Economical Pallet Storage

**Pallet Racking** is an economical storage system typically used for warehouse storage.

This type of racking system is based on common components. By identifying the type of pallets you’re looking to store, we’ll select **Pallet Racking** sizes and capacities to form a design that optimises your space, whilst maximising the volume of pallets you can store.

As a modular system, **Pallet Racking** is very cost efficient when creating runs of adjacent bays.

**Tested to industry standards**

Our **Pallet Racking** range has been tested to an independent, industry recognised standard – FEM (European Federation of Materials Handling), to ensure our products are safe and durable for workplace use.

We use FEM and SEMA standards to set out your racking for safe and efficient use of your valuable floor space.

**Any size for any application**

With a wide variety of sizes available, **Pallet Racking** is ideal for warehouses, factories or even outside storage. You’ll find our extensive range of stock sizes overleaf, or we can manufacture specific sizes and load capacities to suit your requirements.

European standards specify the operating clearances required for forklift handling, allowing for safe location of pallets with minimum wasted space.

Horizontal clearances are determined by pallet width and beam length. Our stock range of beams allows for most eventualities. Vertical clearances are provided by the adjustability of beams in frames.
Custom Pallet Racking Designs

With a wide range of add-on components and accessories, we are able to configure your Pallet Racking system to precisely suit your needs. This can be from the type of forklift you’ll be using, to the building’s limitations, and any other unique requirements you have.

We also supply variations of Pallet Racking such as Double-deep, Drive-In, Push-Back and Live storage. These can greatly increase storage relative to floor area, whilst affecting selectivity.

Fast, expert installation

At its simplest, Pallet Racking comprises just 2 main components: Frames and Beams. For safe installation at high levels, SEIRS registered installers can construct your Pallet Racking quickly and with minimal disruption to your business.

We deliver Pallet Racking frames pre-built for even faster assembly on site.

For further information on Pallet Racking’s structural components, see pages 6 and 7.

The market’s fastest Design Service

- Free site visits within 24-48 hours
- Free design quotations within 2 hours
- Fast, expert installation

01285 68 68 68  rapidrackingdesign.com
Post Heights

Tapered slots along the posts mean levels can be adjusted up to 50mm.

We stock a wide range of post heights up to 8m, available as Standard Duty and Heavy Duty.

Other bespoke sizes and capacities can be manufactured to suit particular applications - please call us for advice.

Frame Depths

Posts are combined with 900mm or 1100mm bracing to make frames that suit 1000 or 1200 deep pallets.

For 'starter bays', two frames are required. After that, the frames share the load of adjacent bays and require only one frame ('Add-on Bays').

Bay Widths

Beam lengths determine bay widths to suit common pallet sizes.

<table>
<thead>
<tr>
<th>Bay width</th>
<th>Clear entry</th>
<th>Total bay (Starter)</th>
<th>Total bay (Add-on)</th>
<th>Total bay (Starter)</th>
<th>Total bay (Add-on)</th>
</tr>
</thead>
<tbody>
<tr>
<td>950</td>
<td>960</td>
<td>1181</td>
<td>+1036</td>
<td>1205</td>
<td>+1060</td>
</tr>
<tr>
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<td>4155</td>
<td>+4010</td>
</tr>
</tbody>
</table>

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Selecting Bay Sizes

Checking the size of the pallets you’d like to store will determine the Pallet Racking bay size needed.

We stock a wide range of standard beam lengths to allow up to 4 pallets to be stored per level, including recommended operating clearance.

### Pallet specification

<table>
<thead>
<tr>
<th>Pallet Type</th>
<th>Dimensions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR1 pallet, or Euro-pallet</td>
<td>800W 1200D</td>
<td>The most common pallet in Europe, handled on the 800 width, 1200 deep, stored in 1100 deep rack.</td>
</tr>
<tr>
<td>EUR2 pallet, or “UK” pallet</td>
<td>1200W 1000D</td>
<td>The most common pallet in the UK, handled on the 1200 width, 1000 deep, stored in 900 deep rack.</td>
</tr>
<tr>
<td>EUR3 pallet</td>
<td>1000W 1200D</td>
<td>An alternative UK pallet, handled on the 1000 width, 1200 deep, stored in 1100 deep.</td>
</tr>
</tbody>
</table>

### Beam width

<table>
<thead>
<tr>
<th>Beam Width (mm)</th>
<th>Beam Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>800</td>
<td>950 1850 2700 3600</td>
</tr>
<tr>
<td>1200</td>
<td>1100</td>
</tr>
</tbody>
</table>

### Frame depth

<table>
<thead>
<tr>
<th>Frame Depth (mm)</th>
<th>Beam Width (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>1100</td>
</tr>
</tbody>
</table>

Pallet slats must run front to back when stored, and not left to right.
**Pallet Racking Structural Components**

A Posts
- The main components of the frame are used in pairs to carry the load
- Standard duty and heavy duty posts are available from stock
- More beam levels and greater loads require a greater frame load capacity
- Over 25 post sections can be manufactured as required for varying needs

B Bracing
- The secondary frame component that provides structural rigidity between posts
- Horizontal and diagonal bracing is bolted into posts
- Bracing sizes determine the frame depth
- Stock frames are delivered pre-built for faster installation on-site

C Footplates and fixings
- Steel plates that spread the vertical load acting on the floor
- Floor fixing anchors are included
- Holes provide optional floor fixing positions
- Shim plates are stacked under the footplate to ensure that frames are erected vertically
Beams
- Beams are the main horizontal component that create levels
- Used in pairs (front and back) to support pallets
- Their load capacity is dependent upon the beam length and profile and are specified in kg per pair (UDL)
- The range of beam sections are available in various material thicknesses – please call for advice

Box Section Beams
- We stock Box Beams for pallet storage in a variety of lengths
- Decking materials are optional with this type of beam

Z-Section Beams
- ‘Z’ section beams must be fitted with shelf decking for hand loaded storage
- We can arrange manufacture of Z-section beams and other options if required

Security Pins
- Beams locate easily into tapered post slots
- A Beam Security Pin is then fitted at each connection
- Pins minimise accidental dislodgement of beams by loads that are lifted from the level below

Post profiles
- A vast number of post sections can be manufactured in painted finish or in pre-galvanized steels
- Larger sections and greater steel thicknesses will increase load capacity. There are three basic types with common bracing profiles

Beam profiles
We offer a wide range of beam sections varying in size and thickness of steel to suit almost any load.

Over 20 sections can be manufactured as required – call for details
Some accessories are required by SEMA* Codes of Practice, and some are highly recommended for safe operation within the workplace.

1. **Post Protectors Required**
   - Steel protectors that are floor fixed independently of the rack and limit potential damage to Pallet Racking posts
   - Available as standard duty and heavy duty
   - Required under SEMA Code of Practice for safe racking design

2. **Frame Protectors Recommended**
   - Protection barriers that span end frames
   - Recommended when there are forklift tunnels through racking
   - Recommended under SEMA Code of Practice when goods are stored adjacent to racking

3. **Row Spacers Required**
   - Steel plates that join two runs of racking together to form “Double-sided” runs
   - Provide the clearance required for pallets to overhang at the back of the bay
   - As a safety feature, Row Spacers can affect how racking behaves during accidental impact

4. **Load Notice Required**
   - Notify rack users of safe Pallet Racking load limits
   - Can be fitted to an optional steel notice plate

5. **Anti-Spill Mesh Recommended**
   - Protect personnel from falling loads on single sided runs which are not against walls

*Storage Equipment Manufacturers’ Association
## Accessories

### Timber Decking
Used with undersized pallets, transit pallets or un-palletised items

### Open Timber Decking
An option with no gaps

### Chipboard Decking
Used for hand loading of un-palletised stock. Supported on steel support bars.

### Galvanized Steel Panels
The most durable decking option for hand loading of un-palletised stock

### Wire Mesh Decking
Provide light, air and water penetration where required. Used for un-palletised stock

### Pallet Support Bars
Support pallets of insufficient strength for beam racking alone, or locate and support decking material

### D Bars
Allow long length items to be stored vertically in ground level pick locations

### Cross-Aisle Tie
Tie the top of high-bay racking across aisles for extra stability

### Back Stops
Provide a visual guide for positioning pallets with equal overhang

### Notice plate
Store job papers, display load notices and aisle markers

### Labelling
Mark individual pallet locations with Barcodes or Alphanumeric references

### Post Splice
Extend the height of existing pallet racking frames to accommodate additional levels

### Fork Spacer
Provide fork entry space and support for non-palletised loads

### Coil/Drum Cradles
Support coils, reels and drums on pallet racking levels

### Drum Chocks
Used to position drums or cylinders on pallet racking levels

### Stillage Supports
Support stillages or box pallets with skids or feet
Safety and Quality

Safety and quality are of paramount importance in Pallet Racking.

The Pallet Racking products that we design and install are fully compliant with industry standards to ensure our customer’s storage solutions are safe and durable for industrial use.

We ensure the design and structural analysis of how Pallet Racking components work together comply with the FEM European design codes and European Norm BS EN 15512.

Rapid Racking are founder members of the SEMA Distributor Group; SEMA is the Storage Equipment Manufacturers’ Association.

We will follow SEMA Codes of Practice to safely specify racking materials and layouts to suit your applications.

Our installers carry SEIRS identity cards. The Storage Equipment Installers Registration Scheme is recognised by the Health & Safety Executive as providing the best possible training, so you can be sure your storage solution is installed correctly and safely.

We strongly recommend you carry out routine rack maintenance checks in order to comply with legislation and to hold an indexed audit trail.

Good-To-Go safety systems allow you to self-assess each rack in your warehouse and display a visible status of condition to operatives (‘safe’ or “do not use”). For faulty racks, the safety system indicates the recommended actions to take in accordance with SEMA recommendations.

More Pallet Racking options

Racking colours

- Blue Frames / Orange Beams
- Galvanized Frames and Beams
- Galvanized Frames / Orange Beams

Special colours can be provided to order. Please note that the lead time and price will vary when selecting bespoke colours.

Pallet Racking Designs

Pallet Racking can be built in various configurations. We’ll help you to make the best use of valuable floor space whilst considering the various specifications such as suitable forklift trucks, load types and your warehouse operations and workflow. See opposite for some examples.