

DESIGNGUIDE

Framing installation Guide

- Specifications
- Connection details
- Deck supports
- Installation requirements

MULTI-SURFACE CAPABILITY



CAN ALSO SUPPORT STRUCTURAL BOARD AND OTHER SURFACES

CLICKDECKING SYSTEM



QUICK INFO GUIDE

Cutting:

We recommend an aluminium or multi material blade used in a dropsaw or grinder.

Safety:

Please ensure all PPE is worn

Foundations:

Ensure appropriate structural foundation is made under each pedestal or post to support deck loading.

Engineering:

General span calculations and engineering is available through us to assist with permits ect. Site specific engineering may be required which can be carried out by a licenced structural engineer.

Fastners:

All fixings shall be either stainless steel or B8 coated screws.

Aluminium contact points:

Aluminium bolted to concrete - Seperated with plastic or EPDM packer (Minimum 2mm clearance to concrete).

Aluminium encased in concrete - Concrete shall not be "rapidset" or contain lime and aluminium to be fully seperated by corrosion resistance paint or similar.

Aluminium to steel - Steel to be HDG and packer to seperate contact point.

Aluminium to natural ground - 5mm clearance.

Loadings:

Standard loading for residental decks under 1m = 2kpa Live load and .2kpa dead load have been used. For all additional loading requirements contact us for a tailored design.

Project Design:

Installer shall verify all measurements and install as per relevant building code. This information is for guidance only and does not overrule building codes.

Attention - *Do not overtighten hex screws* Max torque 39 Nm 8.10.24



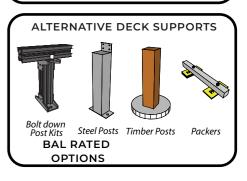
Minimum height achievable: 30mm (Top of Frame)

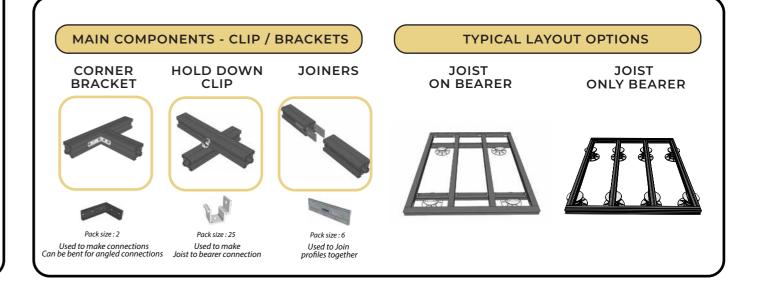
MULTI-SURFACE CAPABILITY

COMPOSITE	TIMBER	RAISED	ARTIFICIAL
DECKING	DECKING	PAVERS	TURE
			* 分类(1) 产业

CAN ALSO SUPPORT STRUCTURAL BOARD AND OTHER SURFACES



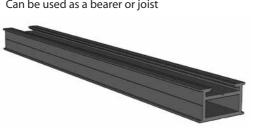




ALUMINIUM JOIST / BEARER

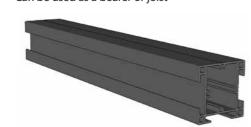
28PROFILE

- 28H x 50W
- Typical Joist span: 700mm
- Used for superlow applications
- Can be used as a bearer or joist



55PROFILE

- 55W x 55H
- Typical joist span: 1200mm
- Used for majority of applications
- Can be used as a bearer or joist



110PROFILE

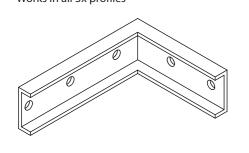
- 110H x 50W
- Typical joist span: 1900mm
- Used for longer spans and elevated decks
- Can be used as a bearer or joist



MAIN COMPONENTS

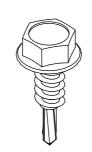
CORNER BRACKET

- The main bracket used make angled connections
- Can be bent to make non standard angles
- Works in all 3x profiles



HEX SCREW

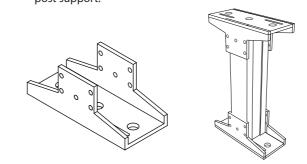
- Hex screw used to secure all components/brackets
- Marine Grade coated screw with EPDM washer
- M12 20mm



OTHER COMPONENTS

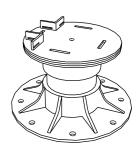
POST BRACKET

Fits onto the end of the 55Profile to make a post support.



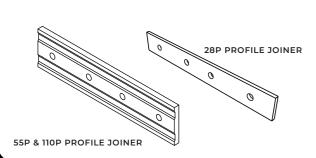
POWER PEDESTAL

- Adjustable height support system
- Heights from 10mm 440mm



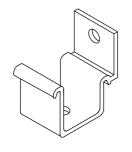
JOINER

Used to extend and join the lengths of the aluminium joists.



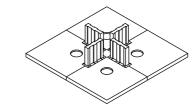
HOLD DOWN CLIP

Used to fasten the joist to the bearer.



TILE SPACER

Rubber tile spacer, supports the pavers and locks them into place once installed onto the Clickdeck system.



65mm HEX SCREW

- Long hex screw used to assemble stair kits
- Marine Grade coated screw with EPDM washer
- M12 65mm



CLICKDECK PRODUCT LIST

INICT / DEADED DONEILEC

JUIST / BEAKER PROFILES				
28 PROFILE (SIZE: 28H x 50W) Used for Super low decks	Item Code 28-3600 28-4800 28-6000	Length 3600mm Length 4800mm Length 6000mm Length	Typical Span 700mm (Continious) Typical Cantilever 200mm	
55 PROFILE (SIZE: 55H x 55W) Used for most applications	Item Code 55-3600 55-3600 55-4800 55-6000	Length 2400mm Length 3600mm Length 4800mm Length 6000mm Length	Typical Span 1200mm (Continious) Typical Cantilever 250mm	
110 PROFILE (SIZE: 110H x 50W) Used for larger spans or elevated decks	Item Code 110-3600 110-4800 110-6000	Length 3600mm Length 4800mm Length 6000mm Length	Typical Span 2100mm (Continious) Typical Cantilever 400mm	

POWER PEDESTAL SYSTEM

Item Code	Height Range
FX0	10-25mm
PPA	24-35mm
PPB	33-47mm
PPC	45-70mm
PPD	65-110mm
PPE	95-190mm
PPE1	185-325mm
PPE2	260-440mm





MAIN BRACKETS / CLIPS

HOLD DOWN CLIP 25 Per Pack

Item Code HDC-25

Used to attach the joist to the bearer.



CORNER BRACKET

2 Per Pack

Item Code CBKT-2

Used to make angled joins with all profiles



JOINERS

Item Code JOINER28-6 6 Per Pack JOINER55-6

Used to join the profiles together. 28Profile has its own model 55/110 shares the same model



HEX SCREWS

250 Per Pack

Item Code HEX20-250

Used to fix all the brackets and clips



OPTIONAL ACCESSORIES

POST BRACKET

Per Bracket

Item Code **POSTBK**

Used to make the Clickdeck Post Kit



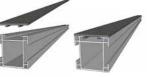
Post Bracket

TILE RUBBER STRIP

1m Strips

Item Code **RUBBER-1**

Rubber that clicks into the joists to lay pavers ontop



LONG HEX SCREWS

25 Per Pack

Item Code HEX65-25

Used when making steps kits



SPAN TABLES

Site/load specific engineering available on request

FORM 126 Certification (VICTORIA) FORM 15 Certification (QLD)



Standard Residential deck loading - Class A -- 2Kpa Live Load, 0.2Kpa Dead Load, 1.8 KN Point Load*

BASIC SPAN TABLE

Profile	Joist Span (recommended)	Bearer Span (recommended)	Cantilever (max)
28 x 50	600mm	600mm	200mm
55 x 55	1200mm	1200mm	250mm
110 x 50	1900mm	1700mm	400mm

CLICKDECK SYSTEM IS A CERTIFIED ENGINEERED PRODUCT.

Contact our friendly team for more information

WE OFFER CUSTOM SITE SPECIFIC ENGINEEERING AND CERTIFICATION.

Contact our friendly team for more information

SPAN TABLES

2.5 Kpa / 1.8 PL - Standard Residential (Standard loading - ~3 People per SQM)

JOIST SPACING: 450mm JOISTS PROFILE SPAN CANTILEVE 600/700*

1050/1200*

1900/2100*

28x50 - BEARER			
JOIST SPAN	BEARER SPAN	CANTILEVER	
600	600/700*	200	
1000	550/650*	200	
1200	550/650*	200	
1500	550/650*	150	
1900	550/650*	150	
2100	500/650*	150	

5	5x55 - BEAF	RER
JOIST SPAN	BEARER SPAN	CANTILEVER
600	1200/1200*	300
1000	1150/1200*	300
1200	1100/1200*	300
1500	1050/1150*	250
1900	950/1050*	250
2100	950/1000*	200
	1000 1000 1200 1500 1900	600 1200/1200* 1000 1150/1200* 1200 1100/1200* 1500 1050/1150* 1900 950/1050*

110x50 - BEARER			
JOIST SPAN	BEARER SPAN	CANTILEVER	
600	2400/2600*	500	
1000	2150/2400*	500	
1200	2050/2200*	500	
1500	1900/1950*	400	
1900	1700/1750*	400	
2100	1600/1650*	400	

Notes: Vibration check for 1.8 KN PL <2mm

Minimum back span length to be 4 times of the overhang length

300

500

- *Continuous Span
- Alu261223

55x55

110x50

3.5 Kpa / 2.7 PL - (Commercial) (Standard loading)

	JOISTS	
OFILE	SPAN	CANTILE

JOIST SPACING: 450mm

JOISTS		
PROFILE	SPAN	CANTILEVER
28x50	450/500*	200
	4 0 0 0 /4 0 0 0 0 V	
55x55	1000/1200*	300
110x50	1900/2100*	400

28x50 - BEARER			
BEARER SPAN	CANTILEVER		
450/550*	250		
450/550*	150		
450/550*	150		
450/550*	150		
450/550*	100		
450/550*	100		
	BEARER SPAN 450/550* 450/550* 450/550* 450/550*		

5	55x55 - BEARER			
JOIST SPAN	BEARER SPAN	CANTILEVER		
500	1100/1200*	300		
1000	950/1150*	300		
1200	950/1100*	250		
1500	950/1000*	200		
1900	850/850*	200		
2100	850/850*	200		

110x50 - BEARER			
JOIST SPAN	BEARER SPAN	CANTILEVER	
500	2100/2300*	400	
1000	1900/2000*	400	
1200	1850/1850*	300	
1500	1650/1650*	300	
1900	1500/1500*	250	
2100	1400/1400*	250	

- Minimum back span length to be 4 times of the overhang length
- *Continuous Span Alu261223

SPAN TABLES



Notes: Vibration check for 1.8 KN PL < 2mm

For non standard projects please contact us for site specific engineering.





Structural Assessment

Project: Aluminium Subfloor System

CAN-001

From: Andrew Barraclough

	Attention	Company	Email
To:	Nathan Azaredo	Exolux Modular Subfloor Systems	nathan@exolux.com.au

Re: Clickdeck Decking Sytem

I, Andrew Barraclough, certify that we have carried out a design check for the aluminium subfloor elements' sections of 28x50, 55x55, and 110x55. We confirm that the nominated aluminium profile sections and connections can sustain the design loads during the stages (Refer: 'Clickdeck Residential Span Table' and 'Clickdeck Commercial Span Table') for the nominated structural

Kind Regards,

Andrew Barraclough

Dr Andrew Barraclough BEng MEng PhD FIEAust CPEng NER RBP (EC 46301) Barrason's Engineers, Principal Engineer

- 1. This consultant advice notice does not authorise any extension of time or cost variation.
 2. Should the contractor deem that this notice constitutes an extension of time or cost variation, then they are to submit a claim in writing to the project manager and obtain approval prior to undertaking the nonlinated works.
 3. This communication may contain information that is privileged, confidential and /or exempt from disclosure under applicable law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or use of the information contained herein is prohibited. If you receive this transmission in error, please immediately contact the sender and destroy the material in its entirety, whether in electronic or hard copy force or hard copy force.

Barrason's Engineers A: Lvl 2-3, 2 Pacific Promenade, Pakenham, Vic, 3810
P: (03) 5940 2638
E: admin@barrasons.com.au

4 Kpa / 1.8 PL - Standard Residential (Higher occupancy loading)

Balconies / Roof decks - No heavy point loaded objects

JOIST SPACING: 450mm

JOISTS			
PROFILE	SPAN	CANTILEVER	
28x50	550/700*	200	
55x55	1050/1200*	300	
110x50	1900/2100*	500	

28x50 - BEARER				
JOIST SPAN	JOIST SPAN BEARER SPAN CANTILEVER			
600	550/650*	200		
1000	500/650*	150		
1200	500/650*	150		
1500	500/550*	100		
1900	450/450*	100		
2100	400/400*	100		

55x55 - BEARER		
JOIST SPAN	BEARER SPAN	CANTILEVER
600	1100/1200*	300
1000	1000/1150*	250
1200	950/1050*	250
1500	900/950*	200
1900	800/850*	250
2100	800/800*	200

110x50 - BEARER			
JOIST SPAN	BEARER SPAN	CANTILEVER	
600	2200/2400*	400	
1000	1850/1900*	300	
1200	1750/1750*	300	
1500	1600/1600*	250	
1900	1400/1400*	250	
2100	1300/1300*	250	

- Minimum back span length to be 4 times of the overhang length
- *Continuous Span

4.5 Kpa / 3.6 kN PL - Podium decks, Walkways.

JOIST SPACING: 450mm

JOISTS		
PROFILE	SPAN	CANTILEVER
28x50	400/450*	
55x55	900/1050*	300
110x50	1900/2150*	400

28x50 - BEARER		
ILEVER		

55x55 - BEARER		
JOIST SPAN	BEARER SPAN	CANTILEVER
500	900/1050*	300
1000	850/1000*	250
1200	850/950*	250
1500	850/850*	200
1900	750/750*	200
2100	750/750*	200

110x50 - BEARER		
JOIST SPAN	BEARER SPAN	CANTILEVER
500	2000/2200*	350
1000	1800/1800*	300
1200	1650/1650*	300
1500	1500/1500*	300
1900	1300/1300*	300
2100	1250/1250*	250

- Minimum back span length to be 4 times of the overhang length
- *Continuous Span

5.5 Kpa / 4.5 kN PL - Public areas with trolley access

JOIST SPACING: 450mm

JOISTS		
PROFILE	SPAN	CANTILEVE
28x50	400/450*	
55x55	800/850*	250
110x50	1900/2100*	300

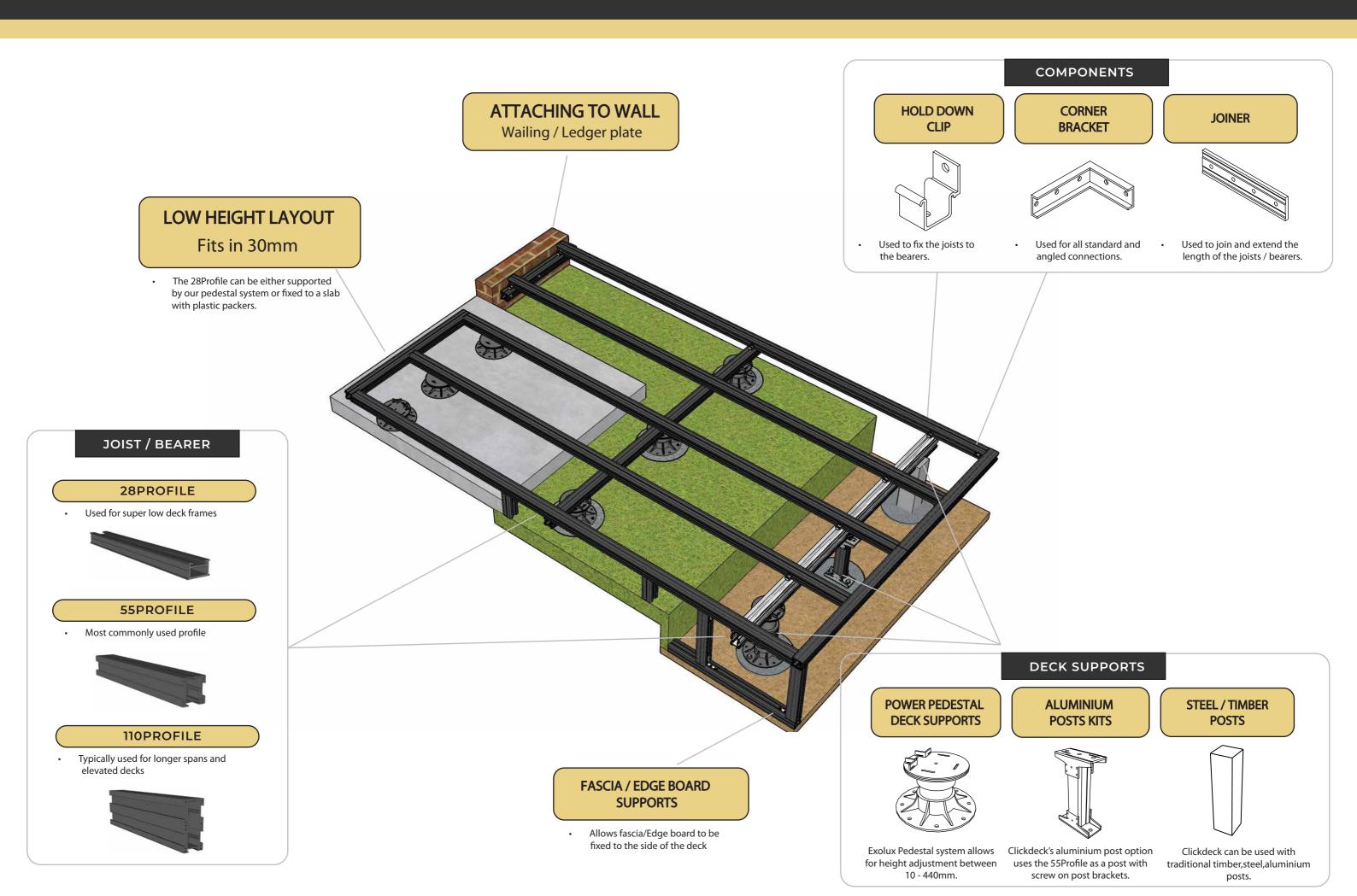
28x50 - BEARER		
JOIST SPAN	BEARER SPAN	CANTILEVER

55x55 - BEARER		
JOIST SPAN	BEARER SPAN	CANTILEVER
500	800/850*	300
1000	800/800*	250
1200	750/800*	250
1500	750/800*	200
1900	700/700*	200
2100	650/650*	200

110x50 - BEARER							
JOIST SPAN	BEARER SPAN	CANTILEVER					
500	1900/2200*	300					
1000	1600/1600*	300					
1200	1500/1500*	300					
1500	1350/1350*	300					
1900	1200/1200*	300					
2100	1100/1100*	300					

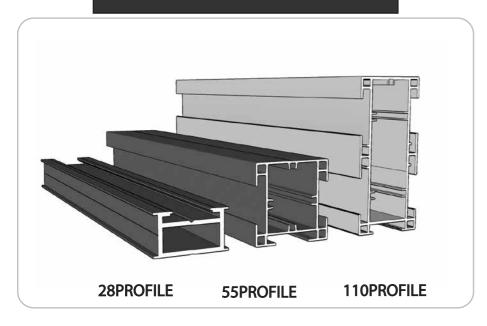
- Minimum back span length to be 4 times of the overhang length
- *Continuous Span

THE VERSATILE SOLUTION

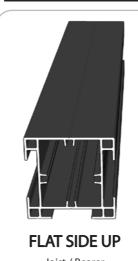


CONNECTION DETAIL

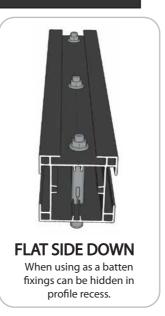
PROFILE RANGE



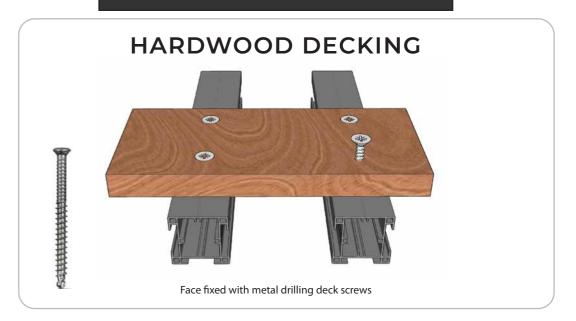
PROFILE ORIENTATION



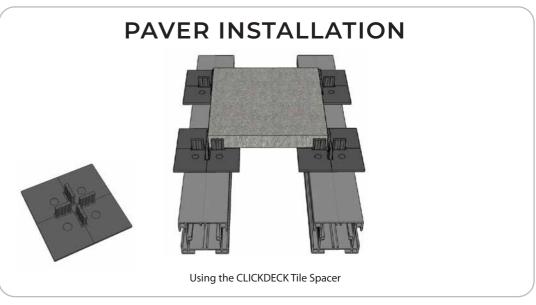
Joist / Bearer Most commonly used



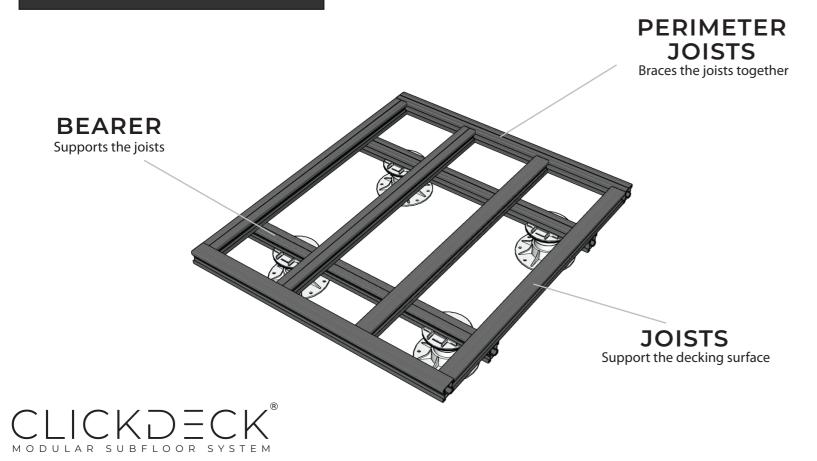
SURFACE INSTALLATION





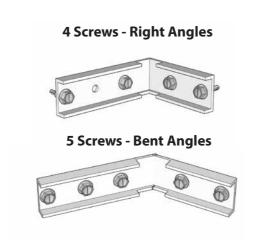


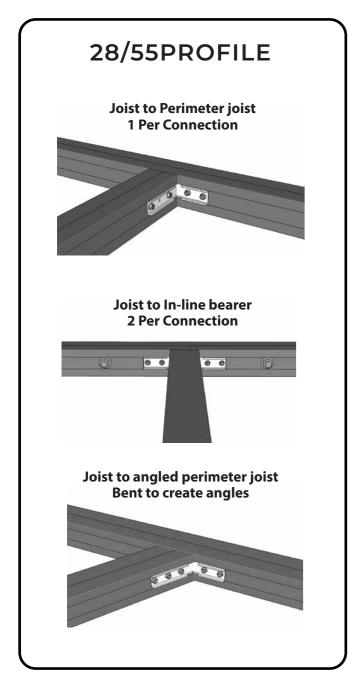
TERMINOLOGY

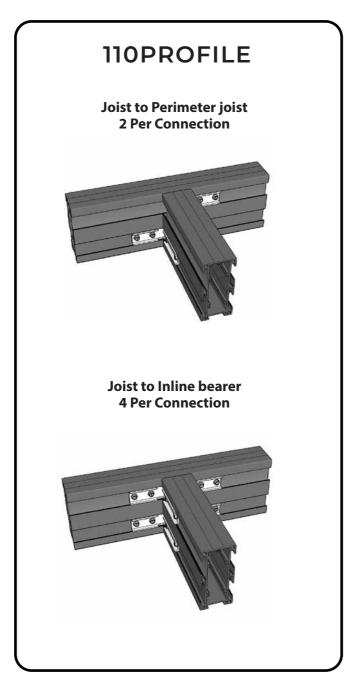


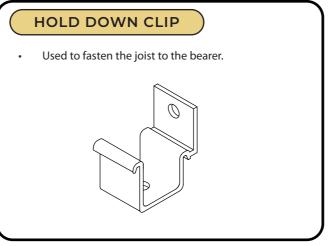
CONNECTION DETAIL

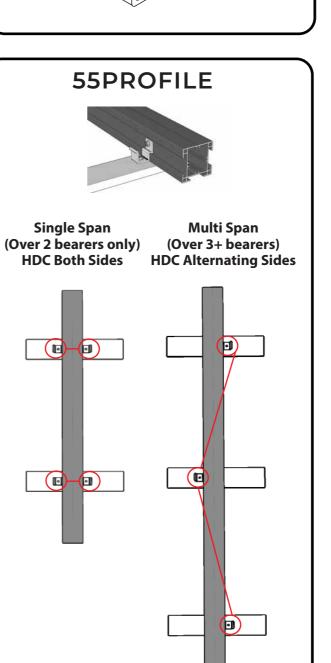
CORNER BRACKET The main bracket used make angled connections Can be bent to make non standard angles Works in all 3x profiles

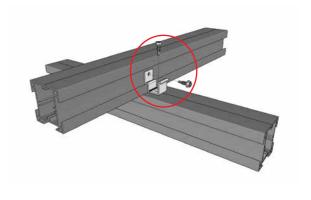


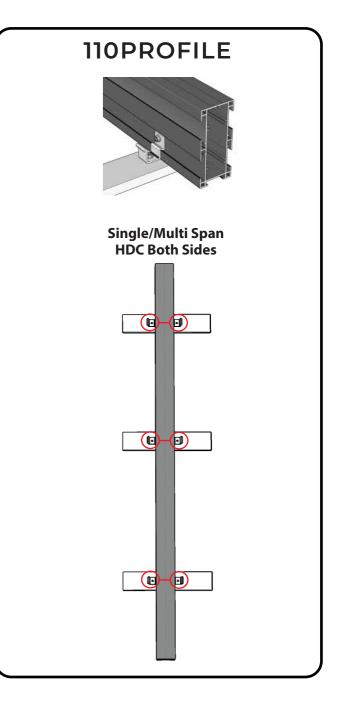




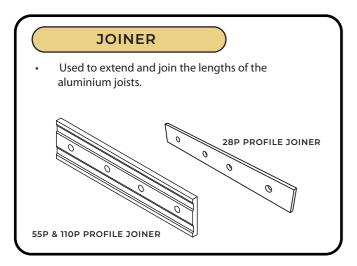




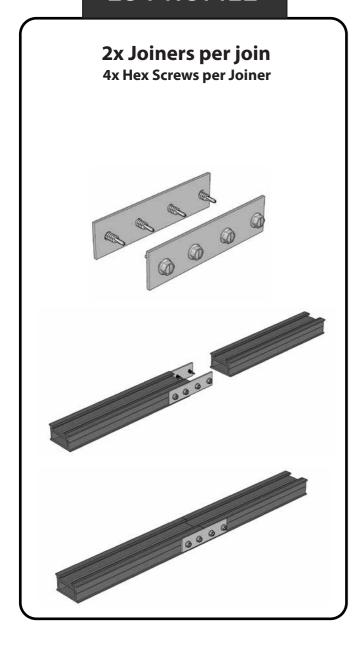




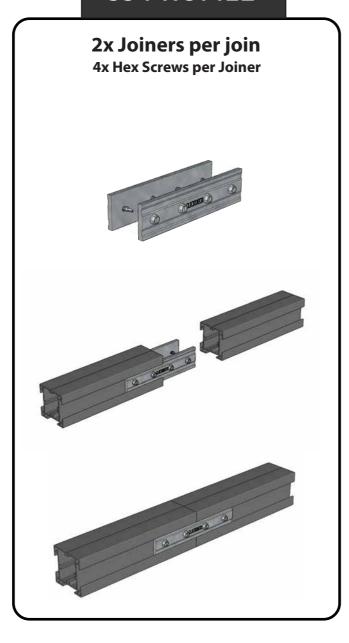
CONNECTION DETAIL



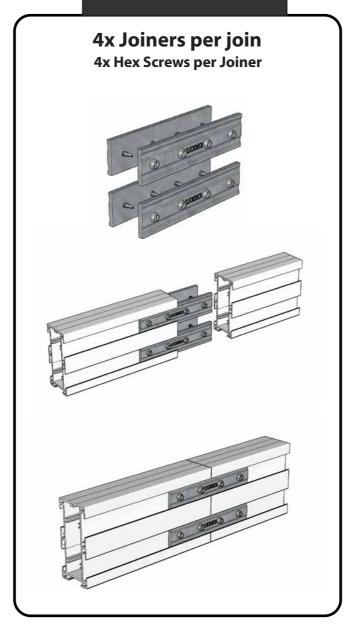
28 PROFILE



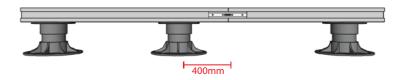
55 PROFILE



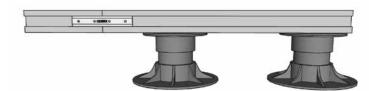
110 PROFILE



Recommended to have joiners within 400mm of supports

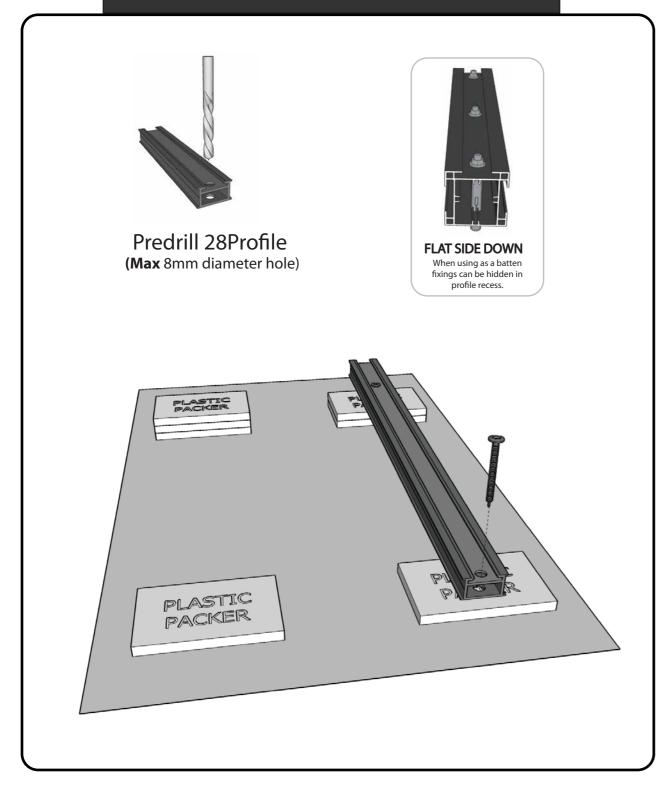


Joiners should not be placed on a load bearing cantilever



DECK SUPPORTS

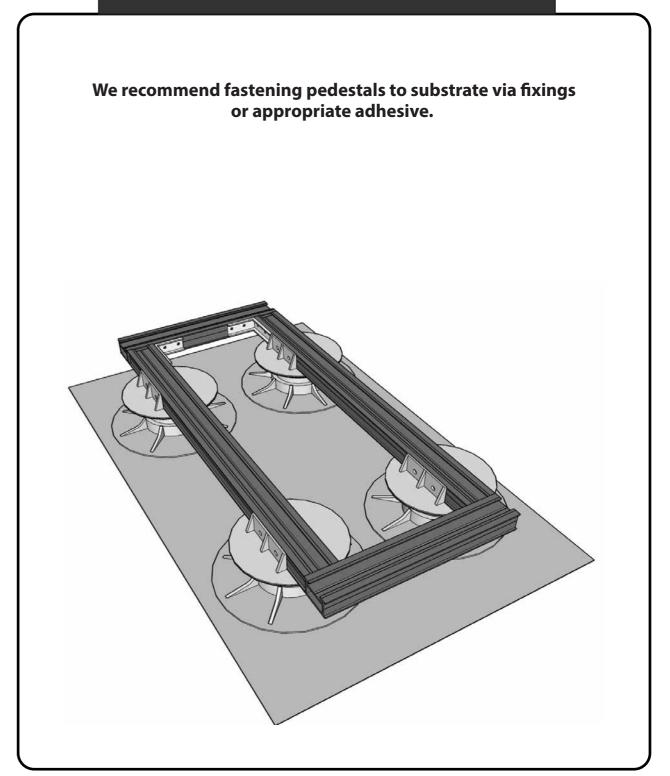
FASTENING TO CONCRETE SLAB



Use appropriate concrete fixings to secure the 28profile through the packer and into the concrete slab.

Please note: - Minimum 2mm clearance is required

USING PEDESTAL SYSTEM



Clickdeck pedestal system can be used to support the 28profile, its recommended to use perimeter joists to brace the frame.

DECK SUPPORTS-POWER PEDESTAL SYSTEM

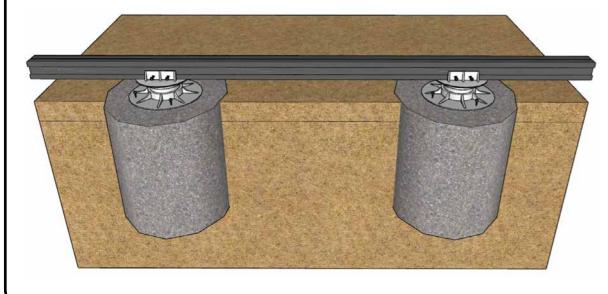
HEIGHT CHART



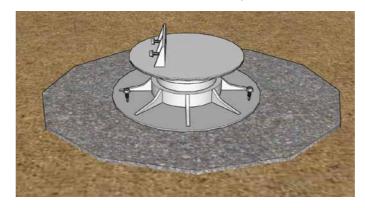
MODEL NO.	Height Range	Finished Floor Heights (includes 25mm deckboard + profile combination below)				
WIODEE NO.		28 JOIST ONLY	55 JOIST ONLY	55 JOIST	55JOIST 110 BEARER	110 JOIST 110 BEARER
FX 0	10-25mm	63-78	90-105	145-160	200-215	255-270
PP A	24-35mm	77-88	104-115	159-170	214-225	269-280
PP B	33-47mm	86-100	113-127	168-182	223-237	278-292
PP C	45-70mm	98-123	125-150	180-205	235-260	290-315
PP D	65-110mm	118-163	145-190	200-245	255-300	310-355
PP E	95-190mm	148-243	175-270	230-325	285-380	340-435
PP E + 1 EX	185-325mm	238-378	265-405	320-460	375-515	430-570
PP E + 2 EX	260-440mm	313-493	340-520	395-575	450-630	505-685

ON CONCRETE PAD FOOTINGS

Pedestals on concrete pad footings

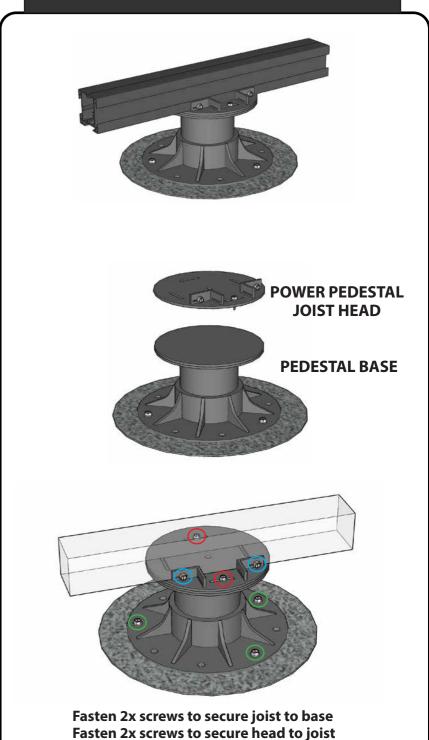


Pad footing (Typical detail) 350mm Diameter x Depth (Dependent on soil type)



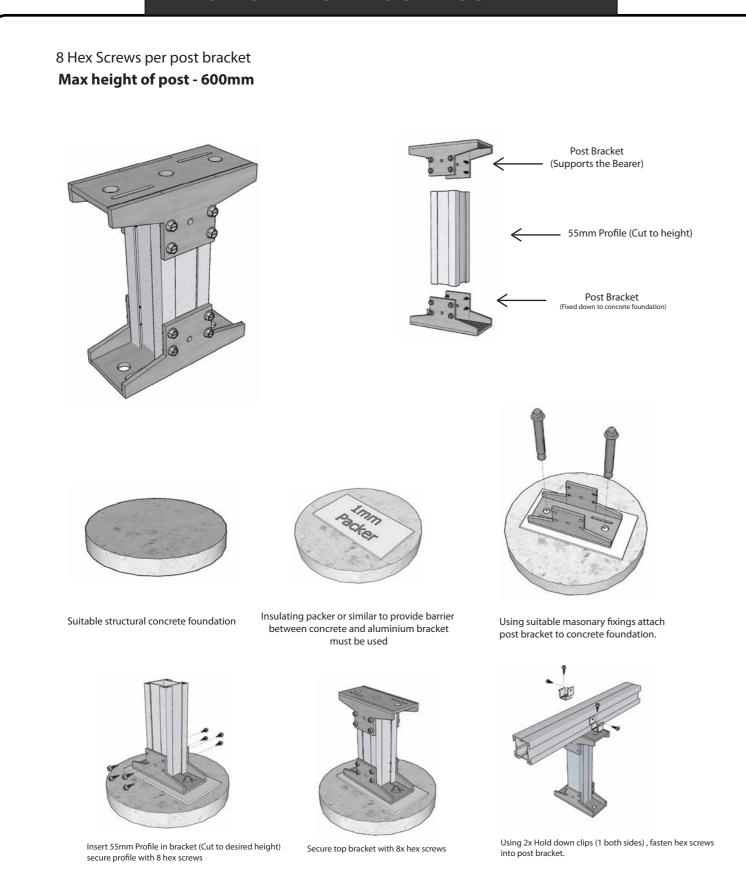
We recommend fastening pedestals to substrate via fixings or appropriate adhesive.

POWER PEDESTAL ASSEMBLY



DECK SUPPORTS-POSTS

CLICKDECK POST ASSEMBLY



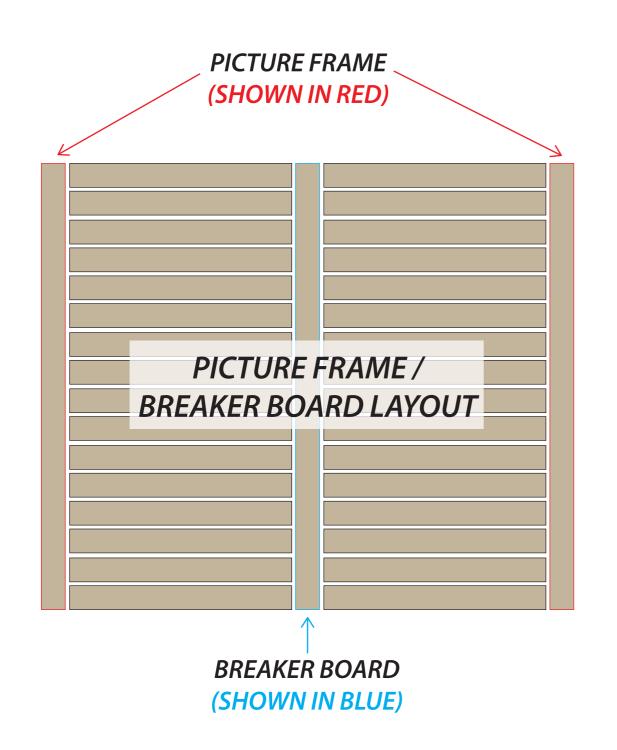
Note:

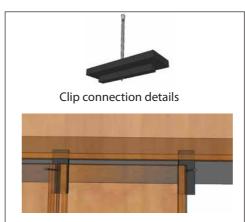
- All deck supports shall have a suitable structural foundation designed by a qualified professional.
- Rapid-set concrete or similar containing lime shall not be used when direct burying aluminum.
- Aluminium must be fully coated by barrier paint or similar and not be in direct contact with in-ground concrete.
- Maximum height for Aluminium post (55mm Profile) is 600mm from Ground level.
- Above 600mm height, a suitable timber or steel post maybe used.
- When attaching post bracket to concrete, an insulating packer or similar must be used to provide barrier between concrete and aluminium.
- It is recommended for the frame system to be attached to a perimeter wall or similar if possible.

Clickdeck can also be supported by:



DECKBOARD DETAIL - PICTURE FRAME / BREAKER BOARD



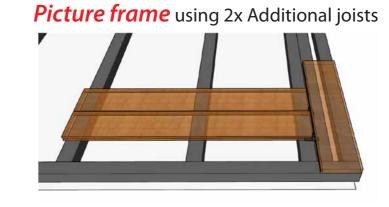












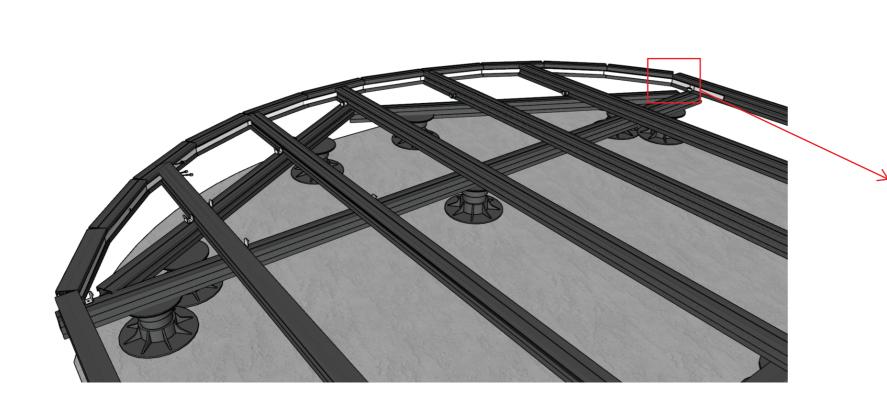
CURVED FRAMING

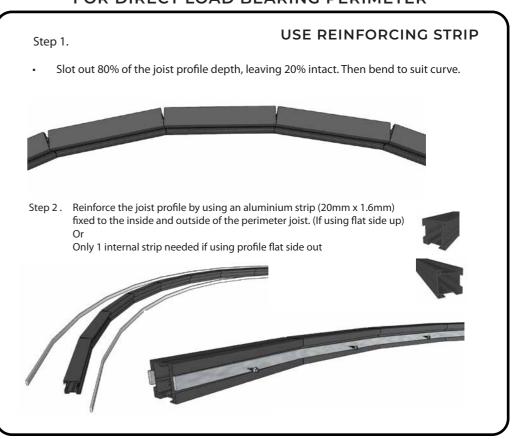


SLOT ALUMINIUM PROFILE



FOR DIRECT LOAD BEARING PERIMETER



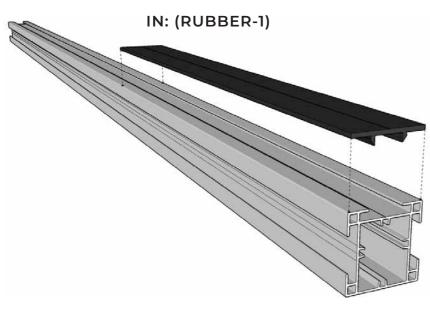


RAISED PAVER / TILE INSTALL

CLICKDECK TILE COMPONENTS

TILE RUBBER STRIP

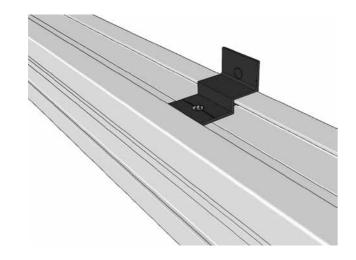
INSTALLED ON THE FRAME TO PROVIDE A NON SLIP SURFACE BETWEEN PAVER AND JOIST



TILE RETAINING CLIP

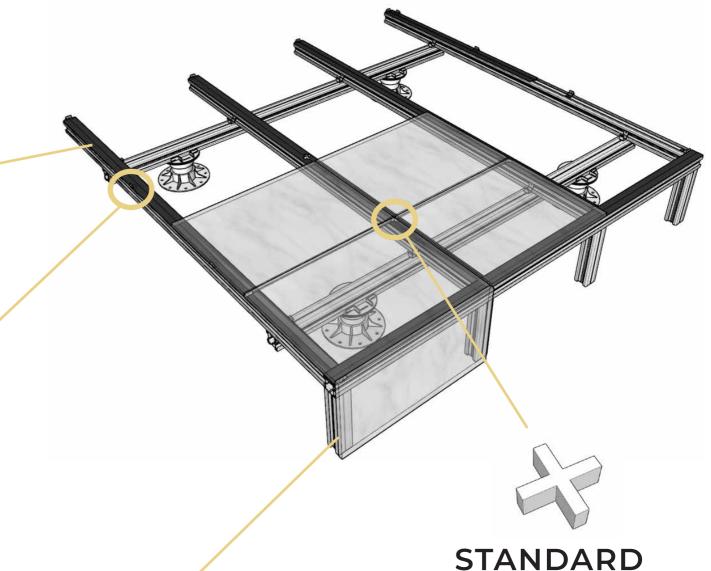
INSTALLED ON PERIMETER OF FRAME TO KEEP PAVERS FROM MOVING OFF FRAME

IN: (TILECLIP-25)



NOTE: FASCIA COVER

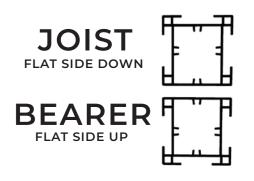
PAVERS TO BE GLUED WITH TILE ADHESIVE TO FASCIA DROPPERS



TILE SPACERS

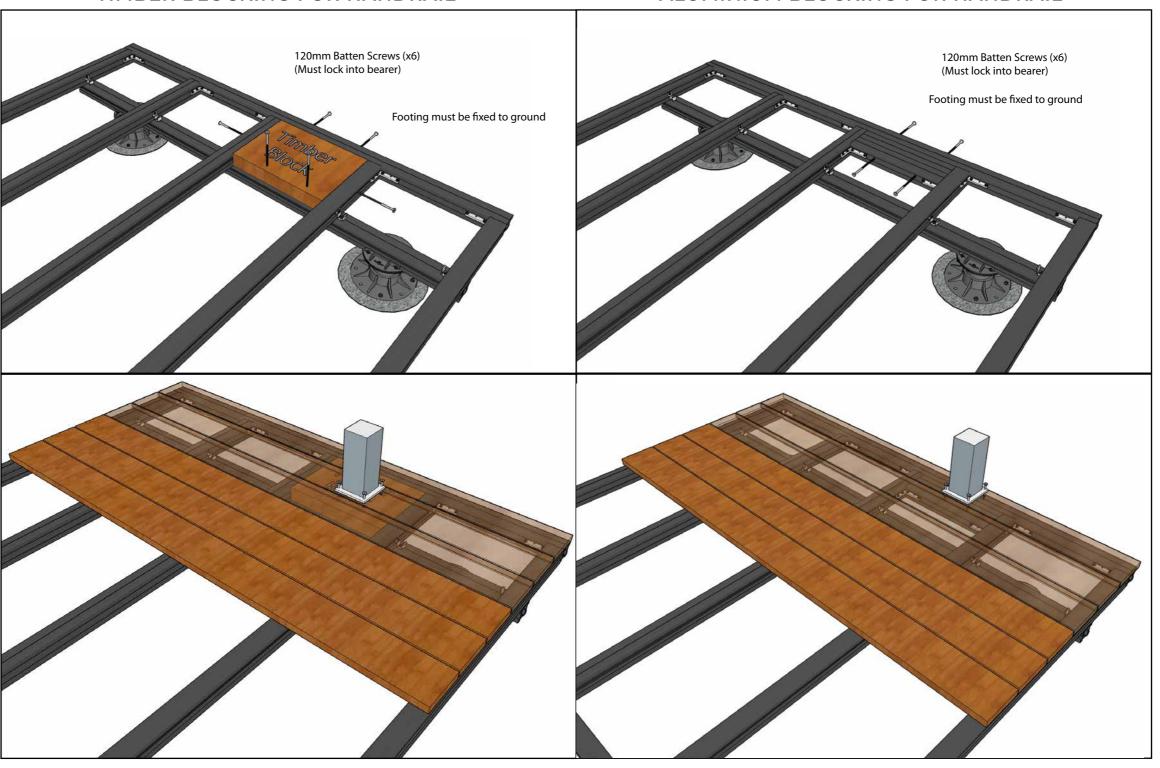
INSTALLED BETWEEN THE PAVERS
TO PROVIDE EVEN GAPS
RECOMMEND 5mm Spacings

PROFILE ORIENTATION



TIMBER BLOCKING FOR HANDRAIL

ALUMINIUM BLOCKING FOR HANDRAIL



Note: Please consult handrail engineer for installation requirements.

FASCIA BOARD SUPPORT

