Rich primer carefully to the defective area followed by a topcoat finish in a matching acrylic-based spray paint. Ensure all areas are cleaned with PW3 panel wipe to remove any grease, wax, and debris prior to re-coating.
- For larger areas of damage, coating breakdown or vandalism, the area should be sanded as such so that the edges are smoothed to allow for feathering in using P320 grade fine sandpaper (to create a smoother transition from the old paint to the new). A Zinc Rich primer should be brushed or sprayed onto the area and a topcoat should then be applied, in a similar manner.

At all times, please follow the manufacturer's instructions and precautions carefully to ensure safety and the best finished results. Wear protective equipment, such as gloves, goggles, and a face mask. If repairs are carried out using spraying it is strongly recommended that the surrounding area is protected and suitably masked off to avoid unintentional damage being accidentally caused.

If graffiti is present this should be removed by a specialist contract cleaner.

If loose fixings are identified, simply re-tighten them using the correct tool for the fixing. If you are unable to successfully tighten the fixing, please contact us for advice on 01622 235 672.

# Cleaning Powder Coated Products

Please tick

We recommend that the systems are cleaned at regular intervals as a build-up of dirt can cause damage. Poorly maintained decking areas can also lead to increased risk of injury from slips.

The frequency of cleaning is dependent on your environment - in a harsh coastal or industrial environment it is recommended that a clean is performed at least every 3 months. Where the surroundings are non-coastal and non-industrial, the frequency can be at six-month intervals.

AliDeck recommend cleaning the installed systems as follows:

- 1. Remove loose dirt/dust with a soft brush/broom.
- 2. Wash the structure with a solution of warm, soapy water and a lint-free mop or cloth
- 3. Rinse with plain warm water

No form of abrasive material or substance should be used at any time. All concentrated cleaners should be diluted as per the manufacturer's instructions.

Never use bleach, solvents, abrasive paste/cream cleaners as they could damage the surface of the products. It is strongly advised that no cleanser that contains chlorinated solvents, ketones or esters is used, which will damage the powder-coat finish. If in doubt, please call us on 01622 235 672. It is not advised to use pressure washers or steam cleaners on any part of the installation, including on the decking.

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#### **CLEANING OF THE ACCESS GUTTER**

We recommend opening the access hatch and clearing the gutter of any loose debris a minimum of at least every 6 months.

#### **STEPS**

- 1. Unscrew access hatch. Open access section of gutter.
- 2. Use long brush to clear collected debris from the gutter and simply flush through with water.







#### **CLEANING OF THE DRAINAGE CHANNEL**

We recommend clearing the drainage channel of all our systems a minimum of at least every 6 months.

#### **STEPS**

- 1. Insert the cleaning tool into the drainage channel and twist through 90 degrees so it will clean the channel.
- 2. Run the cleaning tool along entire length of channel to clear any debris.



# CLEANING OF THE DRAINAGE CHANNEL - ULTRA BOARD

We recommend clearing of the Ultra board drainage channel a minimum of at least every 6 months.

#### **STEPS**

- 1. Insert the cleaning tool into the drainage channel and twist through 90 degrees so it will clean the channel.
- 2. Run the cleaning tool along entire length of channel to clear any debris.



#### **NOTES**















Europa & Jenner House Victory Park, 1-2 Trident Close Medway City Estate Rochester ME2 4ER Tel: 01622 235 672 Email: info@alideck.co.uk www.alideck.co.uk







