



What we can do for you?

- Site evaluation and planning
- Management level overview of options
- Determination of appropriate level of mechanisation or automation
- Detailed layout and logistics solution
- Racking system and related equipments
- Specification of logistics and warehouse management
- Functional and equipment specifications
- Operational specifications



What benefits can you expect?

In the short term, we can enhance efficiency through improved material flows, operational strategies and space utilisation, eliminating bottlenecks. Taking a longer view, we can suggest the best way to re-organize existing facilities or plan and design new ones.

- Reduce inventory holding levels
- Reduce inventory lead times
- Reduce operating costs
- Improve material flows
- Increase space utilisation
- Improve service level

“our solutions save space, save labour, save time and most importantly, save money.”



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Pallet Racking



Superlock Pallet Racking



Superlock Pallet Racking

Superlock Pallet Racking System provides efficient use of storage space for palletized loads. With a wide range of options and components available, the Superlock system can be tailored made to meet your precise needs. Superlock provides efficient pallet storage, which is compatible with all types and sizes of pallets along with any type of handling equipments.

Superlock Pallet Racking System is designed and manufactured in accordance with ISO 9001 : 2000 International Standards and complies with the SEMA, FEM, AS4084-2012 Code of Practice for the design of pallet racking.

Superlock Upright

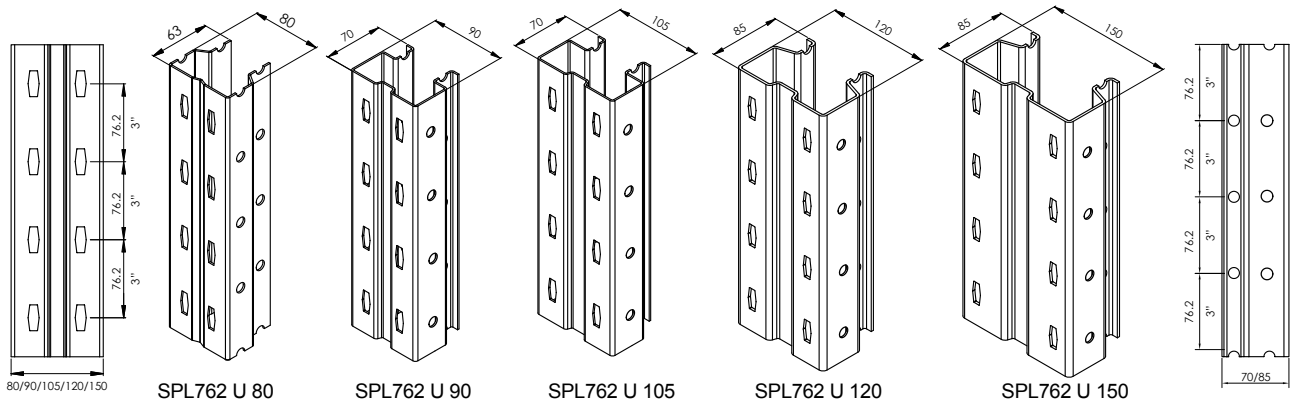


Superlock Upright

Superlock uprights bear the full load of the pallet racking system. The transfer of rack loads from the beams through the uprights is therefore critical to overall system strength, safety and performance. Superlock upright is designed to carry the rack load on the front face without twisting, distorting or stressing metal. The profile of the slots transfers the load vertically down the upright and allows beams to connect without being wedged in so that the side loads are not imposed on the upright by the beam end connector.

Superlock uprights have a significant deeper flange (side face) than other conventional racking systems, providing greater overall strength, rigidity and a greater resistance to lateral impact damage.

Superlock 762 Upright



Type of upright	Width	Depth	Thickness	All units in mm
SPL762 U 80 -18	80	63	1.8	
SPL762 U 90 -18	90	70	1.8	
SPL762 U 90 -20	90	70	2.0	
SPL762 U 105 -18	105	70	1.8	
SPL762 U 105 -20	105	70	2.0	
SPL762 U 105 -25	105	70	2.5	
SPL762 U 105 -275	105	70	2.75	
SPL762 U 120 -18	120	85	1.8	
SPL762 U 120 -20	120	85	2.0	
SPL762 U 120 -25	120	85	2.5	
SPL762 U 120 -275	120	85	2.75	
SPL762 U 120 -30	120	85	3.0	
SPL762 U 150 -20	150	85	2.0	
SPL762 U 150 -25	150	85	2.5	
SPL762 U 150 -275	150	85	2.75	
SPL762 U 150 -30	150	85	3.0	

★ Upright Height: All Size Available at 3"(76.2mm) Pitch.

Row Spacer

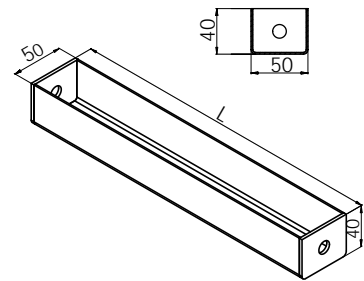
Row Spacer

Use: Row Spacers are fitted between frames of double entry racks to increase front to back rigidity and stability.

Length: As required.

Size: 40×50×1.5mm C Channel with Endplates.

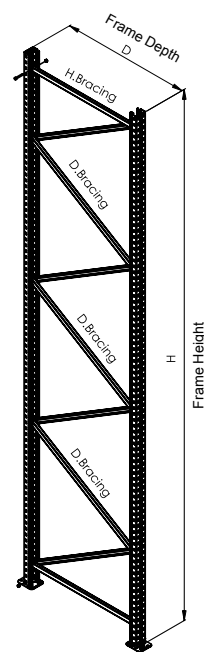
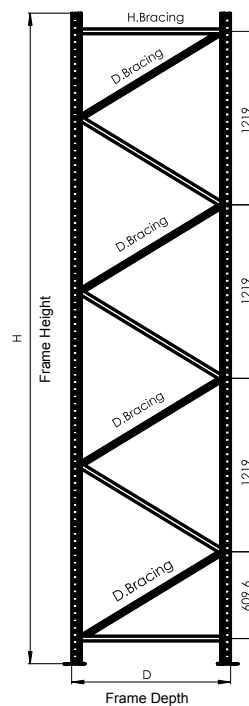
Fixing : Two N10×25mm grade 8.8G setscrews.



Frame



Superlock 762 Frame



Finish & Color

Finish: Powder Epoxy-Polyester Coating, Polymerized at 180° C, Lead free.

Standard Colours

Sky Blue



RAL 5015

- * Pre-Galvanised upright & frame bracing are available.
- * The finish can be Zinc-plated on request.

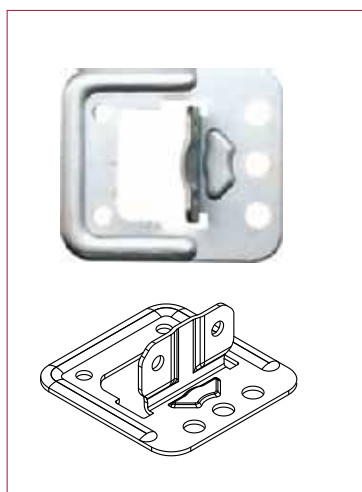


Baseplate & Shim

The baseplate must be fitted to every upright to :

- Provide a smooth bearing surface for the upright,
- Spread the load of the upright over a reasonable area of floor,
- Provide a means of fixing the upright to the concrete floor,
- Provide a means of levelling the upright when necessary.

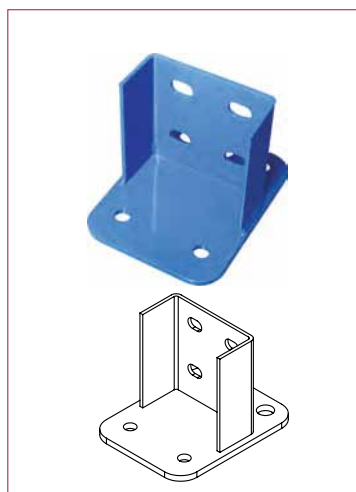
There are four common base plates in use for different situations.



Superlock Bolted Baseplate



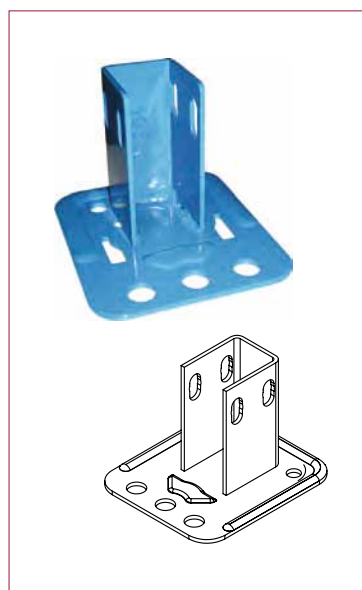
Superlock Bolted Shim



Superlock Heavy-duty Baseplate Type I



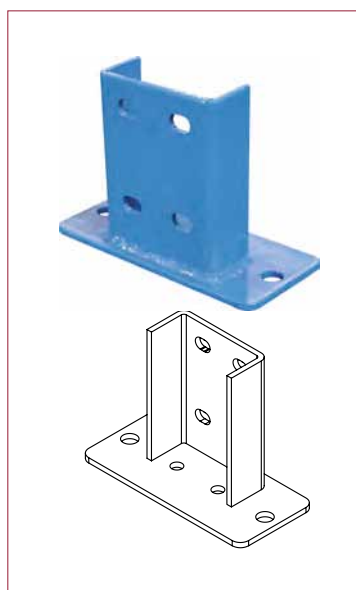
Superlock Heavy-duty Shim Type I



Superlock Reversible Baseplate



Superlock Reversible Shim



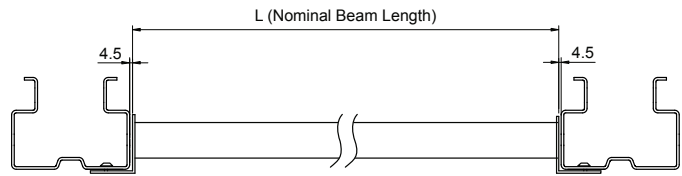
Superlock Heavy-duty Baseplate Type II



Superlock Heavy-duty Shim Type II

Beam Length

Beam length is specified as the distance between connector faces, as shown in right draft.



Beam Connector & Safety Lock

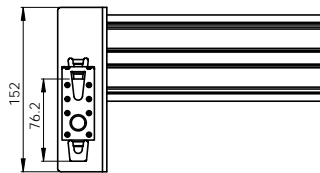
Beam Connector

Superlock Pallet Racking Beam connector is designed to increase resistance to sideways away moments and effectively take vertical loads and moments on specially designed high performance hooks.

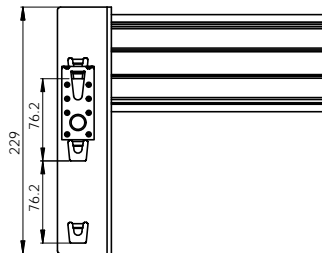
Beam connector available: 2 - hooker, 3 - hooker, 4 - hooker connectors, depending on beam section height and beam loading.



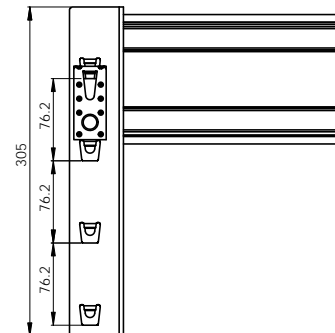
SPL 2 Hooker Beam Connector



SPL 3 Hooker Beam Connector



SPL 4 Hooker Beam Connector



Safety Lock

Each beam supplied with steel Safety Lock, which guarantee the beams correctly positioned and help prevent the beam being accidentally dislodged during its work. Safety Locks are fixed to beam connectors when being packaged.

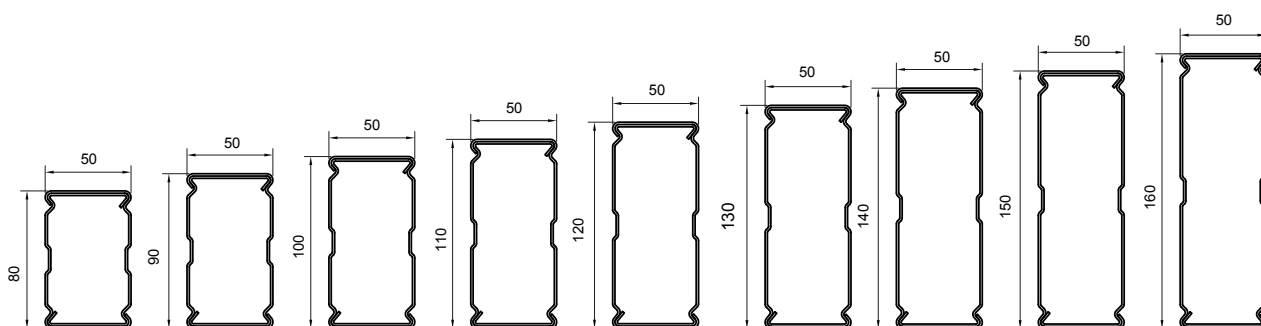
Special designed safety lock, it's pre-assembled can improve installation efficiency, and also avoid any installation missing spot to improve the whole system safety.



Box Beam

Box Beam

Superlock Box beams are available in a comprehensive range to cover most loading requirements. Beam section height available from 80-160mm.



80 Box Beam 90 Box Beam 100 Box Beam 110 Box Beam 120 Box Beam 130 Box Beam 140 Box Beam 150 Box Beam 160 Box Beam

Type of beam	Height	Width	Thickness	Hookers	All units in mm
SPL B 80-15	80	50	1.5	3	
SPL B 90-15	90	50	1.5	3	
SPL B 100-15	100	50	1.5	3/4	
SPL B 110-15	110	50	1.5	4	
SPL B 120-15	120	50	1.5	4	
SPL B 130-15	130	50	1.5	4	
SPL B 140-15	140	50	1.5	4	
SPL B 150-15	150	50	1.5	4	
SPL B 160-15	160	50	1.5	4	
SPL B 160-18	160	50	1.8	4	
SPL B 160-20	160	50	2.0	4	

★ Beam Length: All Size Available

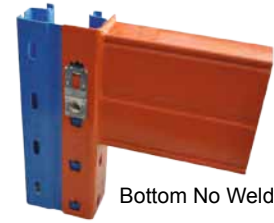
Robot Automatic Welding, without bubble, imperfection and slag, increases the load capacity and makes the surface smooth and beautiful.



Front Welded



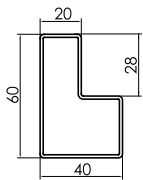
Back Welded



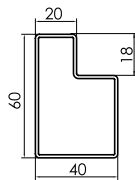
Top welded

Bottom No Welding

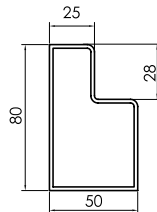
Step & RHS Beam



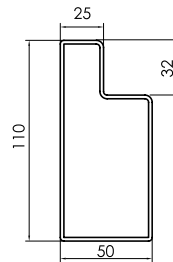
60/28 Step Beam



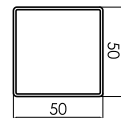
60/18 Step Beam



80/28 Step Beam



110/32 Step Beam



50x50 Rectangle Beam

Type of beam	Height	Width	Thickness	Hookers	All units in mm
SPL P 60 - 15	60	40	1.5	2	
SPL P 60 - 20	60	40	2.0	2	
SPL P 80 - 15	80	50	1.5	2/3	
SPL P 80 - 20	80	50	2.0	2/3	
SPL P 110 - 20	110	50	2.0	3	
SPL P 110 - 25	110	50	2.5	3	
SPL P 110 - 30	110	50	3.0	4	
SPL R 50	50	50	1.5/2.0/3.0	2/3	



Finish: Powder Epoxy-Polyester Coating, Polymerized at 180° C, Lead free.

Standard Colours

Pure Orange



RAL 2102

Sky Blue



RAL 5015

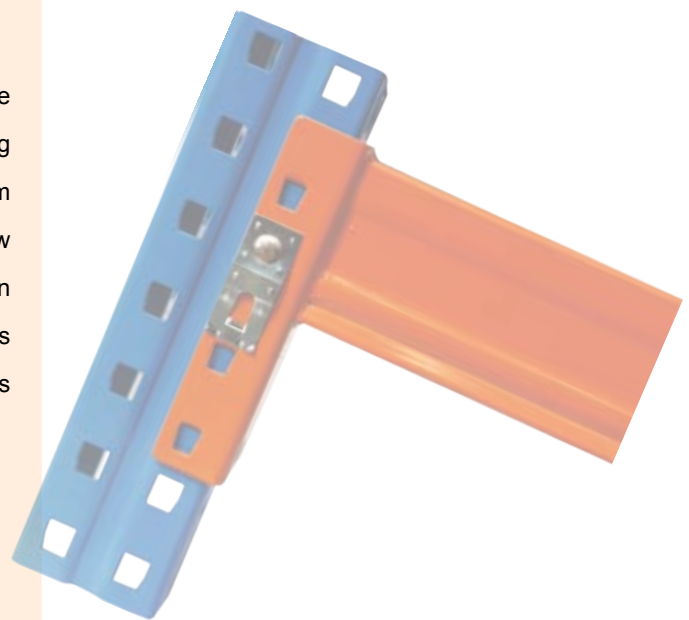
* Zinc Plated & Hot Dip Galvanised are available on request.

Tops Pallet Racking



Tops Pallet Racking

Tops Pallet Racking System offers greater flexibility in the adjustment of beam levels with 50mm or 75mm increments using 3-5 hook(Tops 50) or 2-4 hook(Tops 75) end connector. Apart from providing greater adjustability in beam location, the new connectors have an enhanced load bearing. Tops is designed in accordance to the latest FEM (European Federation of Materials Handling and Storage Equipment) standards. It also meets AS4084-2012 Australian Code for Steel Storage Racking.

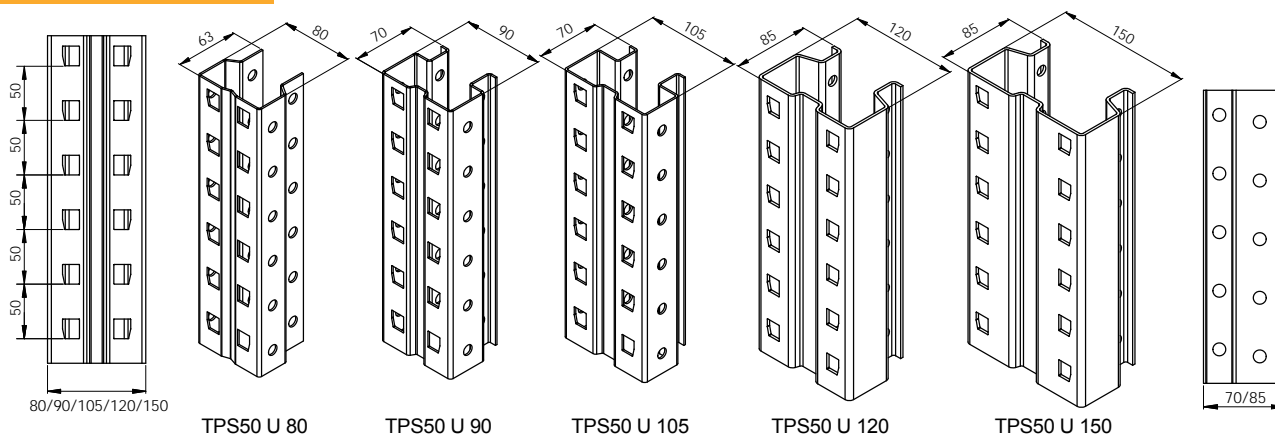


Tops Upright

Tops Pallet Racking Upright has optimum profile with 50mm hole pitch for better loading capacity and space utilization. The uprights are made from high quality steel and are very rigid. These are then bolted from the stable frame using horizontal and diagonal bracing. Different kinds of base plates ensure loads even distributed on floor.



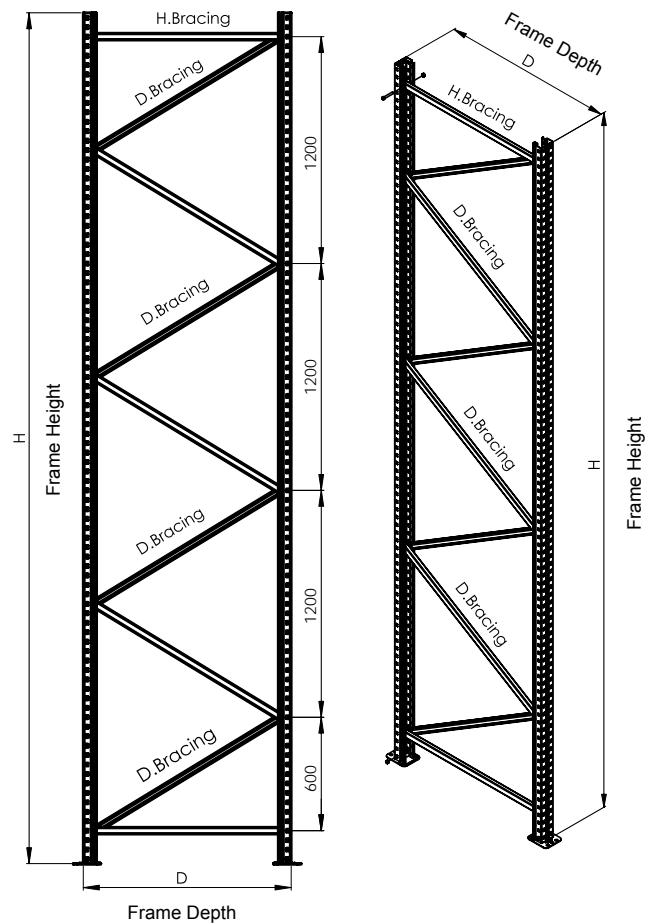
Tops 50 Upright



Type of upright	Width	Depth	Thickness	All Units in mm
TPS50 U 80-18	80	63	1.8	
TPS50 U 90-18	90	70	1.8	
TPS50 U 90-20	90	70	2.0	
TPS50 U 105-18	105	70	1.8	
TPS50 U 105-20	105	70	2.0	
TPS50 U 105-25	105	70	2.5	
TPS50 U 105-275	105	70	2.75	
TPS50 U 120 -18	120	85	1.8	
TPS50 U 120 -20	120	85	2.0	
TPS50 U 120 -25	120	85	2.5	
TPS50 U 120 -275	120	85	2.75	
TPS50 U 120 -30	120	85	3.0	
TPS50 U 150 -20	150	85	2.0	
TPS50 U 150 -25	150	85	2.5	
TPS50 U 150 -275	150	85	2.75	
TPS50 U 150 -30	150	85	3.0	

Upright Height: All Size Available at 50mm Pitch.

Frame



Finish & Color

Finish: Powder Epoxy-Polyester Coating, Polymerized at 180° C, Lead free.

Standard Colours

Sky Blue



RAL 5015

- * Pre-Galvanised upright & frame bracing are available.
- * The finish can be Zinc-plated on request.



Baseplate & Shim

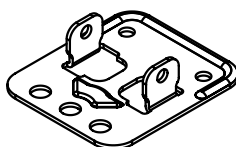
The baseplate must be fitted to every upright to :

- Provide a smooth bearing surface for the upright,
- Spread the load of the upright over a reasonable area of floor,
- Provide a means of fixing the upright to the concrete floor,
- Provide a means of levelling the upright when necessary.

There are five common baseplates in use for different situations.



Tops Bolted Baseplate



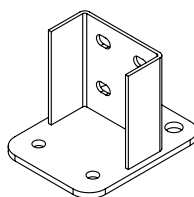
Tops Bolted Baseplate



Tops Bolted Shim



Tops Heavy-duty Baseplate Type I



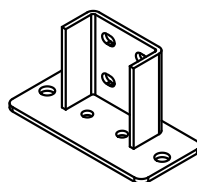
Tops Heavy-duty Baseplate Type I



Tops Heavy-duty Shim Type I



Tops Heavy-duty Baseplate Type II



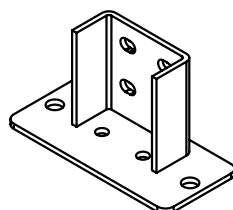
Tops Heavy-duty Baseplate Type II



Tops Heavy-duty Shim Type II



Tops VNA Baseplate



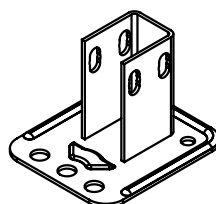
Tops VNA Baseplate



Tops VNA Shim



Tops Reversible Baseplate



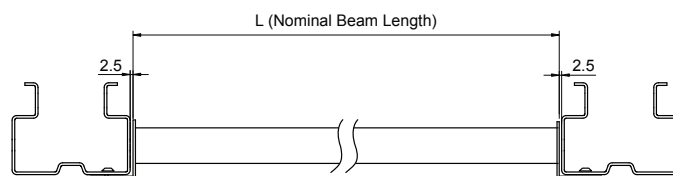
Tops Reversible Baseplate



Tops Reversible Shim

Beam Length

Beam length is specified as the distance between connector faces, as shown in right draft.



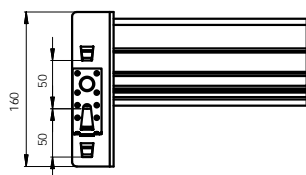
Beam Connector & Safety Lock

Beam connector

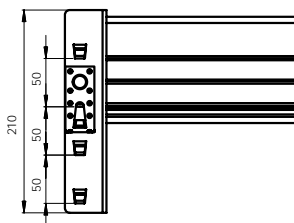
Tops Beam connectors are designed to increase resistance to sideways away movements and effectively take vertical loads and those movements on specially designed high performance hooks.

Beam connectors available for use are: 3-5 hook connectors, depending on the beam section height and beam loading.

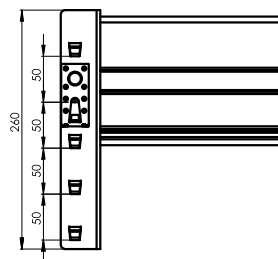
Tops 50 3 Hooker Beam Connector



Tops 50 4 Hooker Beam Connector



Tops 50 5 Hooker Beam Connector



Safety Lock

Each beam supplied with steel Safety Lock, which guarantee the beams correctly positioned and help prevent the beam being accidentally dislodged during its work. Safety Locks are fixed to beam connectors when being packaged.

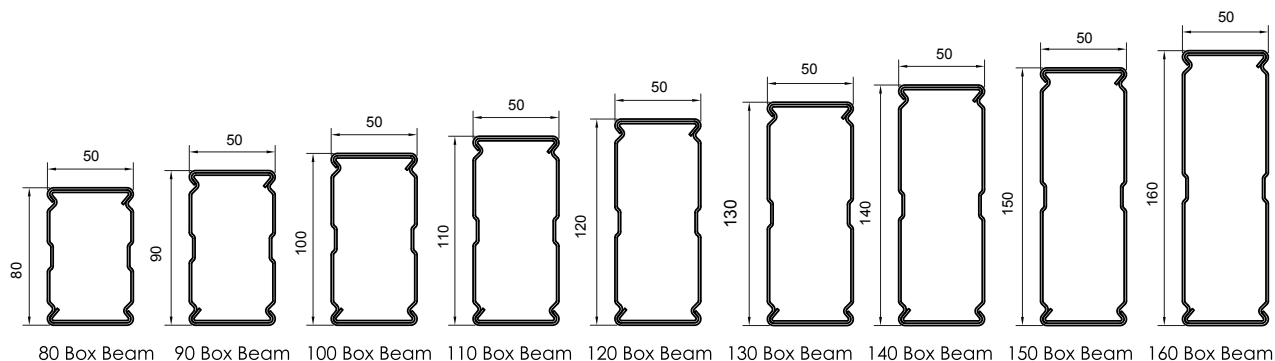
Special designed safety lock, it's pre-assembled can improve installation efficiency, and also avoid any installation missing spot to improve the whole system safety.



Box Beam

Box Beam

Tops Box beams are available in a comprehensive range to cover most loading requirements. Beam section height available from 80-160mm.



Type of beam	Height	Width	Thickness	Tops 50 Hookers	Tops 75 Hookers	All units in mm
TPS B 80-15	80	50	1.5	3	2/3	
TPS B 90-15	90	50	1.5	3	2/3	
TPS B 100-15	100	50	1.5	4	3/4	
TPS B 110-15	110	50	1.5	4	4	
TPS B 120-15	120	50	1.5	4	4	
TPS B 130-15	130	50	1.5	4	4	
TPS B 140-15	140	50	1.5	5	4	
TPS B 150-15	150	50	1.5	5	4	
TPS B 160-15	160	50	1.5	5	4	
TPS B 160-18	160	50	1.8	5	4	
TPS B 160-20	160	50	2.0	5	4	

★ Beam Length: All Size Available



Teardrop Pallet Racking

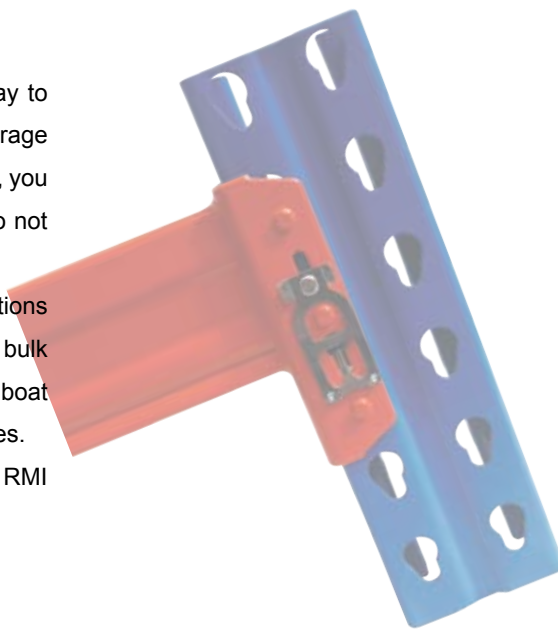


Teardrop Pallet Racking (2" / 50.8mm Pitch)

Teardrop Pallet Racking is the most economical and efficient way to store pallets or bulk boxes therefore maximizing valuable storage space in your warehouse. As the owner or lessee of a warehouse, you realize that you are paying for every square foot of space and to not maximize that space is a waste of money.

Teardrop rack can be used for a variety of storage applications including selective pallet storage racks, narrow aisle selective, bulk storage, carpet storage, drum storage, cable reel storage, marine boat storage, retail racks, rack supported mezzanines and pick modules.

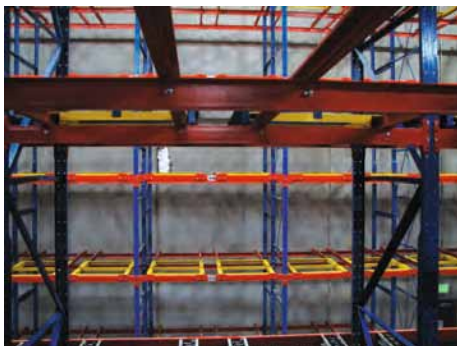
Teardrop Pallet Racking System is designed & manufactured to RMI (Rack Manufacturers Institute Specifications).



Superlock Pallet Racking Solution

Introduction

- Superlock Pallet Racking System is recognized worldwide as the most efficient and versatile pallet racking and shelving storage system.
- Infinitely adjustable, and offering a wide range of options and components, the system provides a solution to maximise space use in any warehouse configuration while still retaining the prime requirement of optimum product accessibility.
- The system is compatible with all sizes and types of pallets & container, can be used with all available handling equipment.
- Superlock Pallet Racking System is designed and manufactured to international quality standard ISO9001, complies fully with Australian storage racking standard AS4084-2012 and additionally with as relevant Overseas Codes , e.g., FEM, DIN, RMI etc.
- It has been progressively developed years, during which time it has earned a class-leading reputation for quality, reliability and workplace safety in warehousing and distribution operations in Australia, Asia Pacific, Europe, America and around the world in every continent. Superlock System can be protected against fork truck operator error and accidental impact damage. It features a selection of frame and beam sections and sizes to accommodate light and heavy duty needs, and has variety of optional storage accessories for awkward and on-standard loads.
- Superlock System undeniably the best.



Selective Pallet Racking

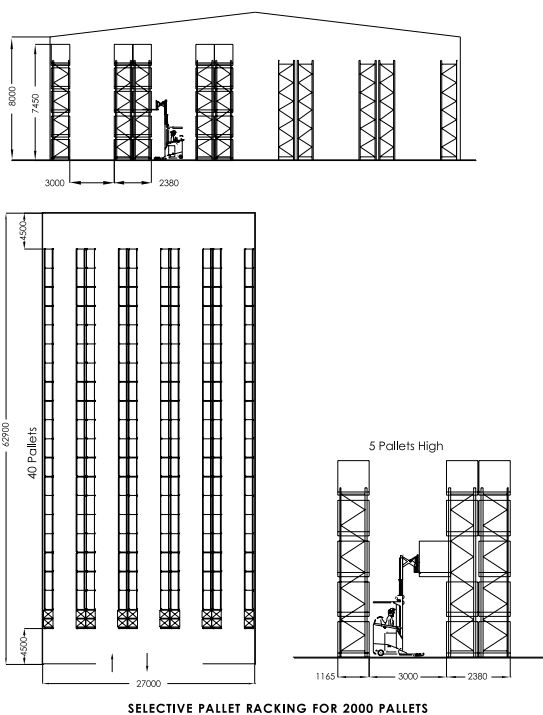
Selective Pallet Racking is the best solution for warehouses where it is necessary to keep a wide variety of articles in pallets. It provides direct access to all pallets for 100% accessibility and good stock rotation. Pallets can be located, accessed and moved individually providing rapid handling of palletized goods. It provides easy beam adjustment and accommodates variable pallet heights.

Lower level pallets can be located on the floor for picking purposes, which reduces structure costs. Alternatively additional shelving beams can be added for lower level picking.

This system is infinitely adjustable and offers a wide range of options and components to accommodate specialized load types.



The simplest of all Pallet Rack Storage Systems provides access to every pallet. Low cost equipment can be used offering simple adjustability and adaptability. Storage density is low with only 35% floor space used and only 25% cubic space used.



SELECTIVE PALLET RACKING FOR 2000 PALLETES

Advantages

Individual access to all pallets to full height of warehouse

Simple stock rotation achieved

Easy beam adjustment accommodates variable pallet heights

Compatible with many handling equipment styles.

Conventional tolerance for floors when used to 10m high.

Lower level pallets can be located on the floor (picking pallets).

Accessories available can accommodate every unit load type.

Economical shelving beams can be added for low level picking.

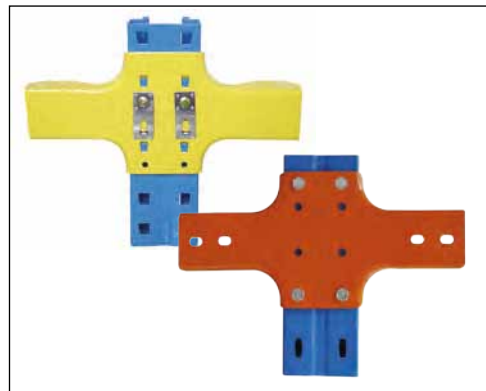
High average locations used 95%, for 100% accessibility, good stock rotation.

Drive-In Pallet Racking

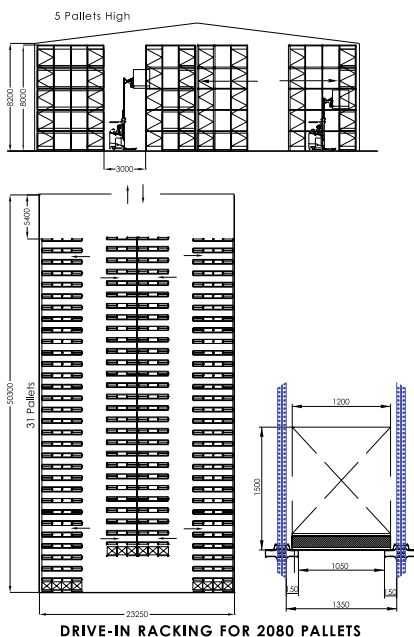
Drive-In racking is used where high-density storage is required. It is frequently used in facilities with a low number of product lines. Pallets are stored in a block system with two blocks generally served by one operating aisle.

The trucks drive into the racking to load or retrieve pallets, which are stored on cantilevered rails running throughout the system. The first pallet in is the last one out FILO (First in, Last Out) unless a Drive-Through system is used whereby pallets can be loaded or retrieved from either side.

- High density storage allowing a greater number of pallets to be stored per cubic metre than other storage system.
- Low stock rotation suitable for seasonal goods and fluctuating stock demand.
- Ideal for cold and chill storage and bulk storage applications.
- Suitable for easily damaged or fragile loads, which cannot be block stacked.



Forklift trucks drive into lanes on racking specially built to provide support to the pallet along the pallet sides. Stacking often to 10 meters high and 4 or 5 but occasionally even more than 10 deep. This system can provide very dense storage capacity, often low in access and rotation of products. As the truck enters the racking, special precautions apply to ensure the compatibility of design between the truck, pallet and load and the racking. Flat floors are advantageous.



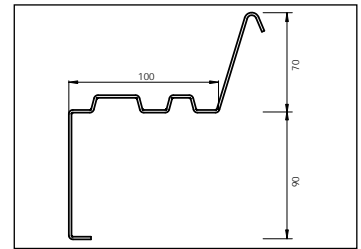
Usually the rack design incorporates a stability structure at the rear of the rack and therefore drive in indicates single access from one side. Drive through requires this same stability to be provided by a variation in design.

Advantages

- Very dense storage, ideal for few SKU with high pallet quantities.
- Prevents product crushing, and offers damage free storage.
- Floor single or double stacked pallets always accessible.
- Low capital costs using conventional handling equipment.

Pallet Support Rails

The pallet rail is ideal when all of the pallets to be stored are the same size, as it means that they can be centralised which eliminates the merchandise from colliding with the sides of the racking structure.



Top & Spine Bracing

Full Top Bracing and Full Spine Bracing solution is a special design which considering safety factors carefully, it's been tested in some pretty seismic countries and proved as a safe and reliable system.



Optional Components



Pallet Rail lead in

Pallet Rail lead in are installed at the end of pallet rails in each of the loading aisles of drive-in racking system. They help to guide the pallet at the entrance to each aisle.



Flooring guide rails

- Prevent the pallets colliding with the sides of the racking structure.
- Enable the fork-lift trucks to be equipped with side wheels so that they are centralised when moving inside the storage aisles.
- Levelling the racking system.
- Uniform loading.

Upright Front Protection

These are installed at the front of the first upright of each row of frames and provide protection against possible minor impacts.

Upright Style



L Style



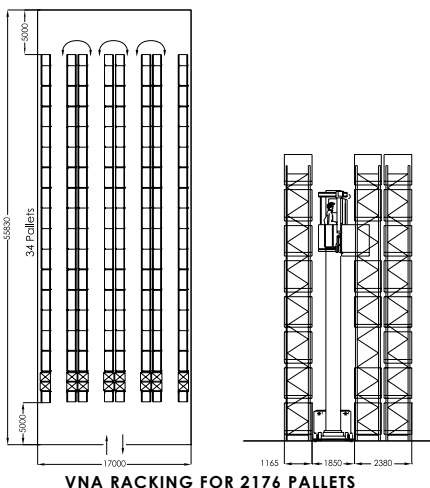
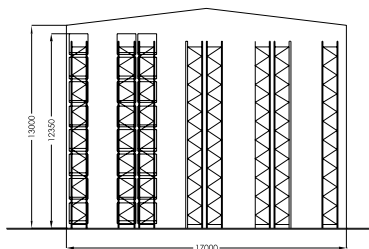
Very Narrow Aisle Pallet Racking (VNA)

Very Narrow Aisle Pallet Racking makes optimum use of floor area and roof height while at the same time providing high-density storage with 100% accessibility and good stock rotation.

The system is served by specialized high liftfork rotating materials handling devices operating in very narrow aisles. The benefit being up to 50% saving in aisle width when compared to a counter balance forklift, whilst achieving up to double the stacking height. As the forklift is guided within the aisles the risk of damage is minimized, resulting in lower maintenance.

Very flat floors, close tolerance racking, carefully located pallets of uniform size and stock location systems are all prerequisites for successful narrow aisle systems.

Floor guidance in the aisles is mandatory and the design interface between all aspects of their systems is needed. Truck lift height of 14 metres with man up capability available.



Advantages

Floor mounted free roaming trucks as flexible in multi aisles.

High speed through put with specialized equipment.

Controlled materials handling provides safe and damage free environment.

High average locations used 95%, for 100% accessibility, good stock rotation and 50% floor utilization with high cube available.

Remark

Special liftfork rotating truck needed.

Fire suppression and seismic need to be considered. Hard wearing and very flat floor designed for heavy static / live loads are normal.



Pushback Pallet Racking

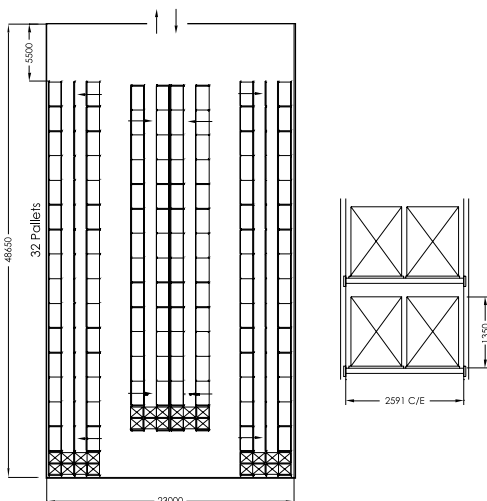
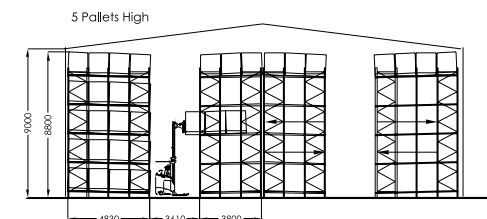
Pushback Pallet Racking provides highly effective use of space by combining high-density storage with high-speed access. The system offers safe and dense storage for 2, 3 and 4 pallets deep storage. Typically up to 5 pallets high.



Pallets are gravity fed via the front using conventional handling equipment and retrieved from the same aisle, so the pick face remains constantly full.

Pushback Racking operates on the FILO (First In, Last Out) principle.

All lanes can be accessed from the aisle at any time irrespective of the storage level. This promotes a low damage environment as the fork trucks never enter the rack.



PUSHBACK RACK FOR 2120 PALLETES

Advantages

Pick face remains constantly full.

A low damage environment, with the truck always outside the racking.

High storage density with speedy accessibility, but FILO.

Conventional handling equipment can be used.

Pallet quality may not be so critical as carts or cradles are always used.



Double Deep Pallet Racking

Double Deep Racking stores two pallets deep, or four pallets deep in a double entry rack. Double entry racks reduce the aisle to rack ratio but also reduces pallet selectivity, increasing storage density.

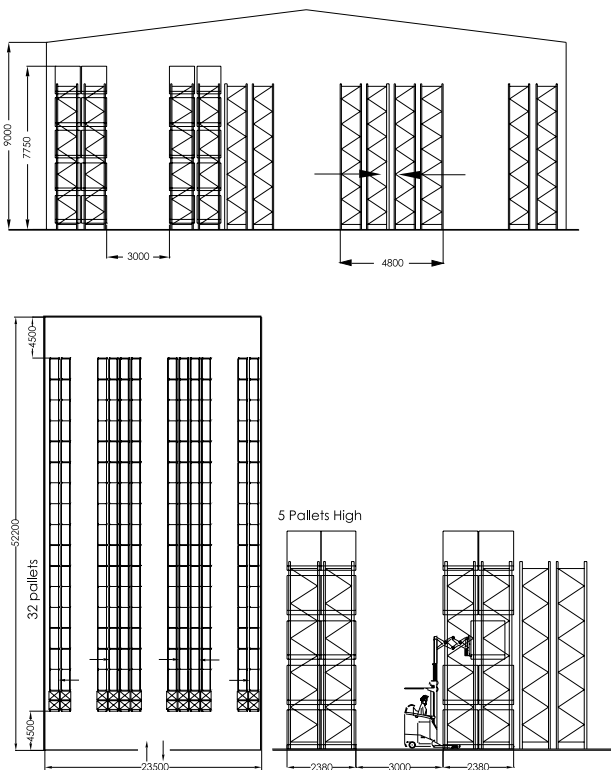
50% immediate pallet access provides reasonable stock rotation on a FILO (First In Last Out) basis and makes good use of all available locations. This system is best used when each SKU has several pallets.

The system requires the use of a special reach truck with either dual pantograph or slide fork attachments. Truck lift heights are limited by load to about 9 meters.

Upper levels can be fitted with guide rails to assist forklift drivers in locating pallets; they also help reduce fork truck operator error and accidental impact damage.



Modified reach trucks with the ability to stack two pallets deep operating in almost conventional reach truck aisles.



DOUBLE DEEP FOR 2040 PALLET

Advantages

Storage density increased as rack aisle ratio changes from Selective racking.

50% immediate accessibility with reasonable stock rotation.

Good use of all available locations, typically above 90%.

Safe and secure handling with the bottom pallet usually off-ground.

Ability to use double deep handling equipment for other tasks.

Best used when each SKU has several pallets.



Pallet Live Storage

Pallet Live Storage Racking for palletised loads are compact structures that incorporate roller track sections placed on a sloped lane to allow the pallets to slide over them.

The pallets are put in at the highest part of the rolling section and move by the force of gravity and at a controlled speed towards the other end, where they remain until they are ready to be removed. It's ideal for the following areas, where palletised loads are handled:

- Strict FIFO (First In First Out) required goods warehouse.
- Perishable goods warehouses.
- Intermediate warehouses between two working zones.
- Dispatch areas, where pallets need to be removed quickly.
- Holding warehouses (prepared orders, classification channels in automatic circuits, etc).

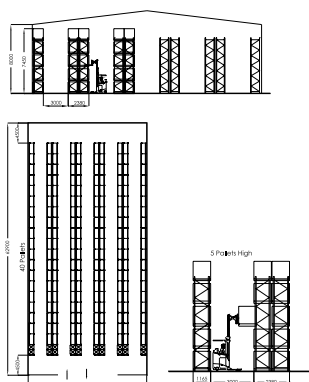


Mobile Pallet Racking

- Mobile Pallet Racking mounted on powered mobile bases running on rails set flush in the warehouse floor offer the highest degree of space utilisation coupled with 100% pallet availability.
- The racks can be individually controlled.
- When a pallet is required, the appropriate aisle is opened up by operating the electrically-driven bases. Only one aisle is required to serve a number of racks.
- The space saving can be so dramatic that economies are also seen in lighting, heating or cooling and ventilating costs.
- Can be used with counterbalance as well as warehouse fork trucks and with control systems ranging from simple push button operation to full computer control.

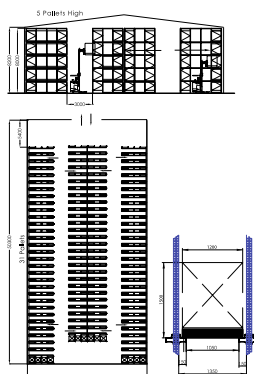


SELECTIVE PALLET RACKING



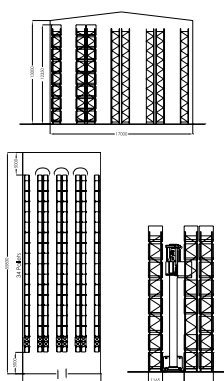
5 Pallets Height
Building Area=1698sqm
Using Reach Trucks
Average Locations used 90%
Immediate access ability 100%
Stock Rotation Good
Floor Utilisation 40%

DRIVE-IN PALLET RACKING



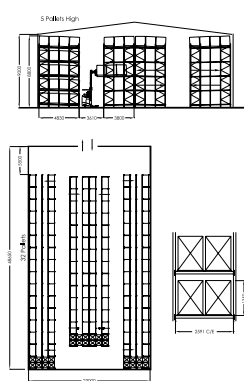
5 Pallets Height
Building Area=1170 sqm
Average Locations used 70%
Immediate access ability 25%
Stock Rotation Poor
Floor Utilisation 65%

VERY NARROW AISLE PALLET RACKING



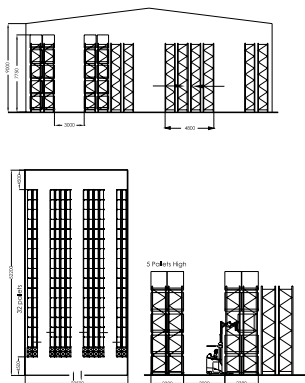
8 Pallets Height
Building Area=950 sqm
Using Narrow Aisle
Average Locations used 90%
Immediate access ability 100%
Stock Rotation Good
Floor Utilisation 45%

PUSH BACK PALLET RACKING



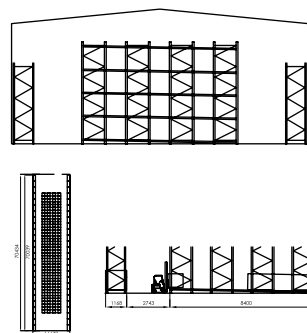
5 Pallets Height
Building Area=1119 sqm
Average Locations used 70%
Immediate access ability 25%
Stock Rotation Poor
Floor Utilisation 65%

DOUBLE DEEP PALLET RACKING



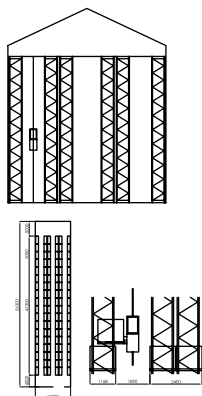
5 Pallets Height
Building Area=1225 sqm
Double Deep Trucks
Average Locations used 90%
Immediate access ability 50%
Stock Rotation Average
Floor Utilisation 45%

PALLET LIVE STORAGE PALLET RACKING



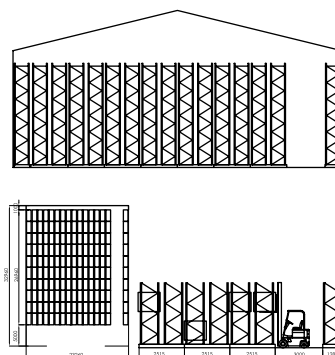
5 Pallets Height
Building Area=1174 sqm
Average Locations used 75%
Immediate access ability 25%
Stock Rotation Good
Floor Utilisation 55%

AS/RS PALLET RACKING



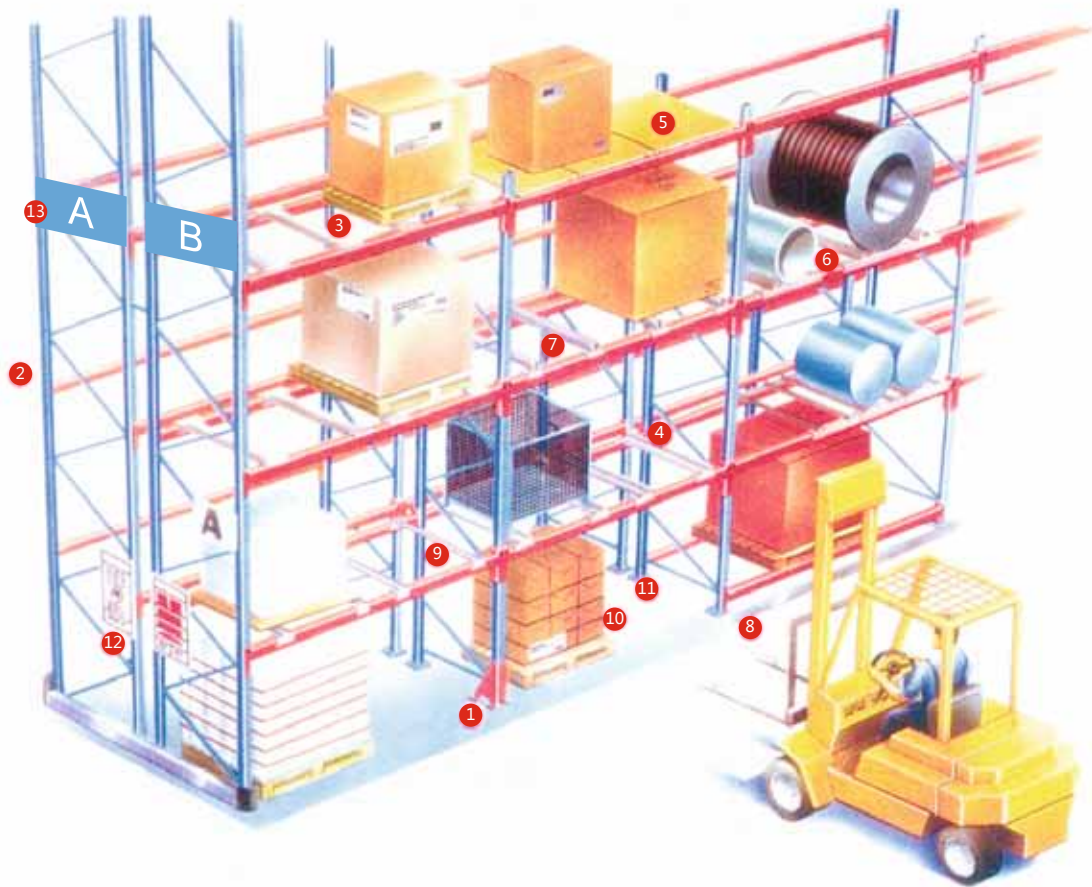
11 Pallets Height
Building Area=675 sqm
Using Automatic Crane
Average Locations used 90%
Immediate access ability 100%
Stock Rotation Good
Floor Utilisation 50%

MOBILE PALLET RACKING



6 Pallets Height
Building Area=766 sqm
Average Locations used 90%
Immediate access ability 100%
Stock Rotation Good
Floor Utilisation 70%

Common Accessories



1. **Corner Protector** safeguard the stability of the structure during fork truck picking and replenishing operations.
2. Upright can be spliced by **Upright Splicers** to provide high-bay storage up to 30m.
3. **Pallet Support Bars** provide support for pallet depth which may be less than the depth of the rack.
4. **Post Pallet Channels** provide positive and safe location for the feet of post pallets and stillages.
5. **Shelf Panels & Shelf Support Bar** can be used on any beam length.
6. Awkward loads, such as coils or barrels, are held securely using **Coil Support Bar**.
7. **Fork Entry Bars** clip over beams, to allow loads to be stored and handled by forklift truck, without using pallets.
8. **Flooring Guide Rail** protects rack base, and provides effective guidance for narrow-aisle and turret trucks.
9. **Skid Channels** provide secure support for stillages, for easy placing and removal by forklift truck.
10. The rigid structure allows for ground level storage where suitable, to make most use of available space.
11. **Baseplates** reduce the risk of floor damage, while firmly anchoring the rack.
12. "Maximum Loads—kgs" and "Maintenance of Racking Structures" can be fitted to racks to encourage safe use.
13. Sign.

N10x65 Bolts & Nuts With Nylon



N10x25 Bolts & Nuts With Nylon



N8x25 Bolts & Nuts



M10x25 Bolts & Nuts



Rn6x12 Bolts & Nuts



Anchors & Chemical Anchors



Bracing Block & Splicer Block



Steel Rivet 4.8x10



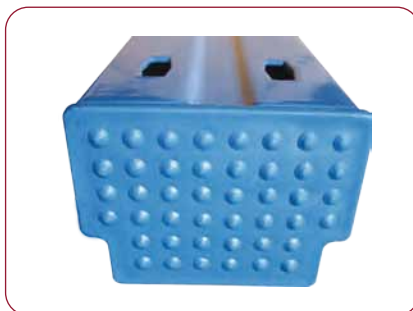
Row Spacer



Upright Splice Kit



90 Upright Plastic Endcover



J Lock for Cable Rack



U Type Corner Protector
(H= 400mm)



L Type Corner Protector
(Standard &H.D Style)



Post Protector



Steel Bump Protector



Pipe Bump Protector



Upright Front Protector



Pallet Support Bar (J Hookers)



Shelf Support Bar



Fork Entry Bar



Coil Support bar



Loading Capacity Sign &
Maintenance Sign



Single / Double Barrel Chocks



Shelving



Longspan Shelving

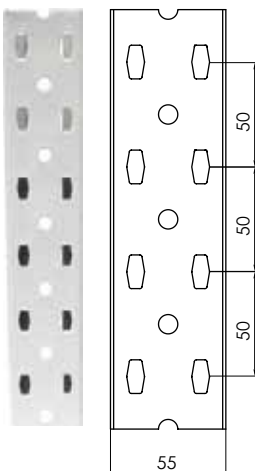


Longspan Shelving is the perfect solution no matter what you need to store from small components to heavy cartons. Longspan Shelving is fast and easy to assemble, and uses a modular design with bolted frames & knock down beams which require no special tools, giving you maximum storage in minutes whatever your available space is.

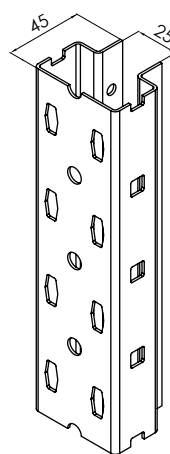
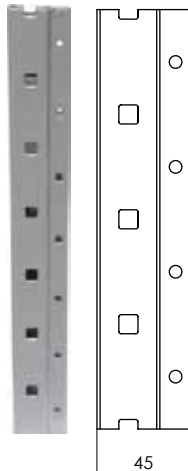
Longspan Shelving offers you virtually unlimited opportunities to expand your storage capacity, giving you higher density storage and greater flexibility no matter what you are storing. Long, uninterrupted spans of up to 3000mm also make Longspan ideal for a wide range of big and bulky items. Shelves are easily adjusted to your needs as stock patterns change. All components comply with Australian, European and American guidelines for safe storage.

Upright

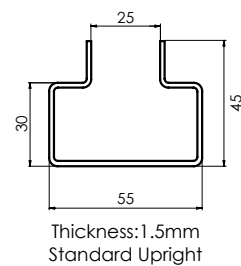
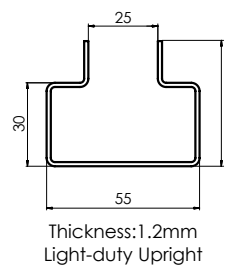
Front view



Side view



Top view



- H2200 x D465mm
- H2200 x H605mm

Finish: Powder Epoxy-Polyester Coating, Polymerized at 180 °C, Lead free.

Standard Colour:

Dark Grey



RAL 7016

Optional Colour:

Sky Blue

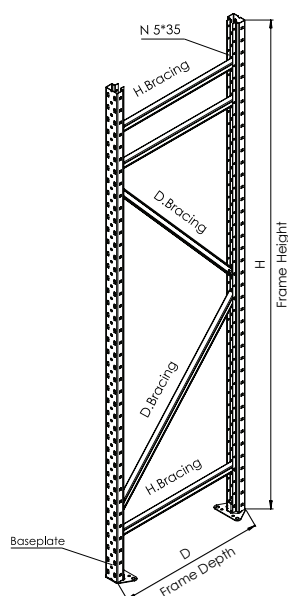


RAL 5015

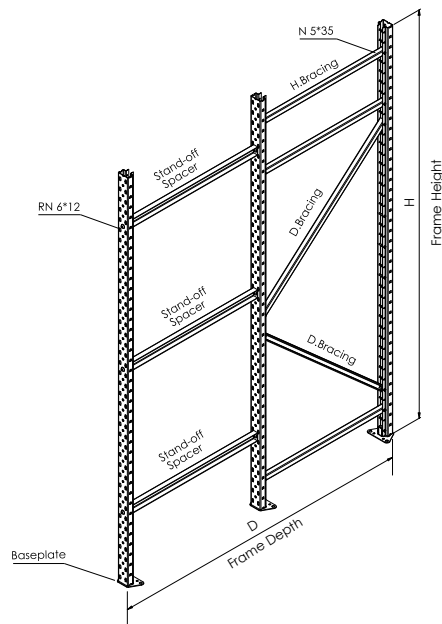
Frame & Bracing



2 Uprights Frame



3 Uprights Frame



Beam & Safety Pin

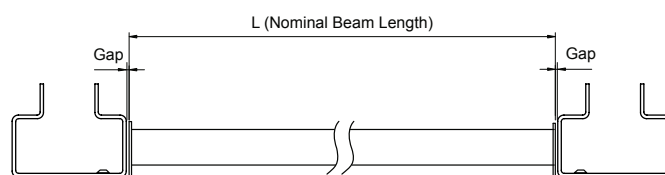
Longspan Shelving system incorporates a wide range of beams, making it easy to customize to meet your precise needs. Open, mesh clad, medium and longspan bays can be combined in the same unit for efficient storage of a wide range of stock items. A number of high performance accessories are also available to extend the versatility of the Longspan Shelving system still further.



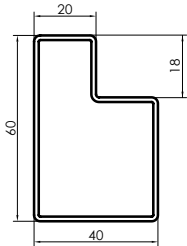
Beam Length

Beam length is specified as the distance between connector faces, as shown in right draft.

G = 2.0mm = N' Style Beam Connector

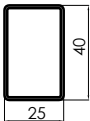


Step Beam Profiles

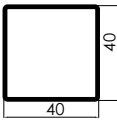


60×40×18 Step Beam
Thickness:1.2/1.5/2.0mm

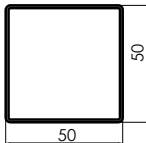
Rectangle Beam Profiles



40×25 Rectangle Beam
Thickness:1.2/1.5mm



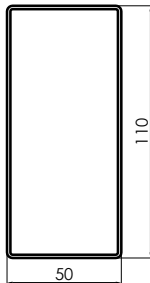
40×40 Rectangle Beam
Thickness:1.5/2.0mm



50×50 Rectangle Beam
Thickness:1.5/2.0/3.0/
3.75mm



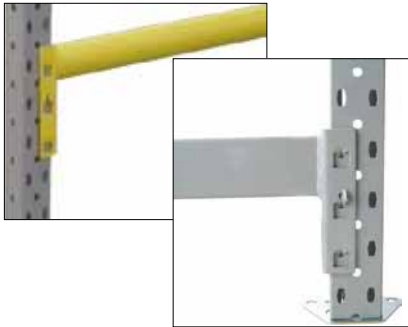
100×50 Rectangle Beam
Thickness:1.8/2.0mm



110×50 Rectangle Beam
Thickness:1.8/2.0mm

Other Beam Profiles

Can design and produce special beam profiles for your special requirement, for example round tube beam profiles etc.



Finish: Powder Epoxy-Polyester Coating, Polymerized at 180°C , Lead free.

Standard Colour: Light Grey



RAL 7035

Optional Colour: Safety Orange

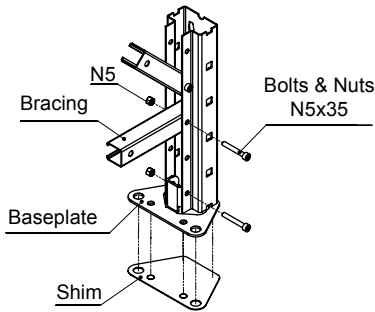


RAL 2102

Baseplate & Shim



Anchor
P8*50
(Optional)



Shelves

Various Shelves are available for different requirements.



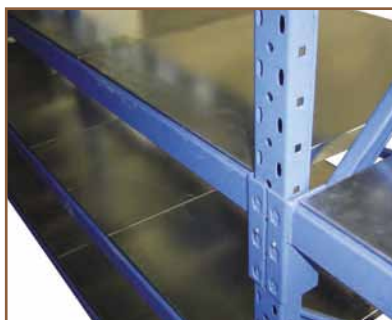
Chipboard Shelves

- Chipboard is available pre-cut to fit longspan shelving. This is the most cost effective shelving for the system.



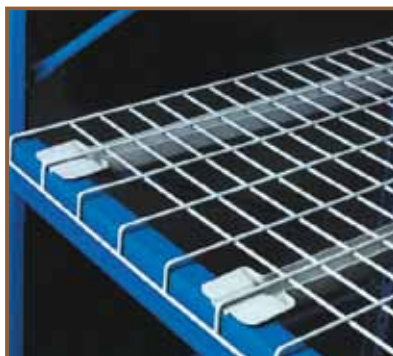
Melamine Faced Shelves

- Provide a wide clean surface where high levels of cleanliness are required such as in pharmaceutical or electronic industries.



Steel Shelves

- Pre-Galvanised and Powder Coated steel shelves are available.



Wiremesh Shelves

- Wiremesh Shelves are available on all Shelving Systems. Offers variety of sizes, capacities, and customized configurations to accommodate any applications.

Back Panel



Side Panel



Divider



Accessories



N5 * 35 Bolt N 5 Nut with Block



RN 6 * 12 Bolt N 6 Nut with Block



Plastic Upright Endcover



Longspan Upright Splicer



Welded Shelf Support



Knock Down Shelf Support

Longspan Shelving Application



Longspan Shelving is the perfect solution no matter what you need to store.

Longspan Shelving system incorporates a wide range of beams and frames making it easy to customize to meet your precise needs, from small components to heavy cartons.

A number of high-performance accessories are also available to extend the versatility of the Longspan system.



Build In Longspan Shelving

- Quick and easy installation with no special tools and no special training saves your time and money.
- Shelves are easily adjusted to your needs as stock patterns change.
- Designed for safety-all components comply with Australian, European and American guidelines for safe storage.



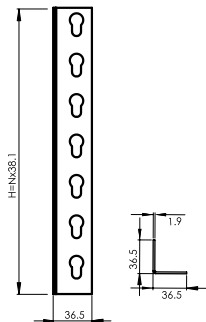
Rivet Shelving

Angle Post

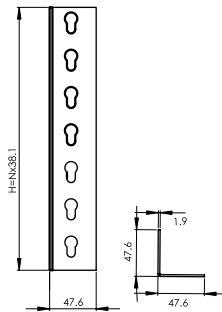
Standard angle post and heavy-duty angle post are available. Rivet shelving angle post has a standard specification and can manufacture according to individual customers' height requests.



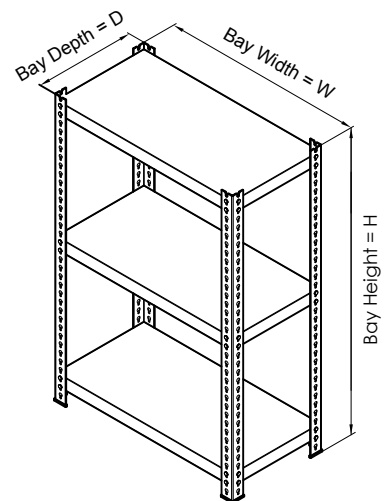
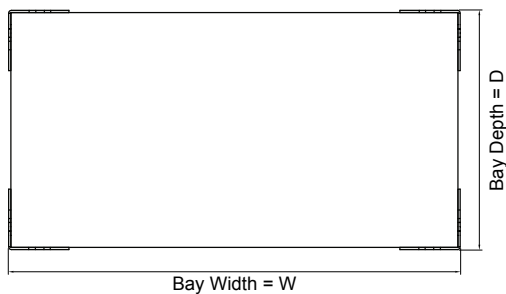
Standard Angle Post



Heavy-duty Angle Post



Nominal Bay Size



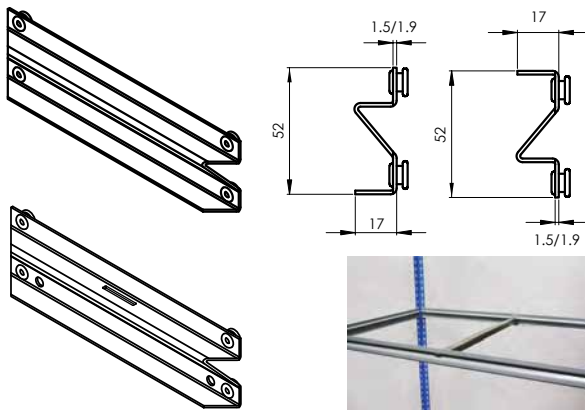
* Bay Depth = Nominal Side Beam Length = D

* Bay Width = Nominal Front / Back Beam Length = W

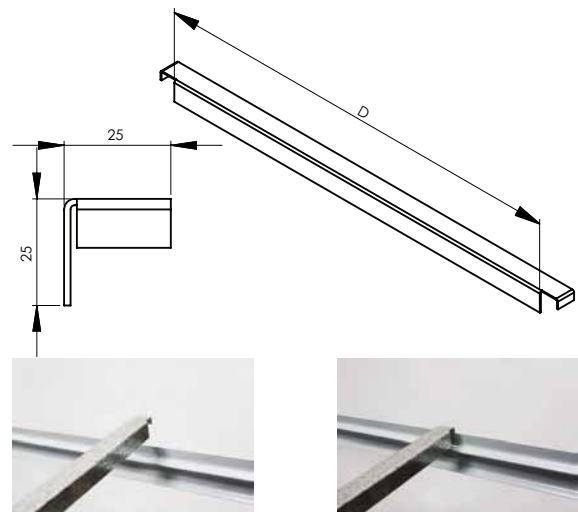
Rivet Shelving Beam

Z Type Rivet Beam (16Ga / 14Ga)

Provide bigger load capacity in longer length and also protect decking edges.



Shelf Support for Z Type Beam



Shelves

Various Shelves are available for different requirements.

Chipboard Shelves

- Chipboard is available pre-cut to fit rivet shelving. This is the most cost effective shelving for the system.



Accessories



Plastic Base Plate



Double-side Steel Base Plate



Single-side Steel Base Plate



Top Angle Post Endcover



4 Rivets Angle Post Connector



Angle Post with wheels

Rivet Shelving Application

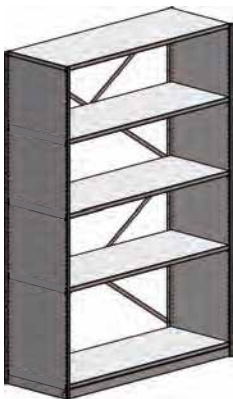
The structural integrity of Rivet Shelving leads itself to the construction of storage facilities for lots of applications.



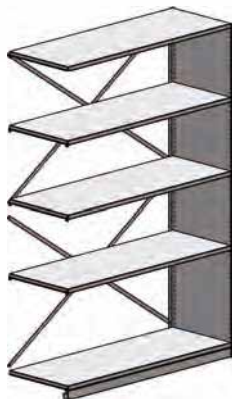
RET Shelving



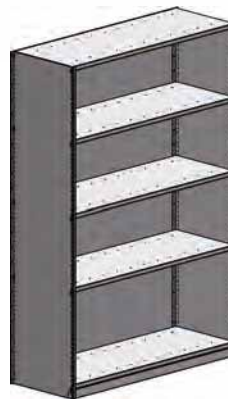
RET Shelving systems is ideal Solution for Mobile, Media, Archive, Medical & Office Environments, Bay Loading 450-500kg, Shelf Loading 100kg (UDL), Polyester Powder Coated.



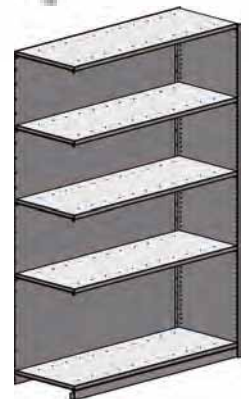
Starter Bay Open



Add-on Bay Open

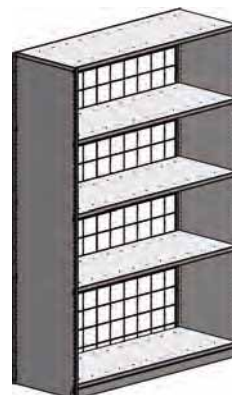


Starter Bay Closed

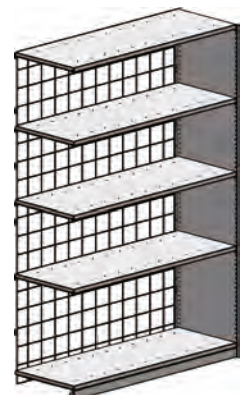


Add-on Bay Closed

- Open (braced) and closed (back clad) bay options.
- Duplex shelves for lateral file storage available in 900, 1000, 1100 and 1200 mm widths.
- Quick and easy to assemble.
- Self assembly components available.



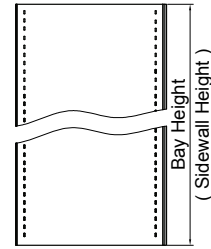
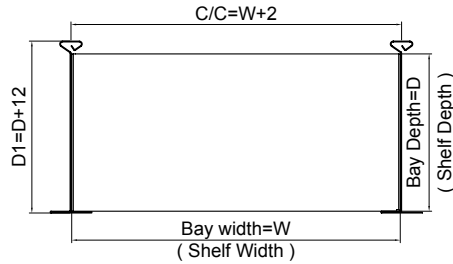
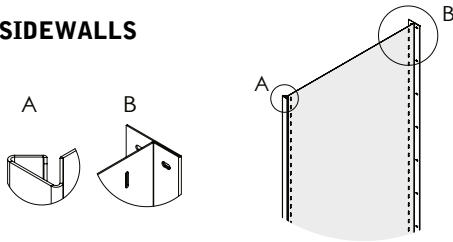
Starter Bay Meshed



Add-on Bay Meshed

NOMINAL BAY SIZE

Bay Height = Sidewall Height
 Bay Width = Shelf Width
 Bay Depth = Shelf Depth

**SIDEWALLS**

RET-Shelving sidewalls blend strength with appearance through innovative design and manufacture.

SIDEWALL SIZES AVAILABLE TABLE

Height(mm) Sidewall	300	350	400	450	500	550
1800	•	•	•	•	•	•
2000	•	•	•	•	•	•
2200	•	•	•	•	•	•
2400	•	•	•	•	•	•

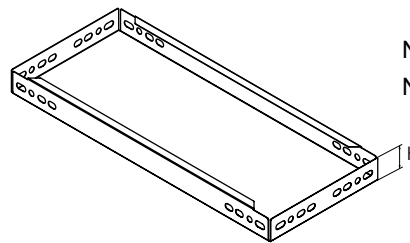
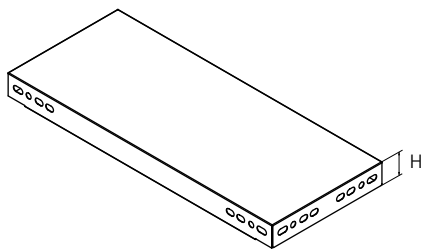
bay bracing requirements, bay loading 400-500kg.

Nesting Shelves (NS Shelves)

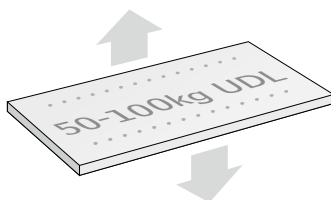
Unique Nesting Shelves (NS) can be completely nested each other, not only reduce delivery cost, in the meanwhile it can avoid damage during long distance shipping transportation. NS shelves can be generally used on Slotfix shelving, RET-shelving and Slotted Angle Shelving.

NS shelves can be manufactured by high quality cold-rolled steel and finished in powder coated, or directly made by pre-galvanised steel.

Its different sizes allow various combinations that make the shelving adaptable to a wide variety of products.



NS 24 Shelves H=24mm
 NS 38 Shelves H=38mm

**NS SHELF ADJUSTMENT**

NS Shelves can be raised or lowered by 25mm increments making this system extremely versatile.

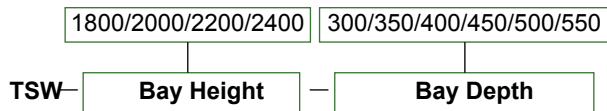
NS SHELF SIZES AVAILABLE TABLE

Width (mm) Shelf	300	350	400	450	500	550
900	•	•	•	•	•	•
1000	•	•	•	•	•	•
1100	•	•	•	•	•	•
1200	•	•	•	•	•	•

Individual shelf loading of 50-100kgs UDL.
 depend on specification

MAIN COMPONENTS CODE

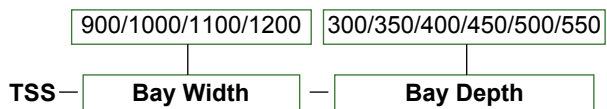
■ SIDEWALLS



eg. **TSW-1800-300**; Means: 1800mm Bay Height*300mm Bay Depth.

* **Remark:** Overall Depth=Bay Depth+12mm

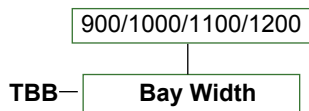
■ STANDARD SHELVES



eg. **TSS-900-300**; Means: 900mm Bay Width*300mm Bay Depth.

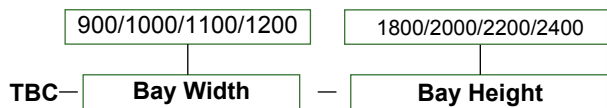
* **Remark:** Overall Width=Bay Width+2mm

■ BACK CROSS BRACING



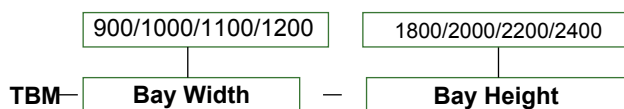
eg. **TBB-900**; Means: 900mm Bay Width Back Cross Bracing.

■ BACK CLAD



eg. **TBC-900-400**; Means: 900mm Bay Width*400mm Height Back Clad.

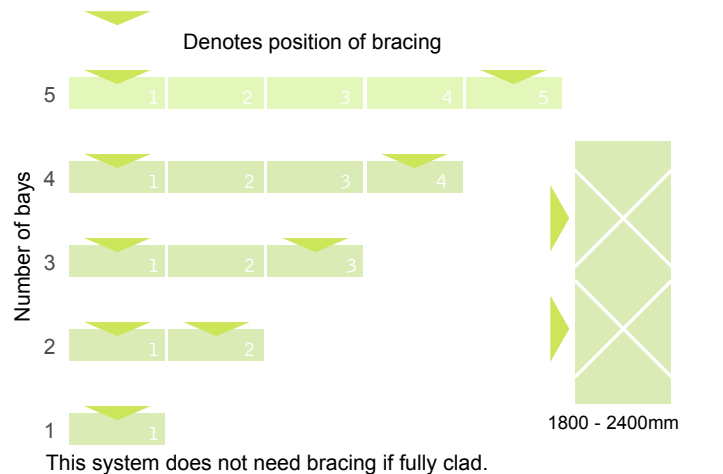
■ BACK MESH CLAD



eg. **TBM-900-400**; Means: 900mm Bay Width*400mm Height Back Mesh Clad.

BAYS AERIAL VIEW

WITHOUT CLADDING



Finish & Colours

Finish: Powder Epoxy-Polyester Coating, Polymerized at 180° C, Lead free.

Standard Colours:

Belge

Light Grey



RAL 1001



RAL 7035

Mezzanine



Racking Support Mezzanine

Racking Support Mezzanines add a second or third level inside your facility to create more usable space. These Mezzanines are customized to fit your exact area, height, colour and load requirements. Create new production, office, storage or assemble space, locker rooms, parts departments, stockrooms, cafeterias, company records storage, work platforms, distribution centers and more. Mezzanines are professionally engineered and designed to meet common building codes.



Steel Structure Mezzanine

Steel Structures Make Mezzanine Projects Easy

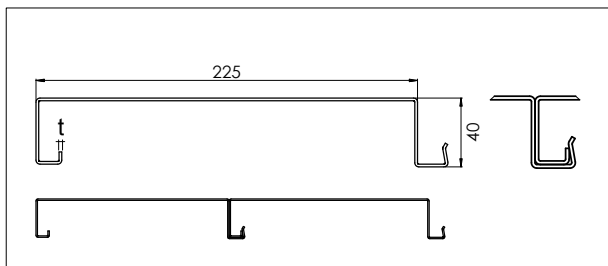
Structural Steel Mezzanines are designed and manufactured to meet customer's specific requirements. Whether you require loading platform, storage platform or a freestanding Mezzanine Floor we can help you specify and design a customized solution to suit your needs. Structural Steel Mezzanine floors are able to span longer distances whilst having heavier load capabilities. This allows for clearer areas under the raised structure for maximum space usage. The mezzanine platforms created can also be used for additional storage areas, offices or as order picking platforms. A variety of flooring medias available, as well as accessories such as staircases & landings, handrails, pallet gates and walkways.

All of Storage's Structural Steel Mezzanine Floors are designed in accordance with common engineering standards.



Special Components for Mezzanine

Nesting Steel Flooring



Solid Steel Flooring



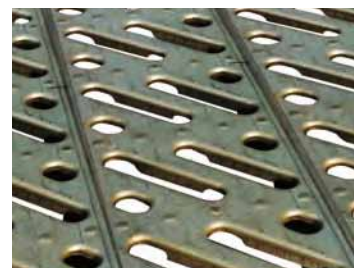
Round Hole Steel Flooring



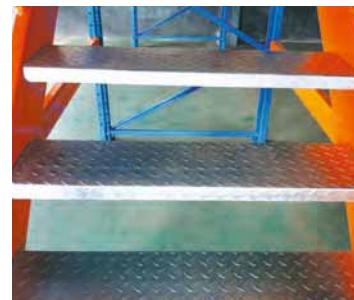
Slot Hole Steel Flooring



Inclined Hole Steel Flooring



Staircase & Stair Tread



Loading & Unloading Door



Others



Cantilever Racking



Very Heavy-duty Cantilever Racking

Very Heavy-duty Cantilever racks with its versatility offer maximum support, strength and capacity for storing lumber and other long, flat items with ease. It is found in daily use in all sectors of industry.

- Robust design, high stability. The uprights and feet are made from hot rolled IPE profile and are bolted together to form a rigid cantilever frame. Large footplates ensure even distribution of the load to the floor.
- Upright construction from bolted post and foot profiles can also be retrofitted to either a single face or double faced systems by changing the foot profile.
- Uprights are bolted together with horizontal braces to form racking rows and reinforced with vertical cross bracing in every fourth racking bays.
- Arms are adjustable every 100mm.
- Bolted cantilever arms.
- Simple assembly with few components.
- Applications range from manual to automatic operation, stationary or mobile racks.
- Load capacity up to 14000 kg per upright side based on evenly spaced cantilever arms.
- Racks can be installed indoors or outdoors as required.

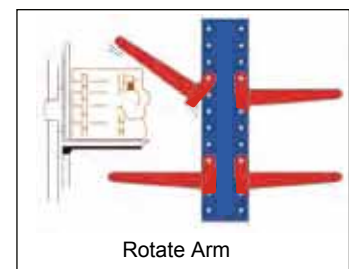
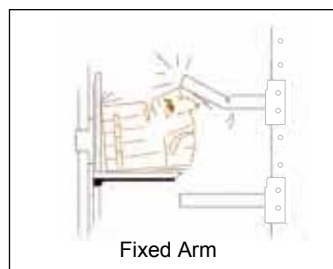
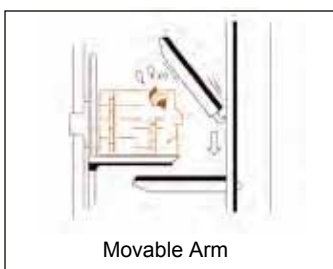


Heavy-duty Cantilever Racking

Heavy-duty Cantilever Racking is particularly suitable for storing long loads, offering the possibility of locating the levels (arms) on one or both sides of the fully independent structure.

Cantilever Racking can range in sizes, gauges and accessories are available to meet all your requirements.

Cantilever arm elevations are easily adjustable to accommodate any bundle size. Unique Rotate Arms can prevent goods and arms from being damaged by accidental operation.



Advantages:

- Excellent low-cost storage system!
- Store long products with ease. Unobstructed arms afford easy accessibility with no uprights on the aisle to restrict storage.
- Arms adjust easily on 100mm centers.
- 'Special Rotate Arm' device prevent arms from being dislodged during loading and unloading.
- Easy assembly, no special tools required.



Mid-duty Cantilever Racking

Mid-duty Cantilever Rack is a multi-level, high storage, special rack designed to handle many types and sizes of products. With freedom from upright column interference, it allows easier product placement and removal. In its basic form, a one bay Cantilever Rack consists of two vertical columns with horizontal load bearing arms attached by fixing at various levels. The horizontal load bearing arms project out from one or both sides of the upright columns at approximately 90 degrees. These racks are used to store rolls of carpet, lumber, pipe, or any long mid-duty materials.





Carton Live Storage

Carton Live Storage

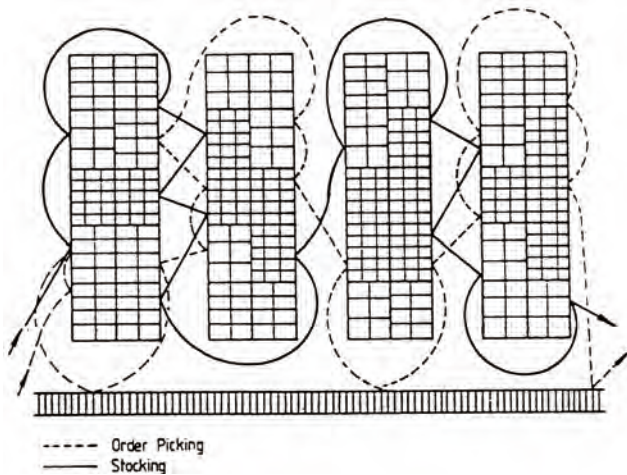
Carton Live Storage can be incorporated into both Pallet Racking and Longspan shelving systems to maximize picking efficiency.

A series of gravity tracks transport suitably packaged products from replenishment aisles to picking faces.

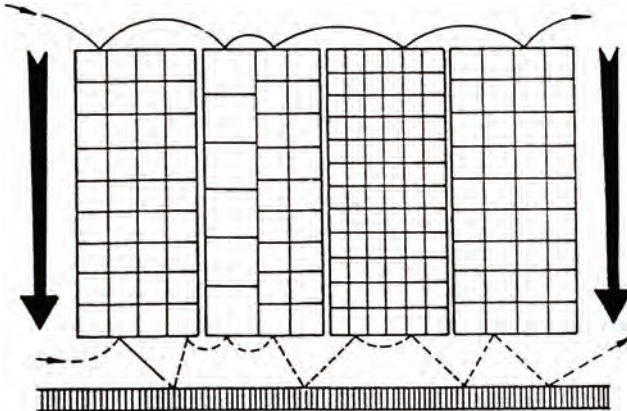
Carton Live Storage provides stock rotation on a strictly FIFO (first in first out) principle and ensures continuous replenishment to the picking face.



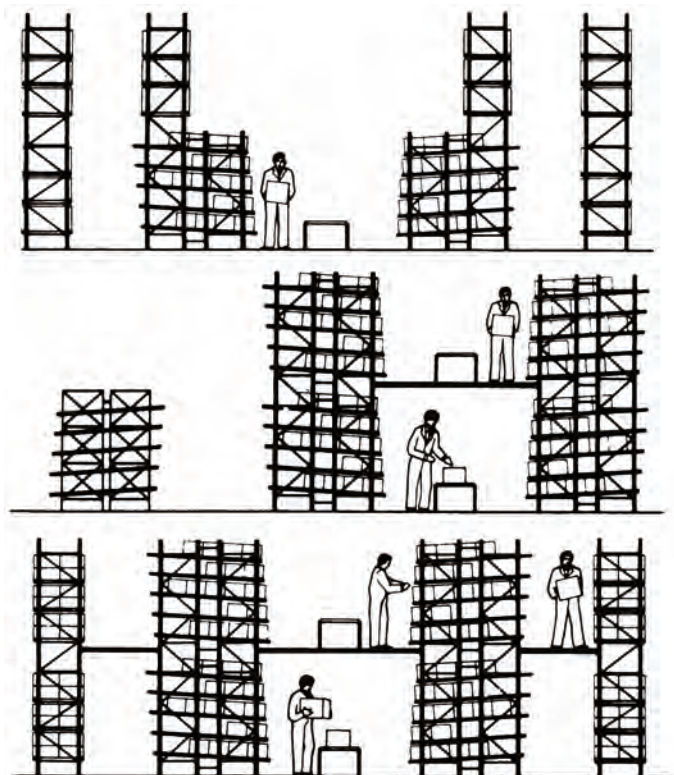
Typical Static Storage



Live Storage System



Typical Solution of Carton Live Storage



Accessories



Carton Live Storage is a unique storage and order picking system, designed to increase order-picking efficiency whilst saving floor-space.

Carton Live Storage uses gravity to maximize the efficiency of full-and split-carton order picking operations.

Carton Live Storage is efficient, fully adjustable, labour saving and versatile.

After years of experience and optimization, Carton Live Storage's comprises of a flowing frame, with rollers and guides which are specially designed to be able to adjust simply

and easily.

To assemble and disassemble without any nuts and bolts, you can adjust with the special connectors to change the flowing frame. You can also adjust the space of the rollers and guides to make it suitable for a variety of goods.



Shop Fitting



Shop Fitting

Shop Fitting

Shop Fitting is a perfect type of shelving system for storeowners which fits in all scenarios.

A gondola system maximizes the potential of your store, fits into your budget, and keeps your customers coming back.

Constructed from quality steel and painstakingly chosen components, this shelving storage system possesses functional intelligent brackets. This system provides the users full freedom of expand.

Features:

- Has both Wall, Retail, Modular and complete Gondola bay solutions available.
- Our Shop Fitting is perfect for all types of retail stores.
- The versatility of our gondolas make them easy to install and change on a frequent basis.





Others

Tyre Racking

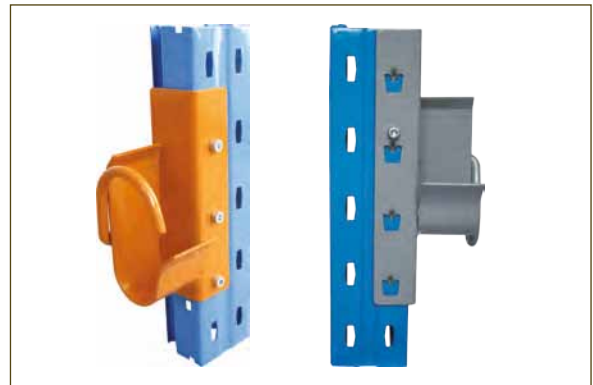
Tyre Racking is ideal for the storage of all tyre types and sizes. It is an economical and efficient storage solution for easy picking and identification of product range. It will increase your storage capabilities by utilizing heights in your existing premises.

The most popular tyre racking styles we produce are display shelving style and stillage style.



Cable Racking

Cable racking is the ideal solution for storing cable reels. Storing the reels horizontally on racking maximises the use of storage space and also provides for easy stock identification. In addition, by mounting each drum on an axle, the cable can be reeled or unreeled while still located in the rack. As a manufacturer, we design the system to suit your exact needs and drum requirement.



Stillage

Stillage can be easily knocked down for easy storage, they recapture floor space otherwise tied up by stationary racks, great for seasonal requirement and can be easily moved empty or full. We can duplicate your existing stacking racks from a drawing or sample rack, or can customize one to meet your capacity and stack height requirement.

Advantages:

- More storage in less space.
- No need to leave aisles.
- No empty shelves, just collapse racks for storage when not in use.
- Maintenance free



Workbench

Industrial workbenches are constructed from either longspan & rivet shelving or pallet racking components. All pieces simply clip together.

Heavy-duty plywood shelves allow vices or other equipment to be fitted, and when backboards are added it is a simple matter to include parts bins for ready access to smaller items.

These benches are the most versatile and economical on the market.

Wheels and additional shelves may be added under the work area if required.



Wiremesh Products

Wiremesh Decking With Support Bars



Wire Container

Wire Containers are tremendously durable and are available in many different sizes and shapes. Great for transporting heavy goods in vast quantities securely and safely, a truck roll cage makes moving goods around large areas a much easier task.

Features as following:

- Rational warehousing management: the standard feature is stocktaking. To meet the immediate requirement, the materials can be easily unload in a small quantity by layer preventing from the trouble of unloading in a large space.
- Saving storage Space: the containers can be stacked up to four levels. Save storage space and enhance the effectiveness of space utilization when not in use, it can be folded in manner that saved 20% of storage space.
- Consecutive usage: The container can be easily operated hydraulic pallet car or elevator, to transport materials covering all phase of the manufacturing cycles the materials will not be damaged during transportation. it saves cost and labour charges.
- Easy to operate: Due to the unique construction, it can be operated safely and easily by anyone.
- Durable: it is made with durability and space saving in mind and is highly recommended for use in manufacturing industries.



Detail Pictures



Material Handling Equipment



2500 KG CAPACITY
TUV  CE
PROTECTOR

Hand Pallet Truck

SPLWA30-ND

- Standard single speed pump and light service weight, but big load capacity 3000kgs.
- Design on the base of 3 years service time, which can be extended up to 5 years.
- Compact appearance, innovative separated rocker arms, ensure the whole truck averaged pressed.
- Full sealed pump, easy to maintain.
- Simplified spare parts, higher performance with low repair cost.
- Conform to EN 1757-2.

Options: (1) Double Speed Pump

(2) Powder Coated Pump or Galvanized Pump

(3) Nylon wheels, polyurethane wheels, rubber wheels, single fork rollers or tandem fork

**SPLWA30-ND**

Capacity (kg): 3000

Lowered fork height (mm): 85/75

Steering wheel (mm): $\Phi 200/\Phi 180$

Fork wheel single (mm): $\Phi 80*93/\Phi 74*93$

Fork wheel tandem (mm): $\Phi 80*70/\Phi 74*70$

Max. lift height (mm): 205/195

Overall length (mm): 1520/1590

Fork length (mm): 1100*1220

Width overall forks (mm): 550/685

Turning radius (mm): 1600/1700

Service weight (kg): 55-70

SPLBF25-ND

- Most standard and popular model with capacity 2500-3500 kgs.
- Complete pump design with reliable leak-proof pump eliminating maintenance and extending the service time.
- 210 steering arc, and small turning radius.
- Fork lowering speed is controllable, operated by hand control and foot pedal.
- Ergonomic rubber wrapped handle, which is comfortable and convenient to operate.
- Entry/Exit Roller, more freely travel.
- Equipped with over-load valve, with long service time.
- Conform to EN 1757-2.
- Ergonomic Large Rubber handle with three control lever.
- Options: (1) Nylon wheels, polyurethane wheels, rubber wheels, single fork rollers or tandem fork rollers.

(2) Fork length: 800mm, 900mm, 1000mm

(3) Foot pedal release.

**SPLBF25-ND**

Capacity (kg): 2500

Lowered fork height (mm): 85/75

Steering wheel (mm): $\Phi 200/\Phi 180$

Fork wheel single (mm): $\Phi 80*93/\Phi 74*93$

Fork wheel tandem (mm): $\Phi 80*70/\Phi 74*70$

Max. lift height (mm): 200

Overall length (mm): 1483/1533/1603

Fork length (mm): 1100/1220

Width overall forks (mm): 550/685

Turning radius (mm): 1600/1700

Service weight (kg): 65-80

Industrial Steel Rolling Ladders

Capacity 350lbs/160 kg.

Perfect for use in warehouse, stockroom and maintenance areas.

Built to take heavy everyday use.

Increase productivity with speedy relocation.

Two castors and two wheels for easily move in the leaders with 4 steps and more.

Non-slip steel steps.



RLC354

RLC354 Series

Loading Capacity: 160kg

No. of the Step: 4

Height to Top Step: 1035 (mm)

Castor Size: PUΦ100*30(mm)

Overall Size: 1170*850*1805 (mm)

Package Size: 1680*850*500 (mm)

Net Weight: 55 (kg)



RLC355

RLC355 Series

Loading Capacity: 160kg

No. of the Step: 5

Height to Top Step: 1275 (mm)

Castor Size: PUΦ100*30(mm)

Overall Size: 1380*850*2045 (mm)

Package Size: 2000*850*500 (mm)

Net Weight: 65 (kg)



RLC356

RLC356 Series

Loading Capacity: 160kg

No. of the Step: 6

Height to Top Step: 1525 (mm)

Castor Size: PUΦ100*30(mm)

Overall Size: 1590*850*2295 (mm)

Package Size: 2300*850*500 (mm)

Net Weight: 75 (kg)



RLC357

RLC357 Series

Loading Capacity: 160kg

No. of the Step: 7

Height to Top Step: 1770 (mm)

Castor Size: PUΦ100*30(mm)

Overall Size: 1800*850*2540 (mm)

Package Size: 2630*850*500 (mm)

Net Weight: 85 (kg)



RLC358

RLC358 Series

Loading Capacity: 160kg

No. of the Step: 8

Height to Top Step: 2200 (mm)

Castor Size: PUΦ100*30(mm)

Overall Size: 2010*850*2970 (mm)

Package Size: 2960*850*500 (mm)

Net Weight: 95 (kg)



Castor

Flexible Conveyor

Flexible Conveyor

Highly mobile, extremely flexible the Expandaveyor can be moved, stretched out and positioned in minutes. Simply wheel it out and expand it straight or around bends to suit your needs. When finished just close the unit up and store away. This flexible conveyor has lattice sideframes which enable it to be stretched around corners or even tight bends with ease. These machines can be used on their own or to supplement existing installations in stores, warehouses or assembly lines.



Rolltainers

- The new type logistics rolltainers are different from the general rolltainers in:
 - a. different designing function;
 - b. different structure;
 - c. different workmanship;
- Applicable industries: post, medicine, commercial distribution, automobile parts etc ;
- High quality feet setting, low noise, labour saving and durable ;
- Non-standard size products are available according to customer requirement.



Packaging



Loading



Assembly & Installation



