

Installation Guide For Low Height Decks



Important:

Please read before starting for efficient and correct installation.

Engineering:

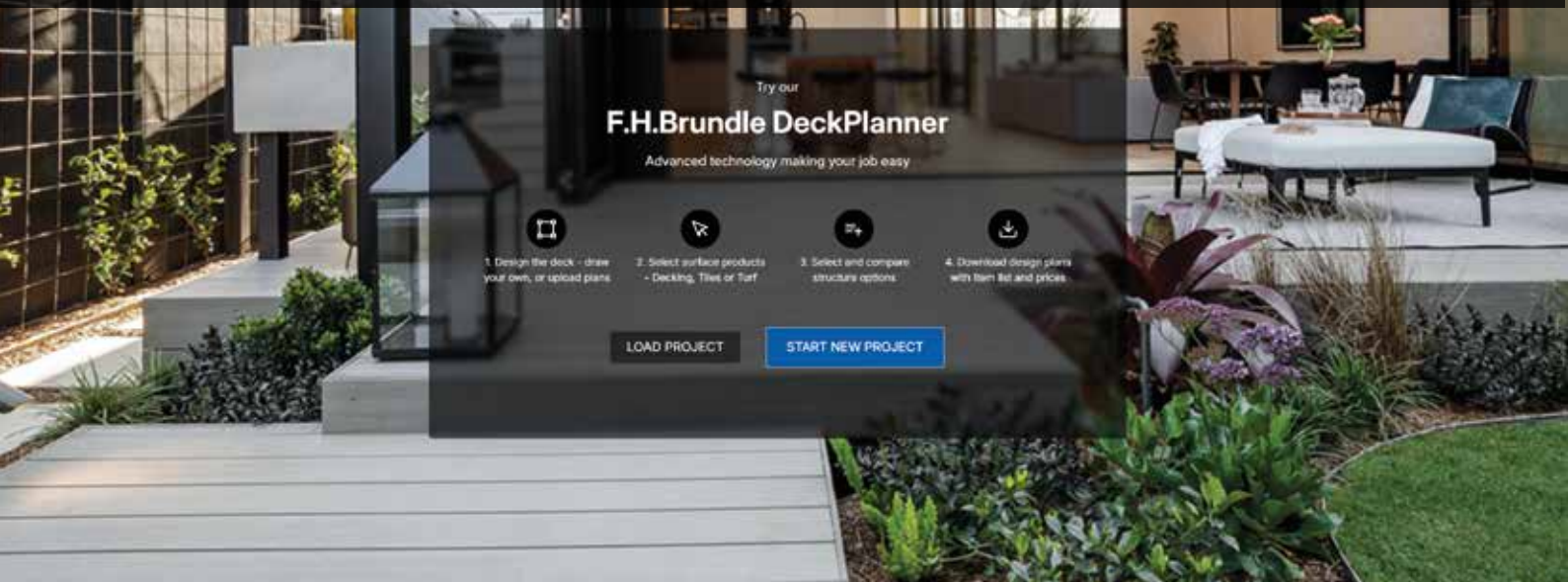
The information in this guide is for standard residential loadings. Commercial use installations may require different connection details, joists and beam spans.

Note:

It is the responsibility of the installer and specifier to ensure correct spans and connection details.

What's In This Guide?

- F.H.Brundle DeckPlanner (design, price and planner overview)
- QwickBuild advantages and overview
- Joist and beam common connections
- QwickBuild installation steps



Design

Simply enter your project information online to get started on your deck design

Configure

Compare surface layouts and frame + support options, all calculated to deck height, and substrate

Review

Refine your deck design, review your pricing and select your preferred option

Download

Confirm your order details to receive your itemised material list, custom plans, and installation guides

The easy-to-use online tool simplifies the process, removing any guesswork. It's ideal for everyone, from professional contractors to homeowners. No training required or software to download.

Easily compare the material quantities required, surface options include tiles for deck areas, timber decking, and most composite board brands. Substructure options include Outdure's QwickBuild® aluminium framing system or traditional subframes.



Design

Simply enter your project information and get started on your deck design, or have our team do it for you.



Configure

Compare surface layouts and frame + support options, all calculated to deck height and substrate.



Review

Refine your deck design, review your pricing and, select your preferred option.



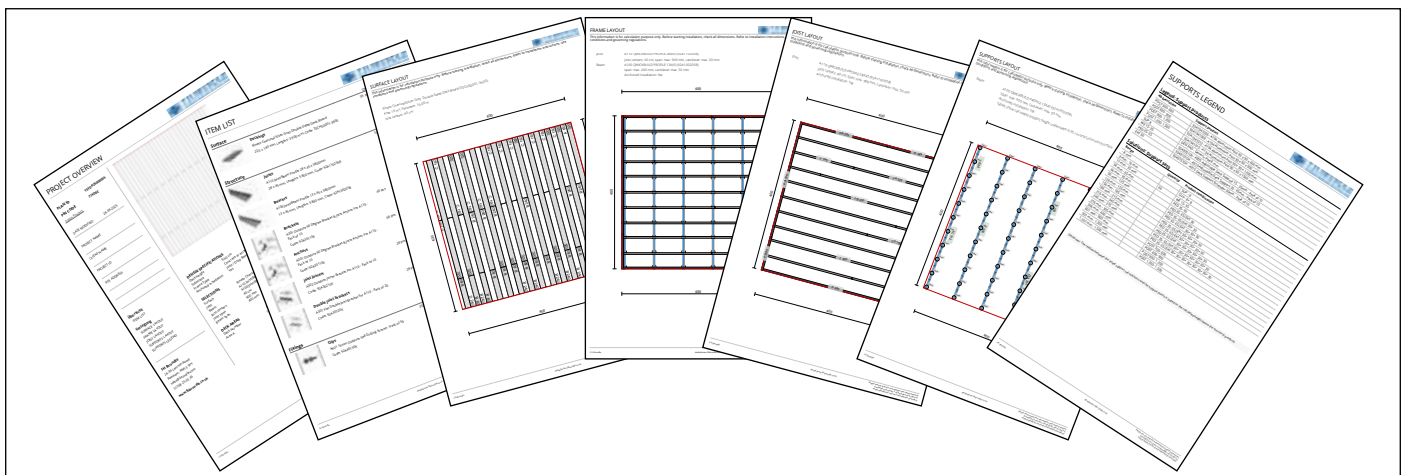
Download

Confirm your order details to receive your customised project information pack.

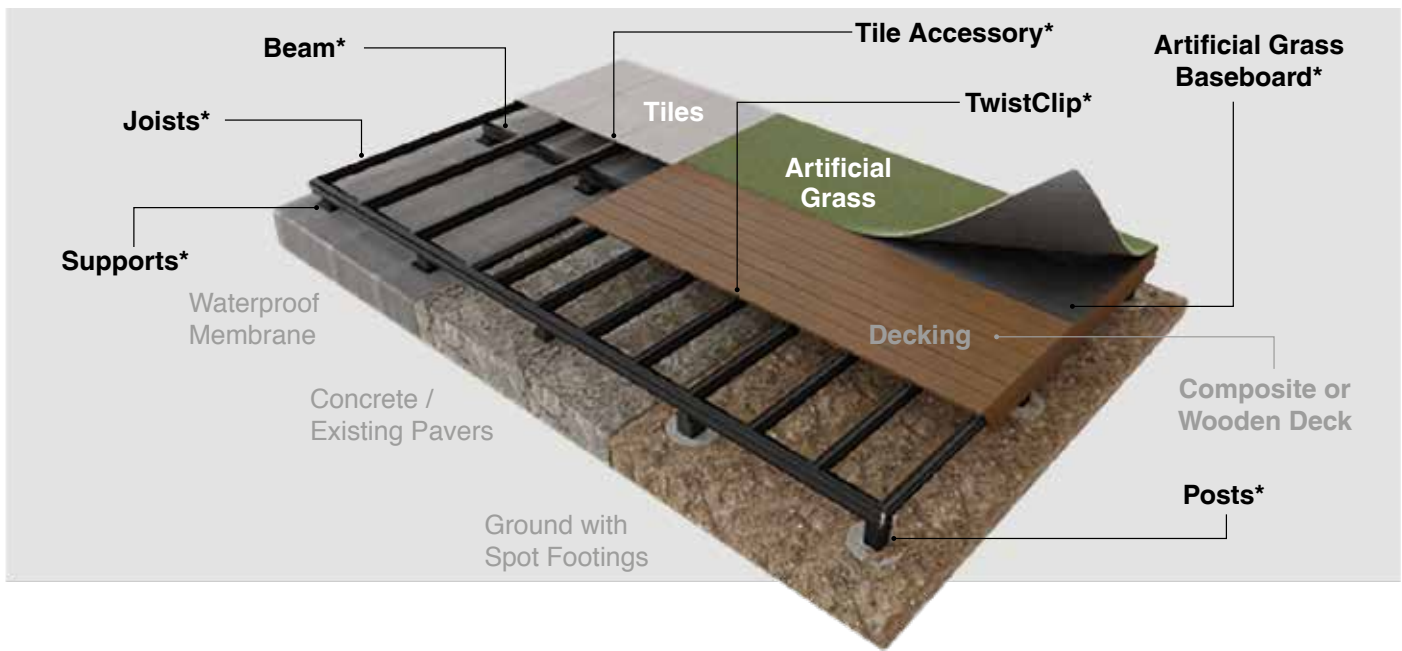
Your customised project information pack includes:

- Shopping list: Itemised list and prices of all materials required
- Design: Easy-to-follow layout for your chosen deck surface
- Engineering: Structure layouts for joists, beams, and supports
- Installation guide: Step-by-step overview
- Product information: Step-by-step overview

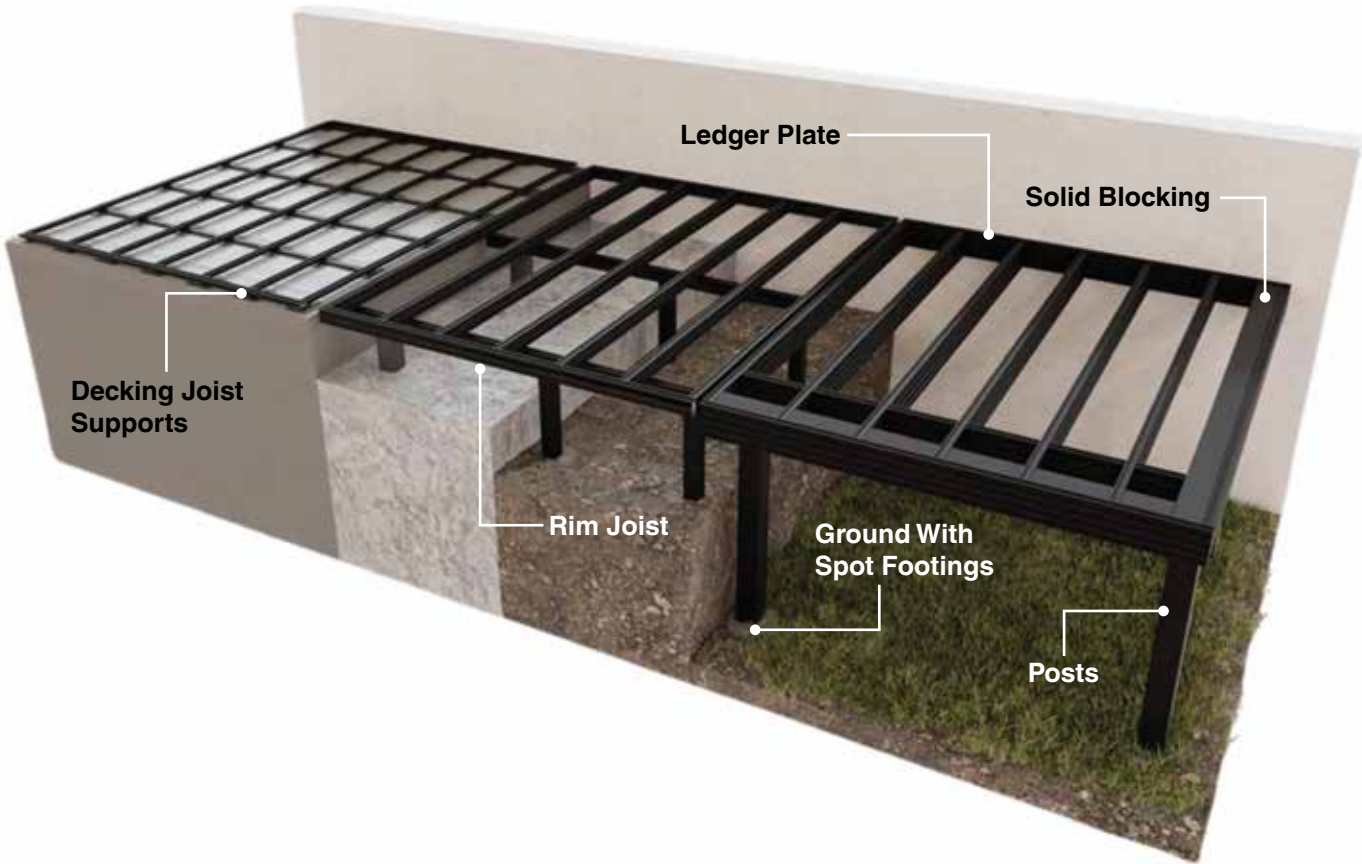
**QR CODE
HERE?**



One System For All Surfaces

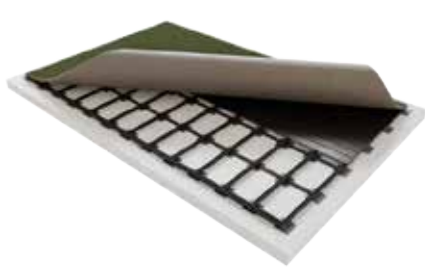


Modular	Easy to install components, configurable to suit all decks
All Surfaces	Supports timber decking, aluminium decking, composite decking, tiles, and artificial grass
All Heights	A range of joist-beam profiles for ultra-low to elevated decks
All Substrates	Build your deck over concrete, pavers, waterproof membrane, and natural ground
All Projects	Ideal for all specifications from simple residential to complex commercial decks
Optimised	Leading design and quantification tech for framing, supports, and chosen deck surface
Balustrading	Components are engineered for simplified integration of handrailing & balustrade



General deck structure heights (top of substrate to the top of joist)

Low Height:
Under 300mm
Profiles: A100, A110 & A120



Low Height:
Under 300mm
Code: 92A1002058
Code: 92A1102058
Code: 92A1202058

Mid Height:
301 - 1200mm
Profiles: A120, A130 & A140



Mid Height:
160 - 250mm
Code: 92A1202058
Code: 92A1302058
Code: 92A1402058

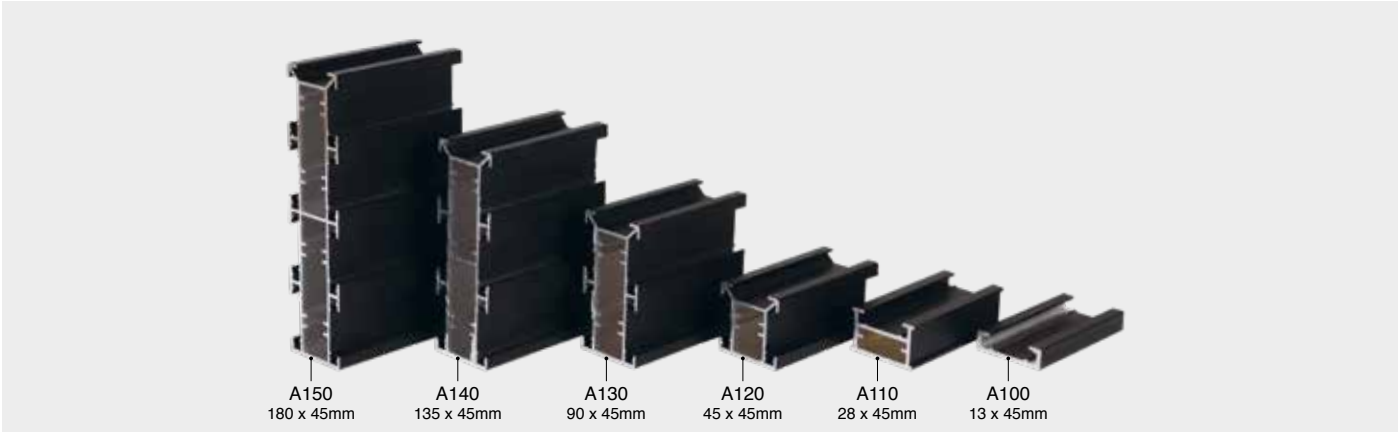
Elevated:
1200mm
Profiles: A130, A140 & A150



Elevated:
From 250mm
Code: 92A1302058
Code: 92A1402058
Code: 92A1502058

Add approximately 23mm (1 inch) for the deck surface (check exact dimensions with supplier).
Composite, tiles and artificial grass + baseboards can be used for all deck heights. Hardwood for structures over 100mm (4 inches) high.

5.8m Lengths For All Deck Heights



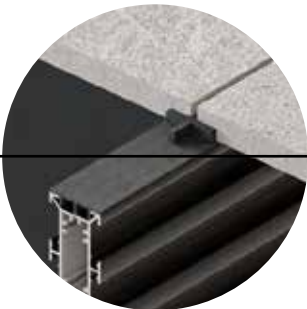
The profiles have greater spans than traditional framing, resulting in fewer footings required for raised decks. QwickBuild is an engineered solution: up to 5.0kPa UDL, 4.5kN PL with long-span, high-load capacity and minimises site preparation (digging, levelling, etc). It is a fast, cost-effective way to upgrade alfresco spaces by covering up old pavers or concrete pads with minimal site preparation. Made from Aluminium 6063-T6, Powder Coated Black.

Joist Span for Tile and Decking - Residential /// 2kPa UDL, 1.8kN PL /// Domestic Decks
Light occupancy (2 to 3 people per square meter), Point loadings less than 180kg

Joist Profile / Span			Beam Profile / Span								Max Joist Cantilever	
	Profile	Span	13 x 45	28 x 45	45 x 45	90 x 45	135 x 45	2 / 135 x 45	180 x 45	2 / 180 x 45	Non Anchored	Anchored
A100	13 x 45	400	400	900	N/A	N/A	N/A	N/A	N/A	N/A	50	50
A110	28 x 45	900	400	900	1200	N/A	N/A	N/A	N/A	N/A	50	50
A120	45 x 45	1200	400	900	1200	2200	3500	4400	4250	5750	100	275
A130	90 x 45	2250	N/A	N/A	950	1800	2800	3500	3600	4650	100	520
A140	135 x 45	3050	N/A	N/A	N/A	1200	1850	2400	2350	3150	100	810
A150	180 x 45	3850	N/A	N/A	N/A	N/A	1650	2200	2100	2900	100	1055

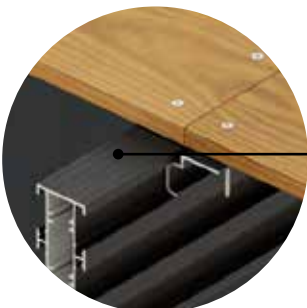
For more information and to see commercial span details, visit www.fhbrundle.co.uk

One System For All Surfaces



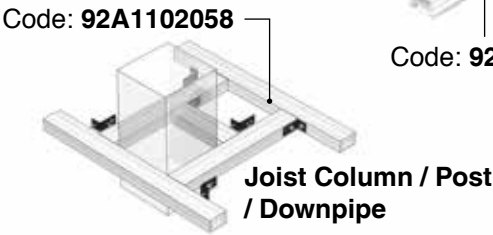
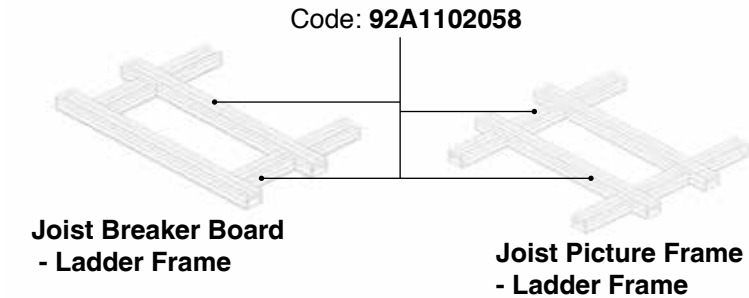
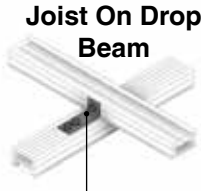
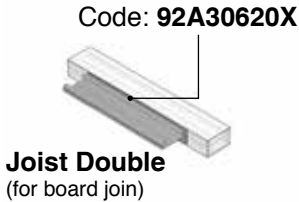
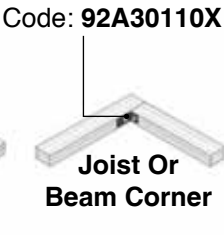
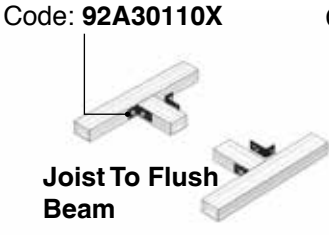
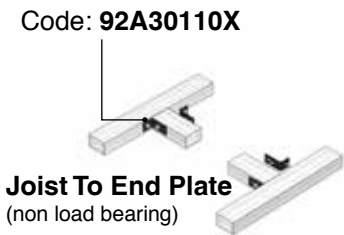
Channel edge of joist up for:

- Decking boards with a side groove to fit TwistClips
- Tiles stabilised with QwickBuild® tile accessories
- Artificial grass on QwickBuild® aluminium baseboards
- Exterior tiles fixed with QwickBuild® tile accessories
- QwickGrates and Anti-Slip strips with snap mount integration

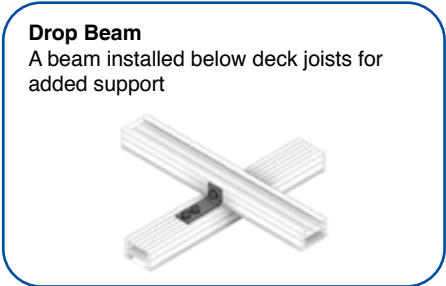
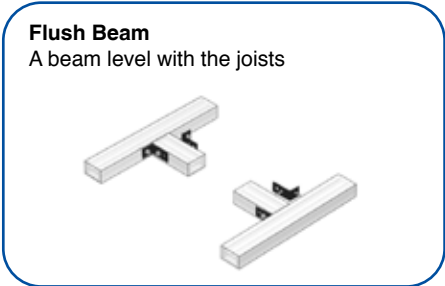
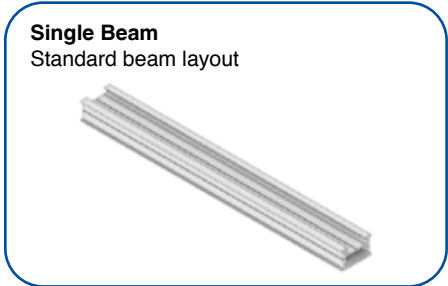


Flat edge of joist up for:

- Top fixing composite decking, aluminium decking with fixing screws
- Outdoor system is compatible with all brands of deck boards



Beam Structure Types





Code: **92A20110X**

Joist To End Plate
(non load bearing)

Code: **92A20110X**

Joist To Flush Beam

Code: **92A20110X**

Joist Or Beam Corner

A110 - 28 x 45mm

Code: **92A20520X**

Joist Double
(for board join)

Code: **92A20210X**

Joist / Beam Join End-to-End

Code: **92A20325X**

Joist On Drop Beam
(alternating sides of joist)

Code: **92A1202058**

Joist Breaker Board - Ladder Frame

Joist Picture Frame - Ladder Frame

Code: **92A20110X**

Joist Column / Post / Downpipe

Beam Structure Types

Single Beam
Standard beam layout

Ledger Beam
A horizontal support beam attached to a structure's wall to support the ends of joists

Flush Beam
A beam level with the joists


Drop Beam
A beam installed below deck joists for added support



Low Deck Heights

Based on the project information you have provided, DeckPlanner generates a customised plan for your specific site. Please also refer to these steps for installing a generis QwickBuild® project.

Tools Required



DRILL



CLAMP



SAW HORSES




SILVER PEN



MALLET



LEVEL TOOL



MEASURING TAPE



METAL CUTTING SAW




SQUARE

SAFETY EQUIPMENT REQUIRED*



SAFETY GOGGLES



EAR PROTECTION



SAFETY GLOVES



CLOSE-TOED SHOES



BROOM



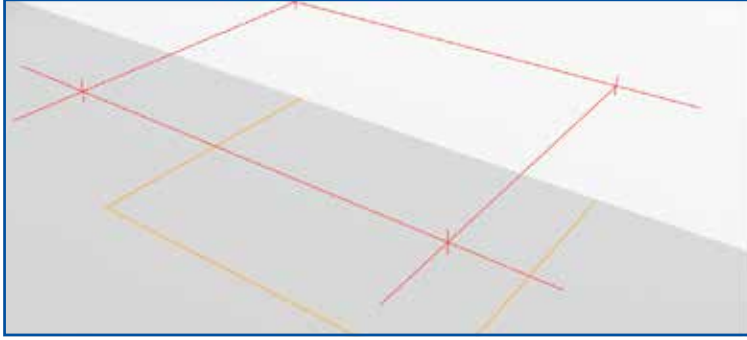
FIRST AID KIT

*SUGGESTED BUT NOT LIMITED TO

Preparation & Pre-Start Checks

- Ensure the site is clean, level, and free from debris
- Confirm the subfloor or ground is structurally sound and suitable for the framing system.
- Read all installation information
- Review structure design layout

Step 1 - Set out



Step 2 - Decking joist supports



Step 3 - Beams

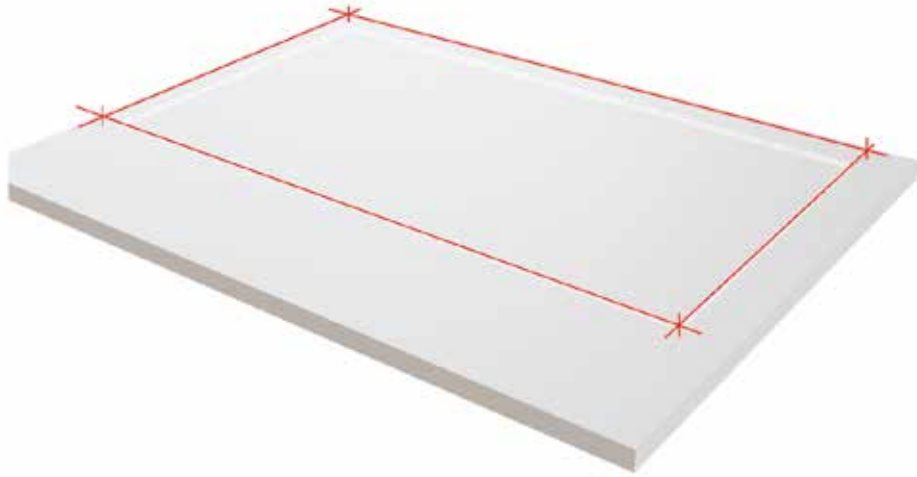


Step 4 - Joists

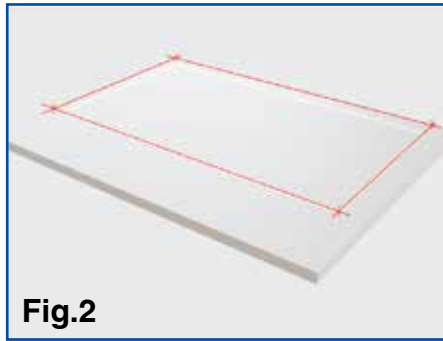


Step 5 - Bracing / Blocking

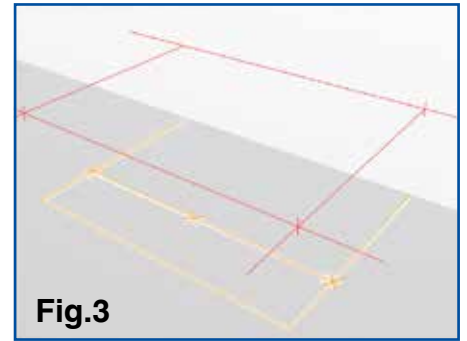




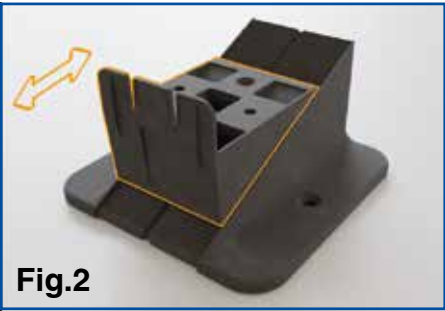
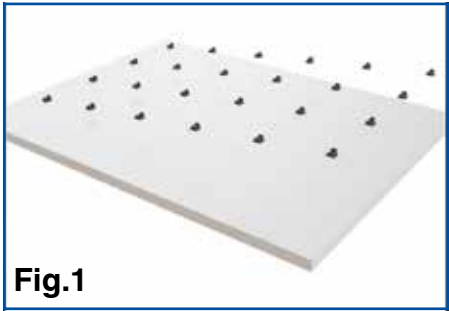
1. Use a chalk/string line or laser line to mark the outer edges of the structure on the ground or subfloor. Ensure all corners are set as 90 degree angles.



2. Mark according to the provided deck plan, the centre of the desired footing locations.



3. Double check all measurements to ensure accuracy.



1. Place your selected decking joist supports on the subfloor following the supplied DeckPlanner layout. Ensure not to exceed maximum spans.

2. Adjust the height of the decking joist supports using a laser or spirit level to reach the required height for framing.

Range Of Decking Joist Supports

Deck Support Packer
Stackable - 5 maximum



Deck Support Extender
A maximum of 8 can be stacked underneath adjustable deck support code: 92A0510X



Adjustable Deck Support



Deck Support Slope Corrector
Correction of up to 7%



Adjustable Deck Support
Code: 92A91510X can be stacked underneath this deck support (maximum of 8)



Deck Support Protection Pad
Acoustic



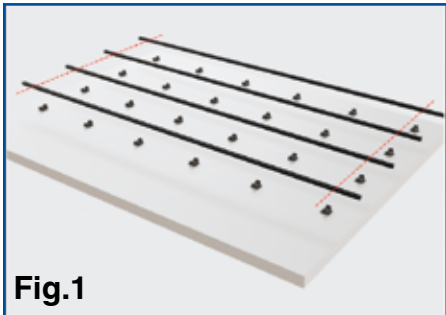


Fig.1

1. Mark and cut beams to desired length using an aluminium cutting saw.

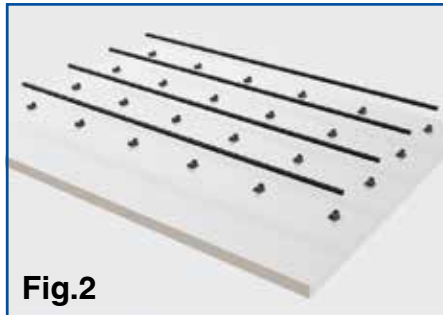


Fig.2

2. Place beams on to decking joist supports ensuring positioning of beams are in the correct location.



Fig.3

3. Use screws to connect decking joist supports to the QwickBuild® frame.



Fig.4

4. Repeat fig.3 for all decking joist supports to ensure they are all connected to the QwickBuild® frame.

Drop Beam

A drop beam is a beam installed below the joists for added support



Beam Structure Type



Fig.1

1. Use a tape measure and silver pen to mark along the drop beam joist positions, making sure to follow the correct joist centres for your surface selection.

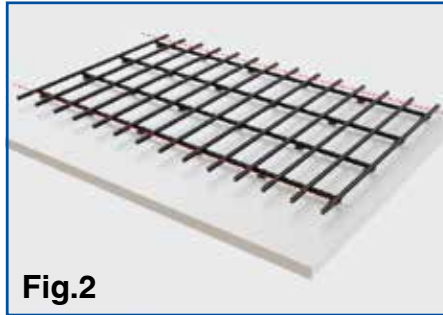


Fig.2

2. Follow the DeckPlanner 'Cut Joists' file to the correct length, using an aluminium cutting saw. Repeat this for all joists required, making sure to confirm that all on site measurements and surface manufacture specs are the same as the deck plans.



Fig.3

3. Place joists onto beams, using joist anchor brackets to fix the joists to the beams at alternating sides. Refer to frame components and common connections for specific detail requirements as per QwickBuild® profile.

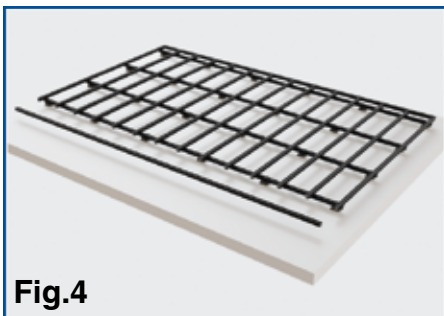


Fig.4

4. Finally cut and install the boundary joist to the joists using joiner brackets. Refer to frame components and common connections for specific detail requirements as per QwickBuild® profile.

Flush Beam

A flush beam is a beam level with the joists in a deck



Beam Structure Type

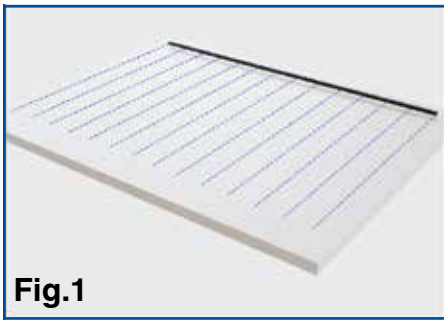


Fig.1

1. Use a tape measure and silver pen to mark along the drop beam joist positions, making sure to follow the correct joist centres for your surface selection.

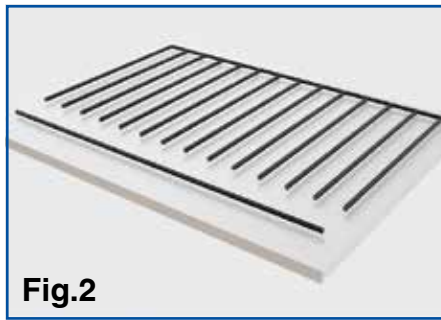


Fig.2

2. Follow the DeckPlanner 'Cut Joists' file to the correct length, using an aluminium cutting saw. Repeat this for all joists required, making sure to confirm that all on site measurements and surface manufacture specs are the same as the deck plans.



Fig.3

3. Slide joiner brackets in/on flush beam spacing according to previous markings. Refer to frame components and common connections or specific detail requirements as per QwickBuild® profile.

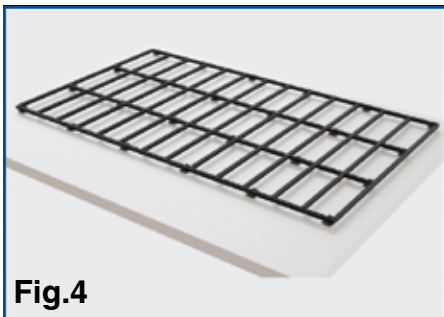


Fig.4

4. Finally ensure all components are fully secure as per connection requirements.

STEP 5 - BRACING / BLOCKING

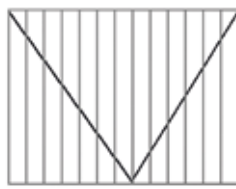


Engineering or local building surveyor to advise requirements

Joist Blocking



Lateral Bracing



Bracing / Blocking Types



Fig.1

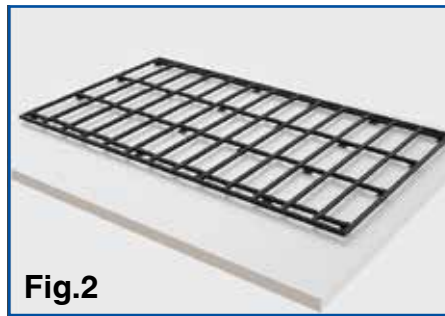


Fig.2



Fig.3

1. Mark out position / location according to requirements set by local building surveyor or licensed engineer. Typically this is over the beam alternating either side of centre.

2. Cut blocking to fit between joists.

3. Install brackets into cut profiles and decking structure.

Whilst every effort has been made to ensure the accuracy of the information supplied. F.H. Brundle cannot be held responsible for any errors or omissions. This product must only be employed for its original intended use. Any other use is wrong and potentially dangerous. Installation must be carried out in full compliance with current regulations. F.H. Brundle cannot be held liable for any damages resulting from wrongful, erroneous or negligent use.



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