

CONTENTS

Storage And Handling Instructions For Zerodeck Boards	2
Pre-Installation Site Survey & Planning	2
Tools Required On Site	2
Sub-Frames	3
A-Ped-Joist Centres	4
Pedestal Centres	4
Sub-Frame Terminology	4
Creating A Sub-Frame With The A-Ped	5
Fixing The A-Ped-Joist To The A-Ped Pedestal	6
Fixing Zerodeck Boards To The Sub-Frame	6
Cantilevers	6
Zerodeck – Cutting Guidelines	7
Safety Gear	7
Straight Cuts	7
Creating Curves With A Jigsaw	7
Cutting Holes	8
Screw Fixing Guidance	8
Pedestal Configuration	9
A-PED Pedestals models	10



STORAGE AND HANDLING INSTUCTIONS FOR ZERODECK BOARDS

- Always wear gloves when handling Zerodeck boards.
- Zerodeck boards must always be stored flat and fully supported along their length.
- When removing Zerodeck boards from a stack, make sure that boards are lifted rather than dragged to avoid scratches.
- Store Zerodeck boards inside in a dry, ventilated area.
- Do not store boards outside or in damp conditions as this may cause mould to grow between the boards.
- Follow any site-specific instructions relating to storage and handling, including the use of lifting aids.

PRE-INSTALLATION SITE SURVEY & PLANNING

- Our products require a hard substrate and are suitable for use with waterproof membranes
- Survey the site for the datums using a laser level. Each site is unique and will need to be surveyed to understand:
 - Finished floor level (FFL) & void requirements
 - Falls
 - Services or obstacles such as utility pipes and cables, ledges, ducting, manholes, drains etc
 - Perimeter conditions and cantilever requirements
 - Substrate materials & membranes
- The site survey will determine which components are required to build the sub-frame for Zerodeck
- We recommend an install team of two persons minimum

TOOLS REQUIRED ON SITE

Non-exhaustive list

- Drill & Driver
- Skill Saw or Plunge Saw for cutting Zerodeck boards lengthwise
- Jigsaw for creating curves
- Chop Saw & stand for cutting Zerodeck boards and aluminium A-PED-JOISTS
- Aluminium / Multi-material blades
- Fibre cement blades
- HSS Drill Bits for Aluminium
- Straight Edge
- Sting Line
- Laser level
- Spirit Levels
- A-PED spanner (or equivalent) – required for A-PED adjustment only
- Soft mallet hammer
- Full PPE including dust suppression, extraction, dust masks, eye protection, gloves

SUB-FRAMES

- The sub-frame needs to be installed prior to any Zerodeck boards being attached.
- Sub-frame can be created using the A-PED pedestals, depending on site void requirements, along with A-PED-JOIST.

SUB-FRAME BUILD UP & FINISHED FLOOR LEVELS (FFL)

A-PED Pedestal (24 – 395mm) + A-PED-JOIST-20 or 40mm + Zerodeck 25mm

- Minimum FFL 69mm
- Maximum FFL 460mm
- Maximum slope correction – 5%

A-PED Model	FFL With A-PED-JOIST-20 and Zerodeck	FFL With A-PED-JOIST-40 and Zerodeck
A-PED-24-30*	69-75mm	89-95mm
A-PED-28-34*	73-79mm	93-99mm
A-PED-33-39*	78-84mm	98-104mm
A-PED-33-48	78-93mm	98-113mm
A-PED-48-65	93-110mm	113-130mm
A-PED-57-82	102-127mm	122-147mm
A-PED-72-117	117-162mm	137-182mm
A-PED-105-150	150-195mm	170-215mm
A-PED-140-185	185-230mm	205-250mm
A-PED-175-220	220-265mm	240-285mm
A-PED-210-255	255-300mm	275-320mm
A-PED-245-290	290-335mm	310-355mm
A-PED-280-325	325-370mm	345-390mm
A-PED-315-360	360-405mm	380-425mm
A-PED-350-395	395-420mm	420-460mm

*No slope correction with these pedestal models

A-PED-JOIST CENTRES

Recommended distance between A-PED-JOISTS for weight loads – centre to centre:

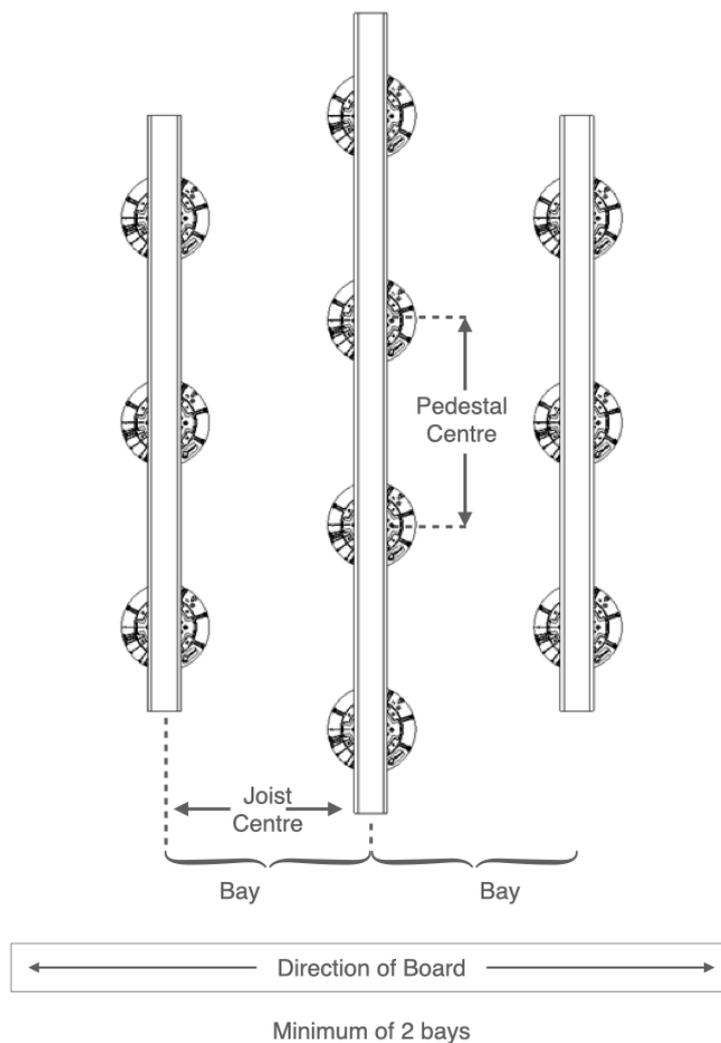
- Commercial settings – 350mm
- Domestic settings – 450mm

PEDESTAL CENTRES

Recommended distance between pedestals – centre to centre:

- A-PED-JOIST-20 (20mm joist) = 400mm
- A-PED-JOIST-40 (40mm joist) = 500mm

SUB-FRAME TERMINOLOGY



CREATING A SUB-FRAME WITH THE A-PED

A-PED PEDESTAL ASSEMBLY

The A-PEDs are supplied in component parts. If using multiple pedestal models, ensure that you are using the correct components for the pedestal model that you are assembling. Refer to the Pedestal Configuration guide for pedestal composition.

All models (EXCEPT A-PED-24-30, A-PED-28-34, A-PED-33-39, A-PED-33-48)

1. Screw the two locking nuts on to the threaded rod - we recommend that the flat side of the bottom nut faces down, and the flat side of the top nut faces up. i.e., the flat sides are always facing out.
2. Attach the turning plate.
3. Place the turning plate (ensure you are using the correct turning plate for the model) in to the base and then rotate to position to the desired slope correction value:
4. Match up the values on the turning plate with the value on the base e.g., 1 with 1, 2 with 2.
5. If no slope correction is required match 0 with 0.
6. Once the desired slope has been set, fix the locking key in position so that the turning plate and the base are locked together (if locking keys are being used).
7. Screw the correct pedestal head in place so that the pedestal is at the required height.
8. Tighten the locking nuts top and bottom.
9. Place the pedestal in the desired position with the arrow on the base pointing in the direction of the fall.

Model A-PED-33-48

Note that the TH Head is the head of the pedestal and the base is the A-PED base.

1. Screw the locking nut on to the threaded rod of the TH Head with the flat side of the locking nut facing down.
2. Attach the turning plate to the base.
3. Screw the threaded rod of the TH Head on to the turning plate so that it is at the required height.
4. Tighten the locking nut.
5. Place the pedestal in the desired position.

Models A-PED-24-30, A-PED-28-34, A-PED-33-39 (90mm Base, no slope correction)

Note that the A-PED Head acts as the base in these models, and the TH Head is the head.

1. Screw the locking nut on to the threaded rod of the TH Head with the flat side of the locking nut facing down.
2. Screw the A-PED Head on to the threaded rod so that it is at the required height.
3. Tighten the locking nut.
4. Place the pedestal in the desired position.
5. Use a spreader plate accessory if required.

FIXING THE A-PED-JOIST TO THE A-PED PEDESTAL

1. Lay the A-PED-JOIST across the top of the assembled & correctly placed pedestals, with the narrow flat side facing up, and the wider flat side placed directly on the pedestal.
2. Check that the pedestal and A-PED-JOIST are at the required height, adjust if necessary
3. Attach each side of the A-PED-JOIST to the pedestal using a tek screw through the base of the rail along the grooved channel.
4. If multiple lengths of joist are required, ensure that they are butt-joined on top of a pedestal using a joiner plate.

FIXING ZERODECK BOARDS TO THE SUB-FRAME

1. Boards should be cut to the required size using a Chop Saw or Mitre Saw following the Cutting Guidelines. Lengths should always be joist centre to joist centre so that the boards are butted together without a gap over a joist. Note that the minimum size for the deckboards are two bays/ three joist fixings minimum.
2. Place a clip into the groove on the side of the board and then screw the clip to the joist using the screws supplied. Note the clip is not the same on both sides, place the side with the cleat into the deckboard groove first, this will hold down the decking. The alternate side is smooth and the next deckboard along will slide under the clip.
3. Do this along the length of the board until the board is attached to the joist on one side.
4. Next board in the row is laid down into the clips and tapped into position with a soft mallet hammer. With a long T20 driver bit, the screws can be loosened or tightened to aid installation or later to remove boards if needed.
5. Repeat this row by row
6. As you are progressing, use a laser level to check for levels and adjust pedestal heights as necessary
7. Clips can be tightened if necessary. Boards will have a 6mm gap between them; the screw head is 5mm and can be tightened or loosened as necessary afterwards – either to help installation if having trouble sliding a board under the clip, or if boards need to be removed.
8. Where boards butt together, use a single clip for both boards
9. The side of the board that is nearest the perimeter sometimes needs to be surface-fixed if clips can't be used. In this instance, use a stainless steel tek screw pulled in flush with the head. See section on screw fixings. Starter Clips may be available as an alternative.
10. Starting points and layouts are site-specific and are often design-led dependent on the desired finished look.

CANTILEVERS

- Cantilever board length – 100mm maximum.
- Cantilever board width – can't be anymore than the width of the board and must be supported all the way by the joist.

ZERODECK – CUTTING GUIDELINES

SAFETY GEAR

In addition to other suitable PPE as described in the method statement and risk assessment, we recommend the following whilst cutting Zerodeck:

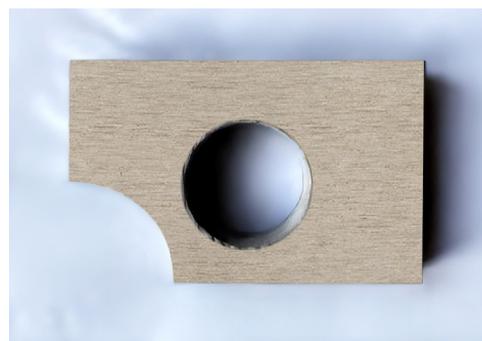
- Impact-rated goggles must be worn.
- Suitable and fitted dust mask must be worn.
- Small cuts must be carried out in a well ventilated area. For larger cuts, dust extraction must be used with the correct filter.
- Hearing protection must be worn.

STRAIGHT CUTS

- It is recommended to use a Fibre cement blade PCD tipped blade on a suitable table-saw, cross-cut saw or chop saw.
- The cut face should be smooth and the colour of the board, with minimal or no breakout at the back.
- If break-out is experienced at the back of the board, consider using a supporting material under the workpiece, or using a crosscut/sliding mitre saw or table saw.
- Cutting the board upside down may result in a tidier cut on the upper surface.
- If blackening of the face of the board is experienced, it is likely that the blade speed is too high, consider reducing the blade speed or switching to a blade with fewer teeth.
- If blackening occurs, it can be removed using 100grit sandpaper.

CREATING CURVES WITH A JIGSAW

- Jigsaws can be used to create curves.
- A good quality PCD blade must be used which is suitable for materials in excess of 25mm thick.
- The correct blade should cut cleanly with no break-out of the back of the board.
- Some blades leave paint on the cut edge, this can be removed with 100 grit sandpaper.
- Points less than 5mm will likely break off.



CUTTING HOLES

- Small diameter holes can be drilled with a PCD tipped drillbit.
- Larger diameter holes can be cut with a good quality PCD or carbide tipped holesaw. Note that the drillbit within the arbor should also be PCD, or masonry tipped.
- For quick cutting of holes, a narrow blade carbide tipped hole saw, with a PCD tipped drill bit in the arbor produces fast cuts with minimal or no breakout of the back of the board. However, this type of hole saw can cause the hole to have ridges on the cut face and can chip the front face unless the hole is initiated very carefully.



Where the cut face will be visible inside the hole, a PCD tipped hole saw for concrete produces a smoother finished face, but will be slower, and greater care is needed to prevent breakout of the back of the board.



SCREW FIXING GUIDANCE

- When surface fixing the perimeter of the area, fixings must be minimum of 25mm from edges and minimum of 80mm apart.
- Using A2 stainless countersunk T15 screws, pre-drill a 4.5mm hole with a suitable PCD tipped drill.
- Insert and drive the screw into the joist, to pull the screw head flush with the surface.

PEDESTAL CONFIGURATION

Without Slope Correction (90mm base)

A-PED-24-30	1 x TH15 Head, 1 x A-PED Head, 1 x Locking Nut
A-PED-28-34	1 x TH20 Head, 1 x A-PED Head, 1 x Locking Nut
A-PED-33-39	1 x TH25 Head, 1 x A-PED Head, 1 x Locking Nut

With Slope Correction (170mm base)

A-PED-33-48	1 x TH25 Head, 1 x A-PED Base, 1 x TP-1 Turning Plate , 1 x Locking Nut
A-PED-48-65	1 x AP-Head, 1 x A-PED Base, 1 x TP-1 Turning Plate, 1 x 35mm Rod , 2 x Locking Nuts
A-PED-57-82	1 x AP-Head, 1 x A-PED Base, 1 x TP-1 Turning Plate, 1 x 50mm Rod , 2 x Locking Nuts
A-PED-72-117	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 65mm Rod , 2 x Locking Nuts
A-PED-105-150	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 100mm Rod , 2 x Locking Nuts
A-PED-140-185	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 135mm Rod , 2 x Locking Nuts
A-PED-175-220	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 170mm Rod , 2 x Locking Nuts
A-PED-210-255	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 205mm Rod , 2 x Locking Nuts
A-PED-245-290	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 240mm Rod , 2 x Locking Nuts
A-PED-280-325	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 275mm Rod , 2 x Locking Nuts
A-PED-315-360	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 310mm Rod , 2 x Locking Nuts
A-PED-350-395	1 x AP-Head, 1 x A-PED Base, 1 x TP-2 Turning Plate, 1 x 345mm Rod , 2 x Locking Nuts



TH
Head



A-PED
Head



A-PED
Base



A-PED
TP-1 Turning Plate



A-PED
TP-2 Turning Plate



A-PED
Rod



A-PED
Locking Nut

A-PED PEDESTALS MODELS



A-PED-24-30
24-30mm



A-PED-28-34
28-34mm



A-PED-33-39
33-39mm



A-PED-33-48
33-48mm



A-PED-48-65
48-65mm



A-PED-57-82
57-82mm



A-PED-72-117
72-117mm



A-PED-105-150
105-150mm



A-PED-140-185
140-185mm



A-PED-175-220
175-220mm



A-PED-210-255
210-255mm



A-PED-245-290
245-290mm



A-PED-280-325
280-325mm



A-PED-315-360
315-360mm



A-PED-350-395
350-395mm