



# ADJUSTABLE PALLET RACKING

## GUIDE

# Pallet Racking

BiGDUG pallet racking is a cost-effective and high-quality modular storage solution for warehouses. Made from premium materials, our pallet racking is incredibly long-lasting and can withstand demanding and heavy-duty storage operations. BiGDUG adjustable pallet racking can be easily configured and adapted to most warehouse locations.

Installing pallet racking from our extensive range of racking solutions can improve the efficiency of pallet storage, by optimising the use of available height in warehouses.



## Quality

BiGDUG pallet racking range has been tested to an independent, industry recognised standard – FEM (European Federation of Materials Handling) and when designing your racking layout, we follow best practice for operating clearances and safe access, while also minimising wasted space.

**BiGDUG.co.uk**  
businesssolutions@bigdug.co.uk



Sistema de  
Gestión  
ISO 9001:2015  
ISO 14001:2015  
ISO 45001:2018



www.tuv.com  
ID 9105076955

# Why use BiGDUG?

- BiGDUG supply fully assembled frames in all but the largest projects. This makes installation much faster, reducing labour costs significantly.
- BiGDUG provides a full CAD design and installation service to ensure racking is configured and optimised to suit the pallet sizes, available space and the environment into which it's going to be located. We also supply safety load charts with every installation.
- Large stock holding – BiGDUG can usually supply racking within just a few days.

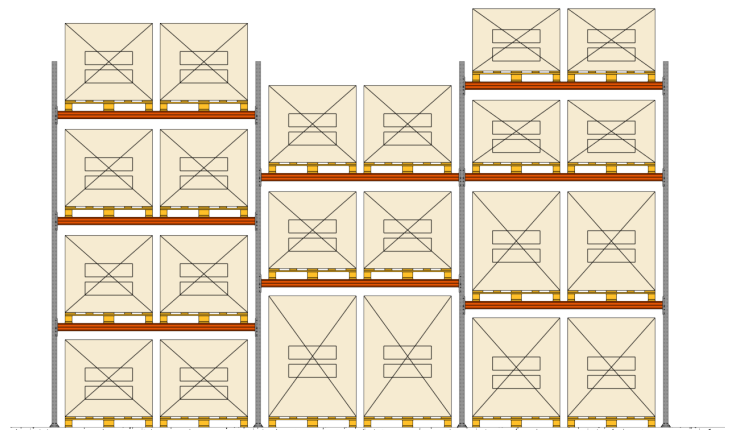
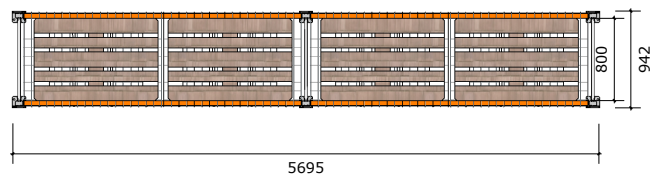
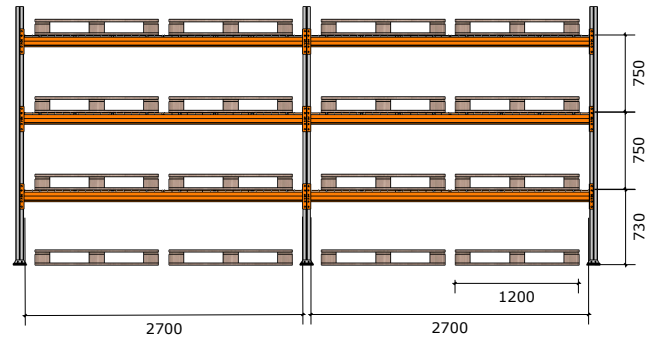
## Range of sizes for any application

Available in a range of sizes held in stock together with a wide range of accessories, BiGDUG can help you to make the best use of valuable warehouse space whilst considering requirements such as suitable forklift trucks, load types and your warehouse operations and workflow.

Most changes in pallet height can be accommodated by simply adjusting the beam position to change the height of the rack. Additional bays and levels can easily be added in order to create more locations or taken away to accommodate changes in operational requirements.

## Installation

For safe installation BiGDUG's SEIRS registered installers build your pallet racking quickly ensuring minimal disruption to your business.



# What to consider when selecting adjustable pallet racking

**1**

Identify pallet type & size (See next page), plus the fully loaded pallet weight to be stored.



**2**

Decide which way around pallets are to be loaded.



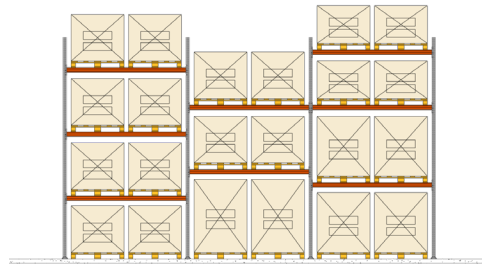
**3**

Confirm forklift truck specification e.g. truck type, maximum lift, maximum lift weight and minimum forklift truck working aisle width.



**4**

Decide how many pallet spaces required and maximum height available.



Adjustable pallet racking is designed to carry heavy loads. Always check that the floor where racking is to be placed, is a concrete load bearing slab.

## Unsure how to specify your pallet racking?

Contact our Business Solutions team for expert advice or to set up a FREE site consultation.



Call

**0330 332 6312**

Email

**businesssolutions@bigdug.co.uk**

**BiDUG.co.uk**

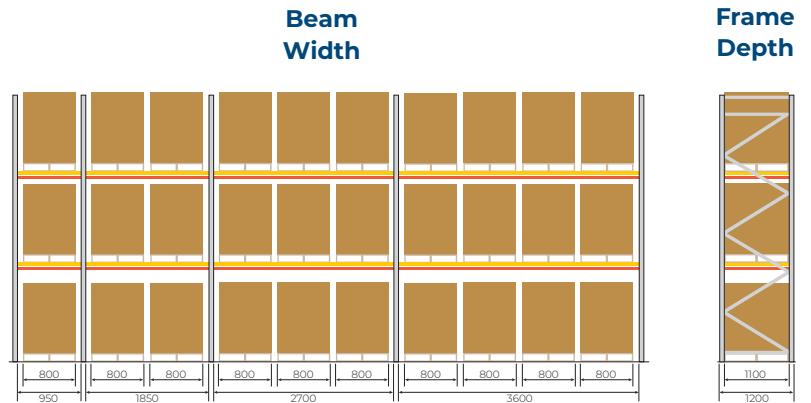
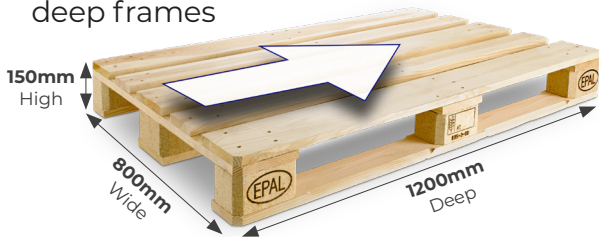
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# Pallet Specification

# & Selecting Bay Sizes

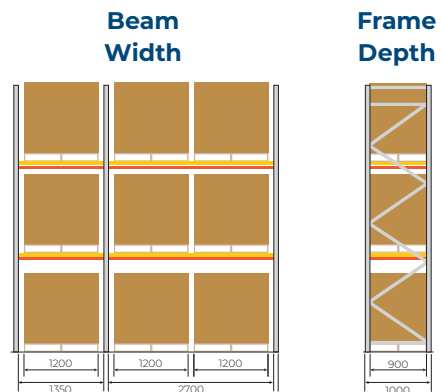
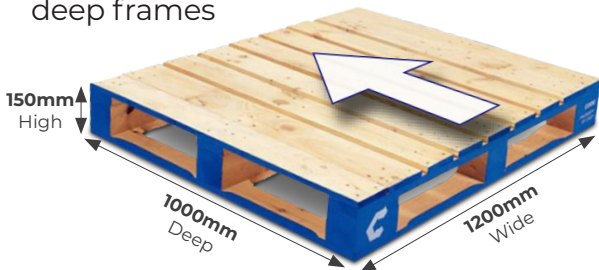
## Eur1 pallet, or Euro-Pallets

- Common pallet size in Europe
- Stored on beams with 800mm width front facing
- 1200 deep, stored using 1100mm deep frames



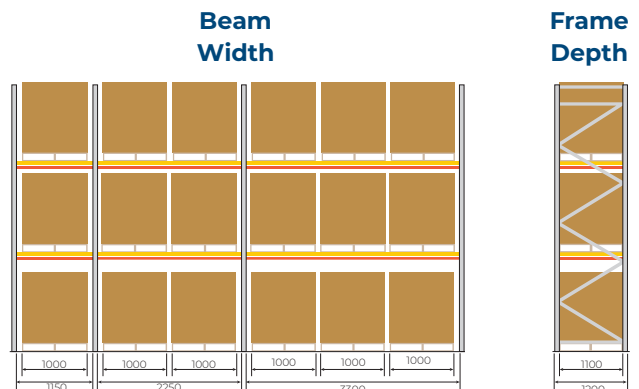
## Eur2 pallet, or UK/Industrial Rotated Pallet

- Common pallet size in UK
- Stored on beams with 1200mm width front facing
- 1000 deep, stored using 900mm deep frames



## Eur3 or UK/Industrial Pallet

- This is the same size as EUR2 pallet but rotated for loading with 1000mm width front facing.
- Stored on 1000 width front facing
- 1200 deep, stored using 1100mm deep frames



# Structural Components



## A Posts

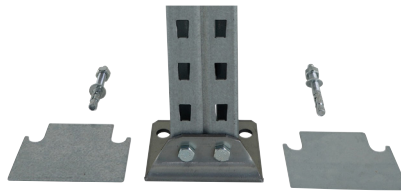
- The main components of the frame used in pairs to carry load
- Standard-duty and heavy-duty posts available from stock
- More beam levels and greater loads require a greater frame load capacity

## B Bracing

- Secondary frame component that provides structural rigidity between posts
- Horizontal and diagonal bracing is bolted into posts
- Bracing sizes determine the frame depth

## C Footplates and Fixings

- Steel plates spread the vertical load acting on the floor
- Floor fixing anchors
- Holes provide floor fixing positions
- Shim plates stacked under the footplate to ensure that frames are vertical



## D Beams

- Beams are horizontal components that create levels
- Always used in pairs front and back to support pallets
- Load capacity dependent upon beam length and profile – specified in kg per pair (UDL)
- Beam sections are available in various thicknesses

## E Box Section Beams

- Box beams for pallet storage stocked in various lengths
- Decking materials are optional with this type of beam



## F Z-Section Beams

- Z Section beams must be fitted with shelf decking for hand loaded storage only



## G Security Pins

- Beams locate easily into tapered post slots
- Beam security pin is fitted at each connection
- Pins minimise accidental dislodgement of beams

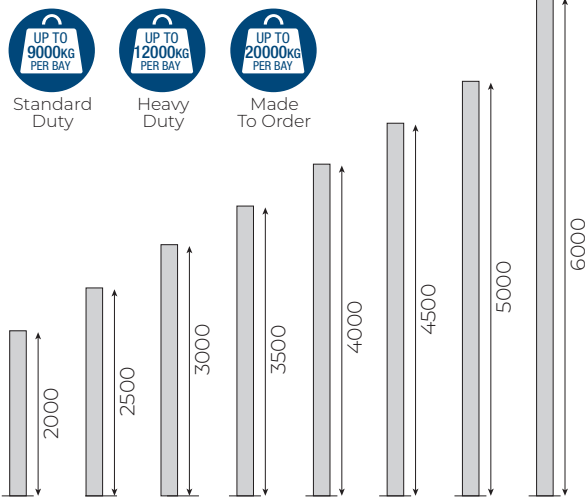


# Features

Adjustable pallet racking can be used safely in ambient, chilled or frozen goods areas down to -35°C. It is not suitable for use outdoors without additional finishing.

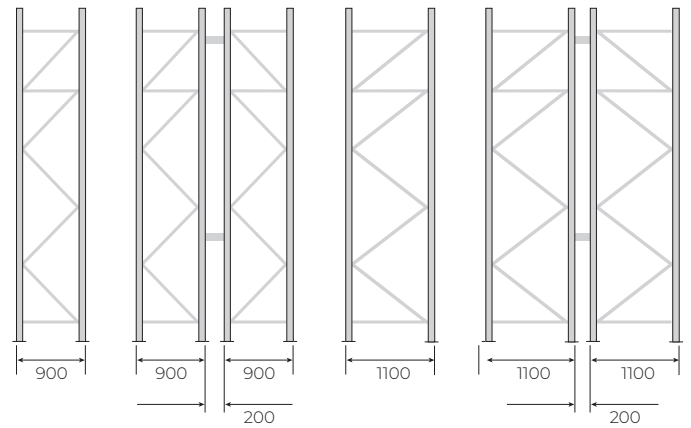
## Frame Heights

BiGDUG stocks a wide range of frame heights up to 6m and are available with standard or heavy-duty frames and beams depending on the load capacity and configuration.



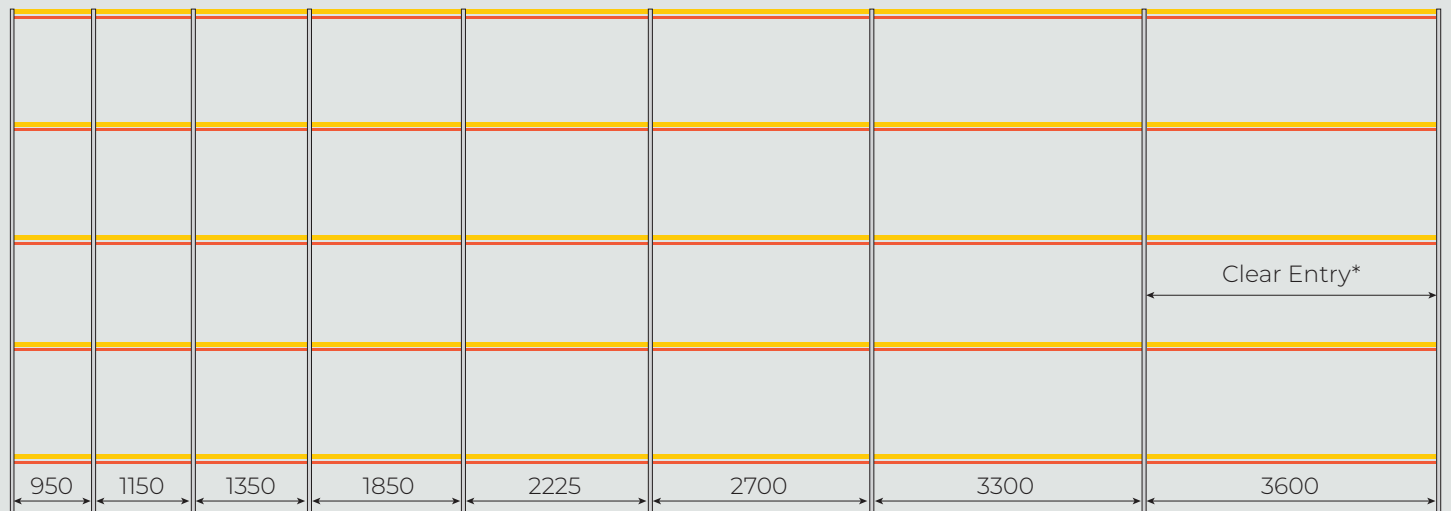
## Frame Depths

Posts are combined with bracing to make frames that are suitable for the pallet type. For starter bays two frames are required. After that, the frames share the load of adjacent bays and require only one frame.



## Bay Widths

The width of pallets you store will determine the pallet racking beam lengths needed. BiGDUG stocks a wide range of standard beam lengths allowing you to store up to 4 pallets per level. Pallets are supported on a pair of beams and must overhang beams by 50mm front and back.

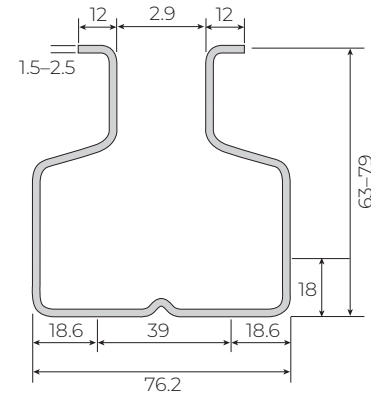
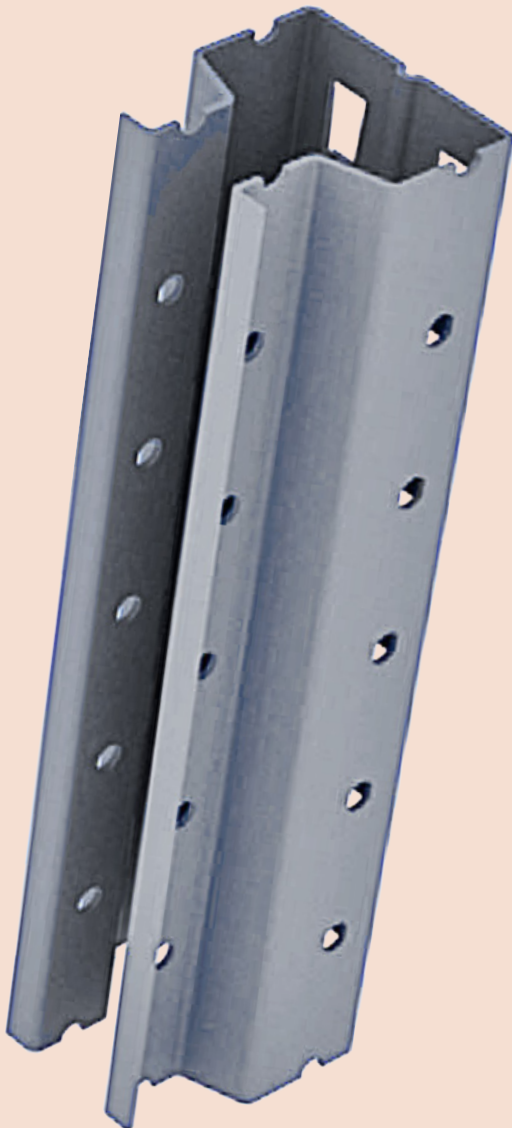


\* The clear entry between frame uprights is normally 10mm wider than the beam length.

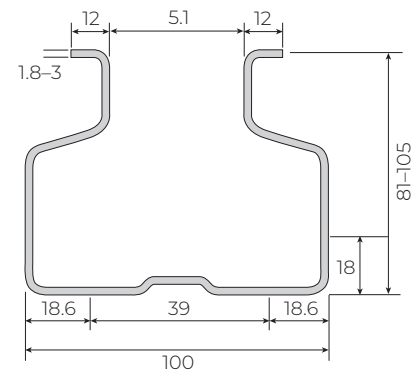
# Post Profiles

A vast number of post sections can be manufactured to order in pre-galvanised or painted steel finish.

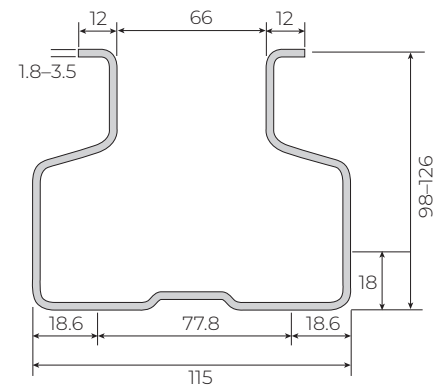
Large sections and greater thicknesses will increase load capacity. Common profiles are available in three basic types:



Standard-Duty 76mm Posts  
8 Sections Available



Heavy-Duty 100mm Posts  
9 Sections Available



Extra Heavy-Duty 115mm Posts  
9 Sections Available

[Available for bespoke projects](#)

Please contact us if you think you need post sections other than our standard stocked range

Call

**0330 332 6312**

Email

**[businesssolutions@bigdug.co.uk](mailto:businesssolutions@bigdug.co.uk)**



# Pallet Supports

BiGDUG offers a wide range of pallet supports and decking to meet your individual requirements.

Available from stock



## Wire Mesh Decking

Wire mesh decks are ideal alternatives to wooden shelves, especially in damp or temperature controlled warehouses and where sprinkler systems are in place.



## Timber Decking

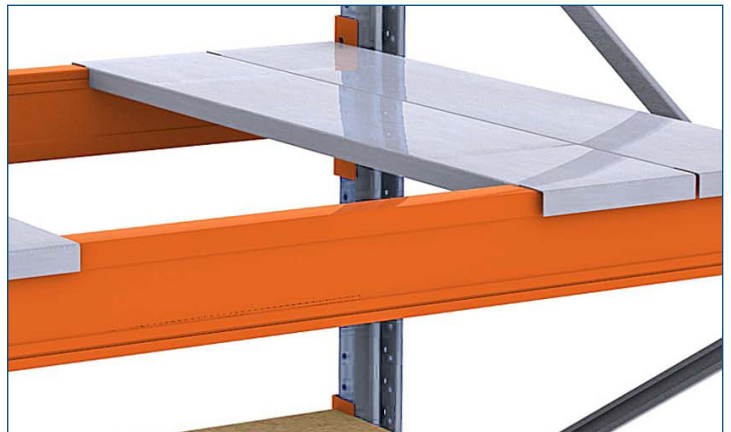
Timber decking is cost effective and environmentally friendly. Made from rough sawn wooden planks nailed to batons, timber decking provides additional support for weak and under-sized pallets or turns your pallet racking into heavy duty shelving for non-palletised goods.

Available to order



## Chipboard Decking

Normally 25mm thick chipboard sheets with steel support bars to prevent bowing. Ideal for converting existing pallet beams to hand loaded, un-palletised storage levels.



## Galvanized Steel Panels

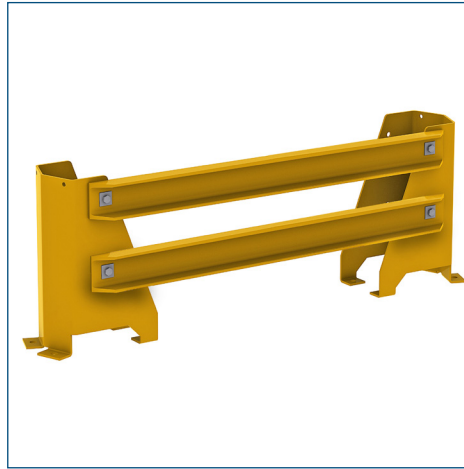
Steel shelves are ideal for storing liquids, such as paint or oil, because they can be cleaned quickly. Due to the self-fixing design, assembly is done in just a few steps. The most durable decking for hand loading un-palletised items.

# Safety & Protection



## A Post Protectors

- Steel protectors that are floor fixed independently of the rack to limit potential damage to racking posts
- Available to fit standard or heavy duty frames



## B Frame Protectors

- Protection barriers that span the end frames
- Recommended when there are forklift tunnels through racking and to protect ends of racking aisle from fork truck impacts.



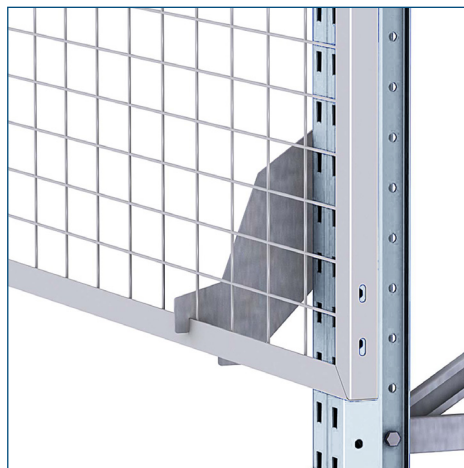
## C Row Spacers

- Steel plates that join two runs of racking together to form double-sided runs
- Provides the clearance required for pallets to overhang at the rear of the bay
- Row spacers can affect how racking behaves during accidental impact



## D Load Notice

- Notify rack users of safe pallet racking loads and limits



## E Anti-Spill Mesh

- Protect personnel from falling loads on single sided runs which are not against walls



## F Pallet Supports

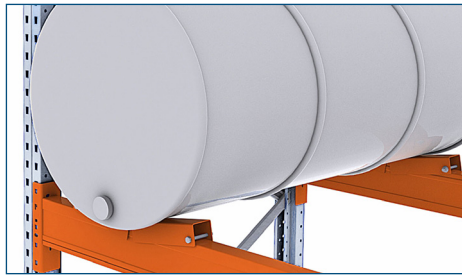
- Ensure under-sized or weak pallets are supported evenly across the whole depth

# Optional accessories\*



## Back Stops

Provides a load stop to inform the driver they've reached the back of the pallet racking



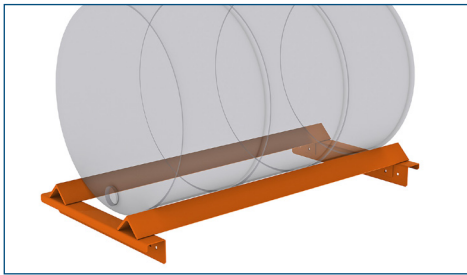
## Coil/Drum Cradles

Used to position drums or cylinders on pallet racking levels.



## Cross Aisle Ties

Ties the top of the high-bay racking across aisles for extra stability.



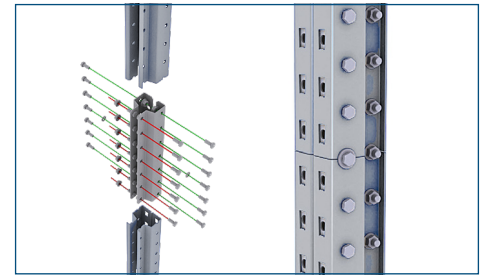
## Drum Chocks

Used to position drums or cylinders on pallet racking levels.



## Labelling

Mark pallet locations with barcodes or alphanumeric references.



## Post Splice

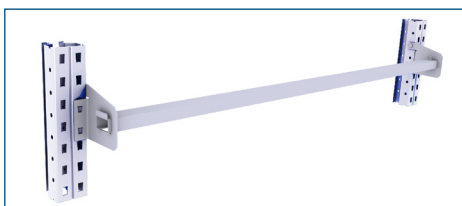
Extends the height of existing pallet racking frames to accommodate additional levels.



## Stillage Supports

Supports stillages or box pallets with skids or feet.

## Other bespoke accessories



## D Bars

Allows long length items to be stored vertically in ground level picking locations.

## Fork Spacer

Provide fork entry space and support for non-palletised items.

## Visual Back Stop

Provides a visual guide to when the load is at the back of the racking.



**Our Business Solutions experts are on hand for advice and support.**

Get a FREE site consultation for your pallet racking project.

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