

Midispan

Industrial Galvanised Longspan Racking





“Midispan offers huge loading capacities and a vast possibilities of application for a number of specialised environments“

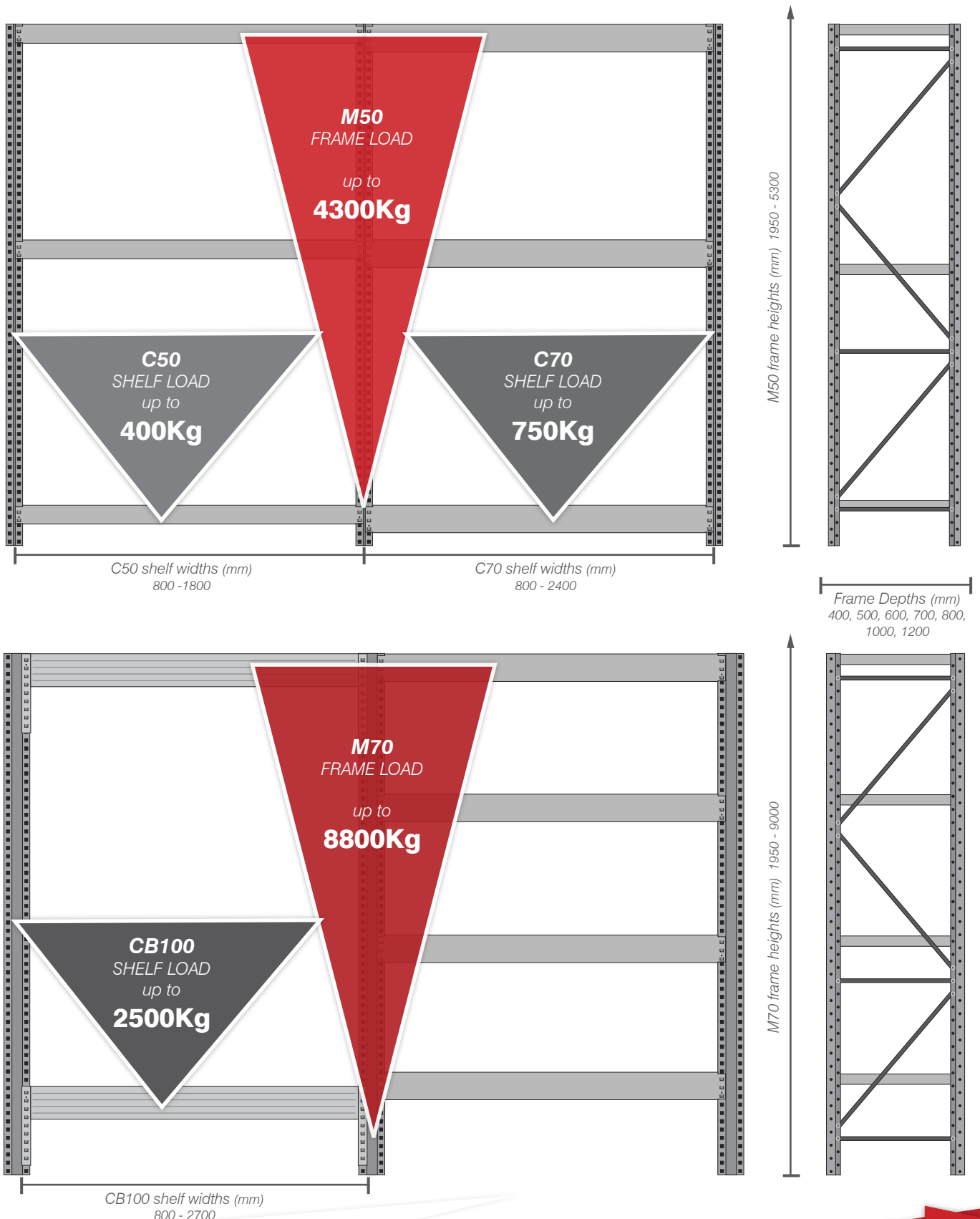
Index

- 3** *Midispan Rack Overview & Loadings*
- 4** *Uprights M50 & M70 & Feet*
- 5** *Frames, Loadings & Bracing*
- 6** *Beams - C50, C70 & Box Beams*
- 7** *Designing Layouts, Box Beam Options*
- 8** *Safety Pins, Beam Ties, Steel Shelves*
- 9** *Chipboard Shelves*
- 11** *Dividers & Binning System*
- 13** *Automotive Solutions*
- 14** *Multi-Tier Application*

Midispan Rack Overview

Midispan is our longspan shelving system with a steel or chipboard decking panels that comes in a contemporary pre-galvanised finish. This makes it ideal for the most demanding application and environments. The profiles are designed in such way to ensure there are no sharp edges when assembling or in use.

The system has a wide range of profiles and sizes which provides complete flexibility when designing your warehouse. Along with a range of accessories that make it simple to store many different products as well as bespoke solutions for the automotive industry or to build a high bay and multi-tier installations.



Uprights

Midispan uprights come in 2 versions. The lighter M50, rolled from 1.0 and 1.2 mm thick steel and the heavier, wider M70 that is made from 1.5 mm steel. They can be both used with all types of midispan beams but have different loading capacities. The uprights are punched to allow beams to be adjusted every 25 mm offering high density solutions.

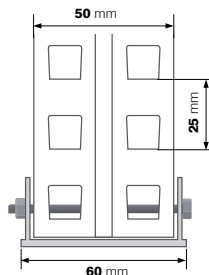
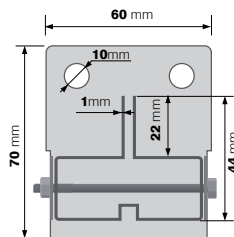
Upright M50

Upright M70

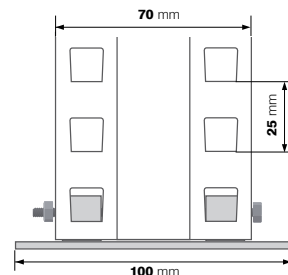
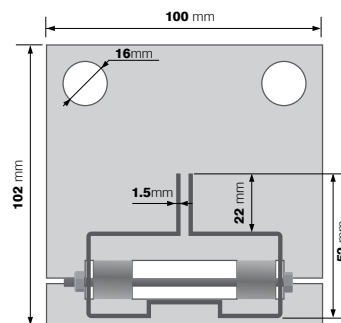


Dimensions

Upright M50 (with footplate)
-use M8 floor fixing



Upright M70 (with footplate)
-use M12 floor fixing



Bracing

Braces connect two uprights to create a frame. There are two variants of brace. Although both have the same construction, the horizontal brace is shorter and the diagonal brace is longer. The sizes depend on the depth of the system and a bracing diagram needs to be followed correctly to assemble the frame.

Horizontal Brace



Diagonal Brace



Feet

Each upright should rest on the metal footplate, connected by a nut and bolt; and fixed to the floor. Footplates are a standard part of the system so each upright is supplied with one footplate and the connecting nut and bolt. (Floor fixings are supplied separately.)

M50 Footplate

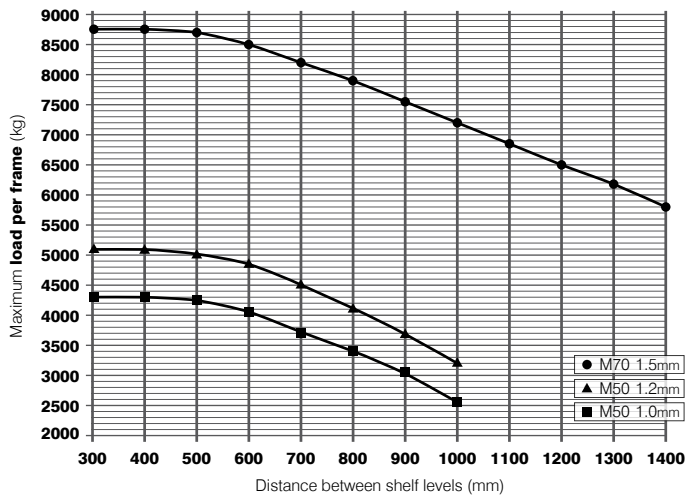


M70 Footplate

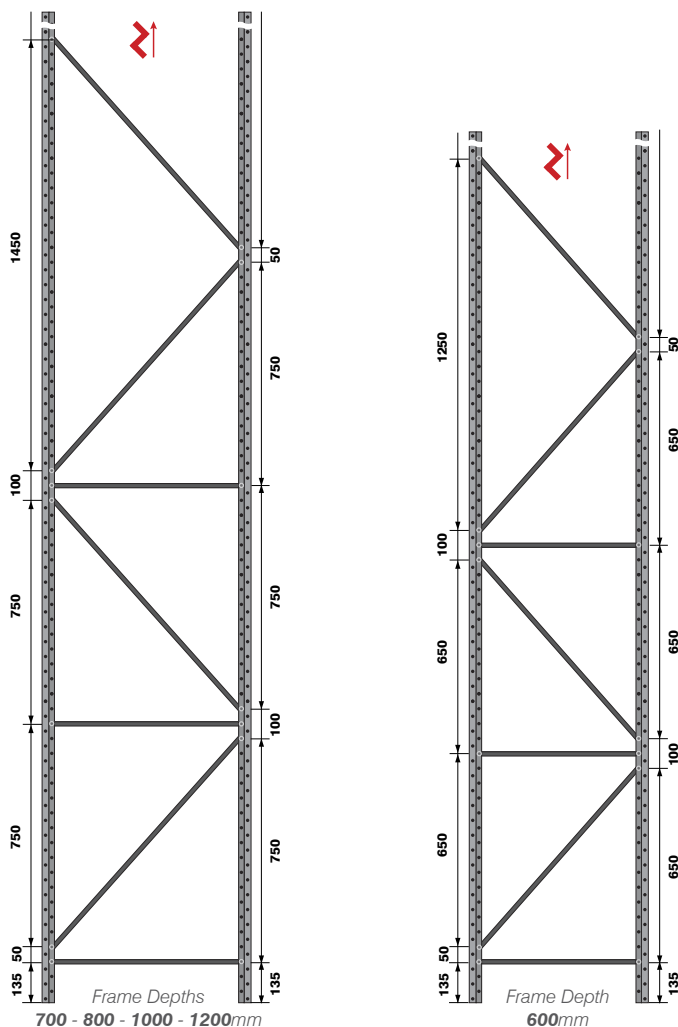


Frames & Loads

Frames are the fundamental part of the Midispan system that provide the support for the shelf levels. Maximum capacity of the system depends on the type of the uprights used. Frames based on the M50 upright can hold up to 5100kg while the sturdier M70 holds up to 8800kg. Actual capacity of the system depends on the shelf pitch (distance between shelf levels).



From the Bottom of the Frame



Brace Count Table

Height	Frame Depths													
(mm)	400		500		600		700		800		1000		1200	
	HZ	DG	HZ	DG	HZ	DG	HZ	DG	HZ	DG	HZ	DG	HZ	DG
1950	3	3	3	3	3	2	3	2	3	2	3	2	3	2
2550	3	5	3	4	4	3	4	2	4	2	4	2	4	2
3000	3	6	4*	4	4	4	4	3	4	3	4	3	4	3
3450	3	7	4*	5	5*	4	4	4	4	4	4	4	4	4
4050	3	8	4*	6	5*	5	5*	4	5*	4	5*	4	5*	4
4500	3	9	4*	7	4	6	4	5	4	5	4	5	4	5
4950	3	10	3	8	4	7	4	6	4	6	4	6	4	6
5550	3	11	3	9	4	8	5*	6	5*	6	5*	6	5*	6
6000	3	12	3	10	5*	8	4	7	4	7	4	7	4	7

HZ - Number of horizontal braces | DG - Number of diagonal braces
* - Top of the frame is finished with two horizontal braces

The Brace Count Table above indicates how many horizontal and diagonal braces are required per frame depending on its height and depth. When building a frame, it is important to follow the correct brace positioning for applicable depths and heights as shown in the bracing diagram below.

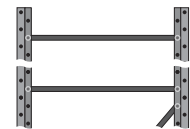
Bracing Diagram

Each diagram shows the positioning of the lower part of the frame bracing, which then **continues with diagonal bracing along the entire frame height** ↗

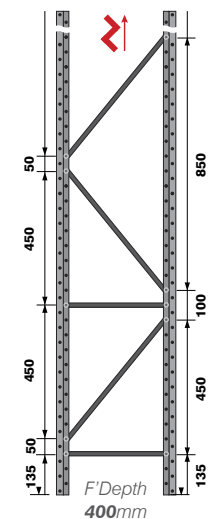
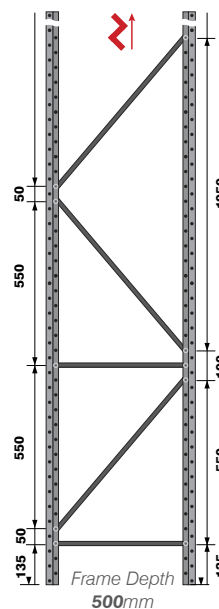
Top of the Frame



All frames are finished with one horizontal brace at the top.



Except where indicated *, which have two horizontal braces - one fitted directly above the last diagonal brace and the other in the 2nd hole from top.



Midispan Main Parts

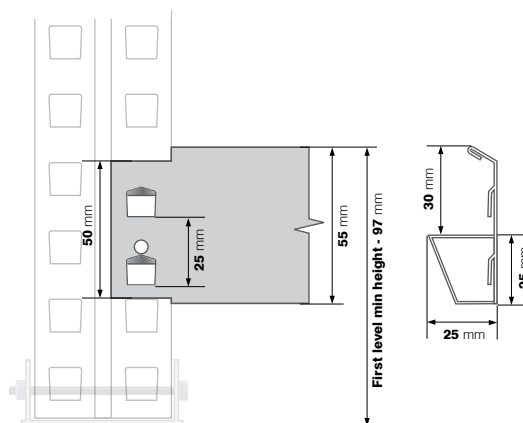
C50 Beam

C50 is Midispan's slimmest step down beam that connects to the upright by two claws and can be adjusted in 25mm increments. C50 built levels can hold up to 400kg depending on the span, available in 6 lengths ranging from 800 to 1800mm.



C50 Loadings	
Length (mm)	UDL (kgs)
800	400
1000	400
1200	340
1400	290
1600	250
1800	220

load per pair



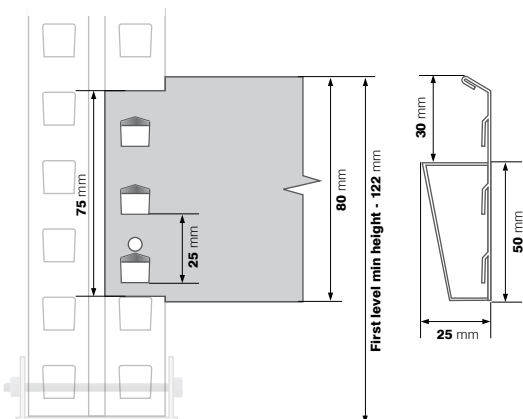
C70 Beam

C70 is Midispan's largest step down beam that connects to the upright by three claws and can be adjusted in 25mm increments. C70 built levels can hold up to 1000kg depending on the span and are available in 9 lengths, from 800 to 2400mm.



C70 Loadings	
Length (mm)	UDL (kgs)
800	1000
1000	1000
1200	930
1400	840
1600	750
1800	660
2000	600
2200	540
2400	480

load per pair



Box Beam

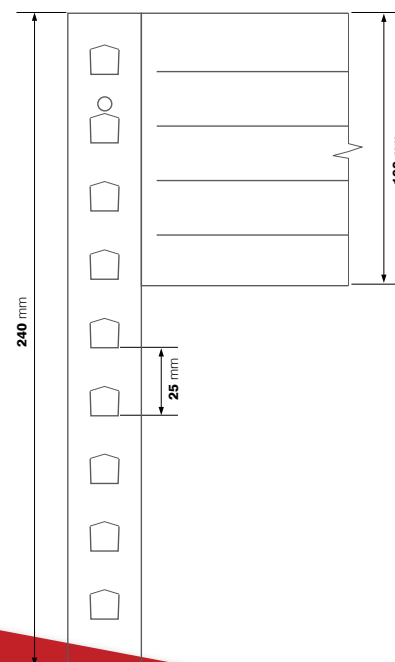
The Box Beam is the strongest one of the range. It can be used to build a multi tier constructions as well as hold heavy pallets. It connects to the upright by its nine claws. CB100 levels can hold up to 2500kg depending on the span and are available in lengths ranging from 800 - 2700mm.

The same beam construction of the CB100 box beam is also available in other variations - CB80 & CB60. The difference is in the height of the beam and lower loading capacities - 2000kg and 1800kg respectively.



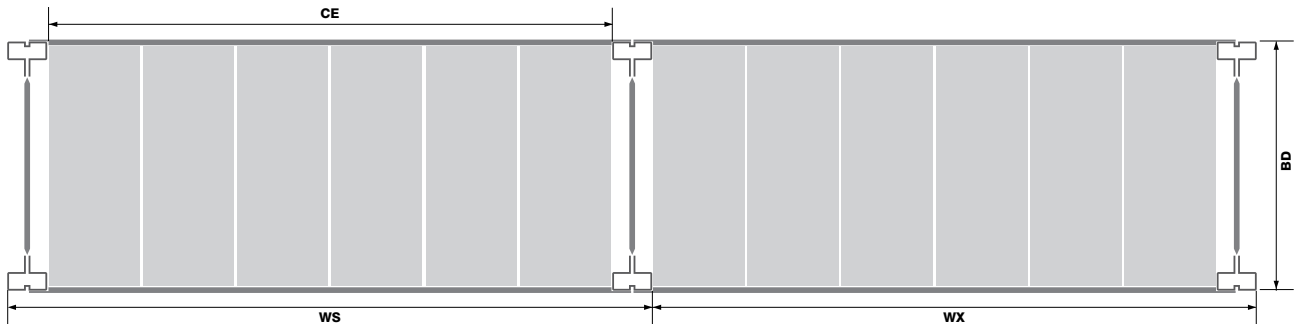
Box Beams Loadings (UDL)			
Length (mm)	CB100 (kgs)	CB80 (kgs)	CB60 (kgs)
800	2500	2500	2500
1000	2500	2500	2500
1200	2500	2500	2380
1400	2500	2500	2100
1600	2500	2500	1900
1800	2500	2280	1320
2000	2500	2070	1060
2200	2500	1680	880
2400	2330	1410	740
2700	1920	1110	580

load per pair



Planning a Layout

Planning a midispan layout is extremely easy, please refer to the diagram and size table below. Note that the footplates' dimensions are not included.



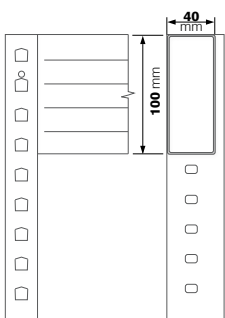
Depths (mm)		Widths (mm)					
Nominal Depth <i>List Measurement</i>	BD <i>Bay Depth</i>	Nominal Width <i>List Measurement</i>	Width using M50 Upright		Width using M70 Upright		CE <i>Clear Entry</i>
			WS <i>Starter Bay</i>	WX <i>Extension Bay</i>	WS <i>Starter Bay</i>	WX <i>Extension Bay</i>	
400	402	800	900	850	940	870	800
500	502	1000	1100	1050	1140	1070	1000
600	602	1200	1300	1250	1340	1270	1200
700	702	1400	1500	1450	1540	1470	1400
800	802	1600	1700	1650	1740	1670	1600
1000	1002	1800	1900	1850	1940	1870	1800
1200	1202	2000	2100	2050	2140	2070	2000
		2200	2300	2250	2340	2270	2200
		2400	2500	2450	2540	2470	2400
		2700	2800	2750	2840	2770	2700

Please note that footplates are not included in these dimensions! See p.4 for footplates.

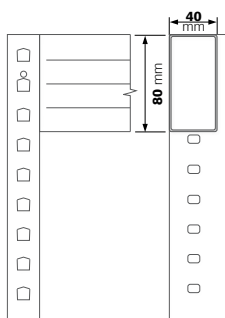
Box Beam Variations

Box Beams can be manufactured in multiple variations, depending on the system requirements, in 3 beam heights, with floor support angle and 3 different claw positions.

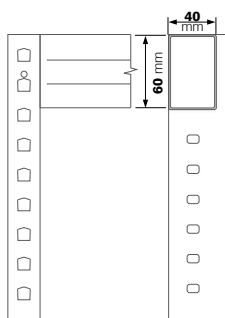
CB100
Front View & Cross Section



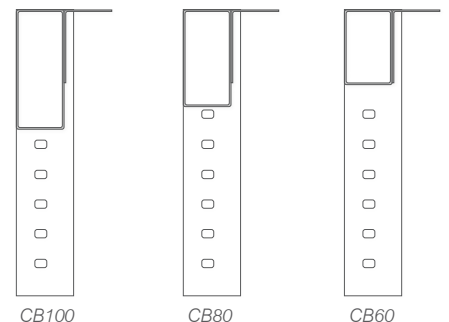
CB80
Front View & Cross Section



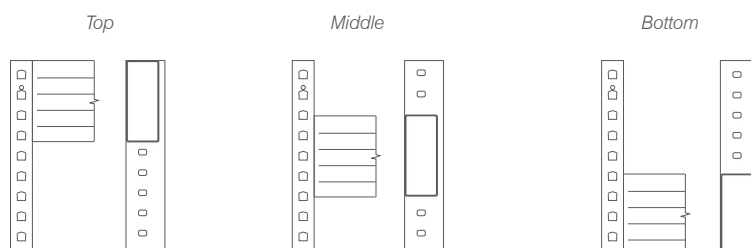
CB60
Front View & Cross Section



Box Beams with Floor Support Angle
(The angle is welded directly onto the beam)



Available Claw positions





Safety Pins

Safety pins are inserted into the holes on both sides of the outer part of the beam to lock it in place and prevent it from being accidentally knocked out off the upright.



Beam Ties

Beam ties are attached to the holes at the bottom of two opposite beams to tie them together. This prevents the beams from moving outwards when the shelf is loaded. Beam ties are only used on beams longer than 1000mm.



Steel Shelves

Shelves are made of 200mm wide steel panels that sit in the steps of the beams along the whole width of the bay. For example, a 1000mm wide bay will need 5 steel panels per shelf ($5 \times 200\text{mm} = 1000\text{mm}$)

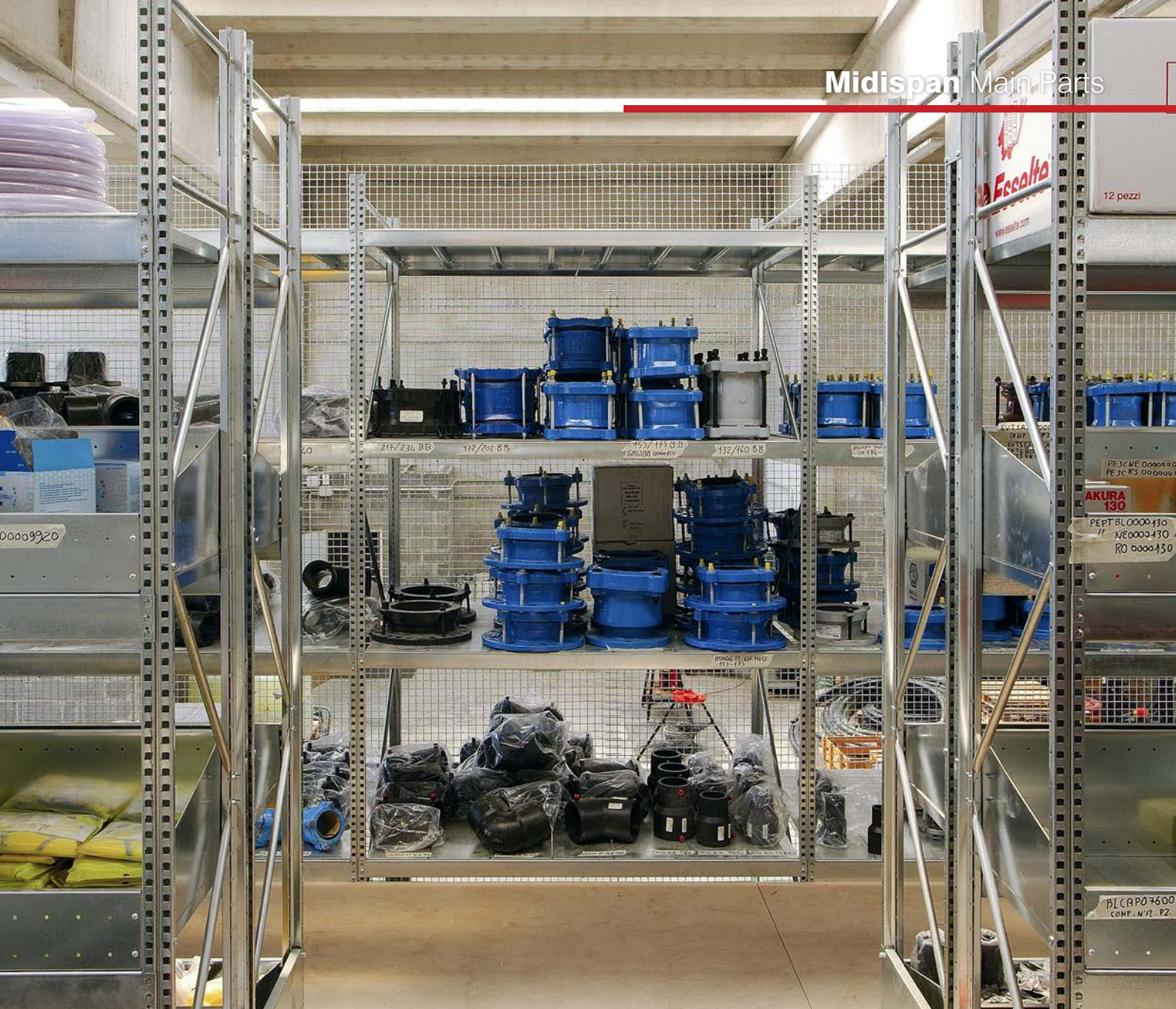
The steel panels come at different lengths to cater for different depths of the system - 400, 500, 600, 700, 800, 1000 and 1200mm.



Steel shelf levels - Loading Capacity (Kgs UDL)

Depth (mm)	Width (mm)							
	1000	1200	1400	1600	1800	2000	2200	2400
400	500	600	700	800	900	1000	1100	1200
500	500	600	700	800	900	1000	1100	1200
600	500	600	700	800	900	1000	1100	1200
700	450	540	630	720	810	900	990	1080
800	400	480	560	640	720	800	880	960
1000	350	420	490	560	630	700	770	840
1200	325	390	385	520	585	550	605	660

Please cross reference with beam profiles and loadings



Chipboard Shelves

Chipboard shelves are the newest addition to the range. We use 28mm chipboard that has a very similar loading capacity as the steel shelf (even greater at certain sizes), but is more competitive. Great savings for larger projects where you don't need steel shelves. It provides a smooth surface and sits flush with the top of the beams.



28mm Chipboard levels - Loading Capacity (Kgs UDL)

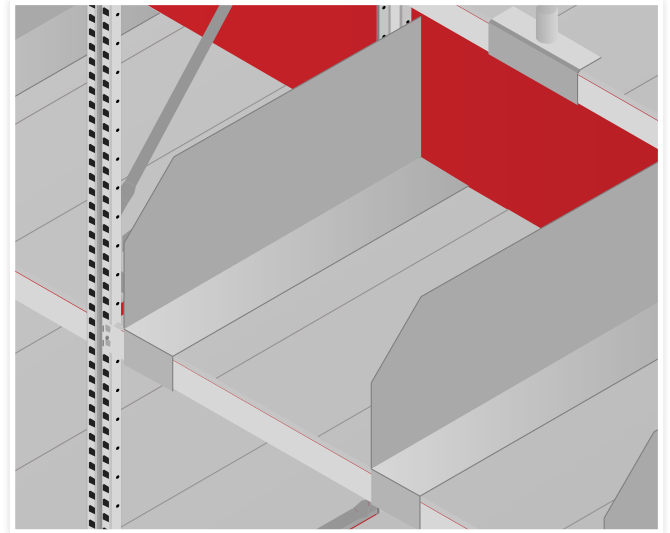
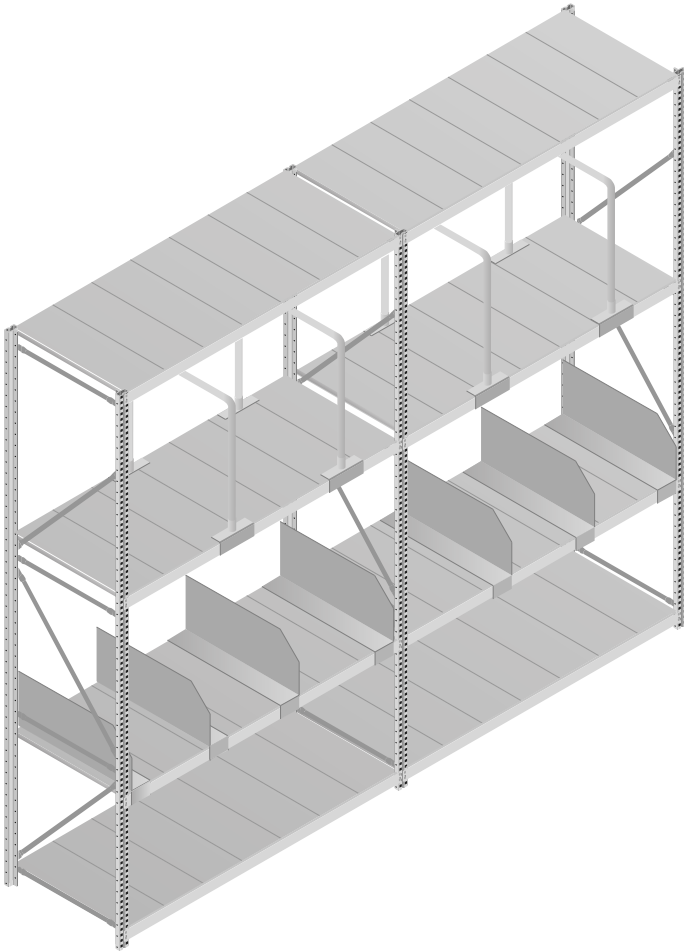
Depth (mm)	Width (mm)							
	1000	1200	1400	1600	1800	2000	2200	2400
400	754	906	1057	1208	1359	1510	1662	1813
500	537	645	752	860	968	1075	1183	1291
600	401	481	562	642	722	803	883	963
700	293	352	410	469	528	587	645	704
800	242	291	339	388	436	485	534	582
1000	163	197	230	263	295	328	361	394
1200	123	148	173	198	222	247	272	297

Please cross reference with beam profiles and loadings

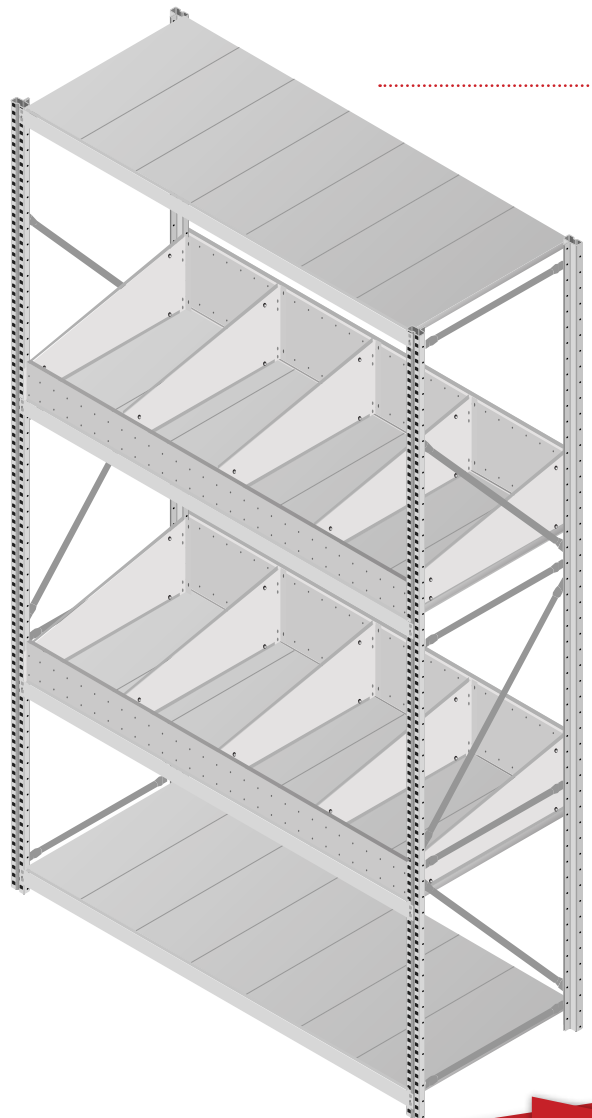




Free Standing & Loop Dividers



Binning System

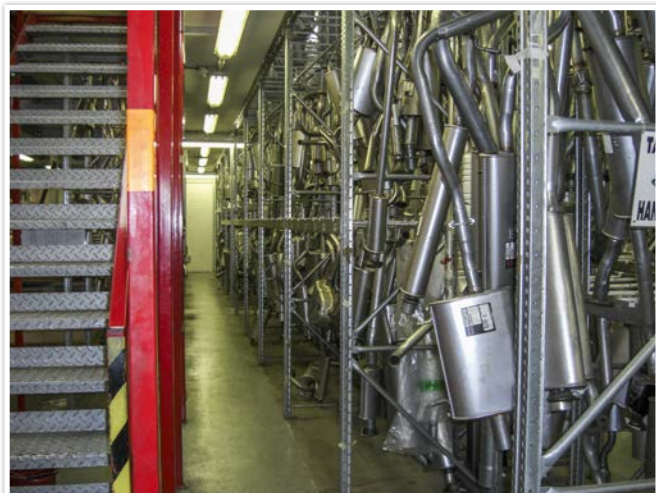




Automotive Industry Solutions

Midispan can be used in a number of different applications. In the automotive industry, the exhaust hanging or tyre racking utilise available parts and accessories to create smart solutions.

Exhaust Hanging



Exhaust Hanging

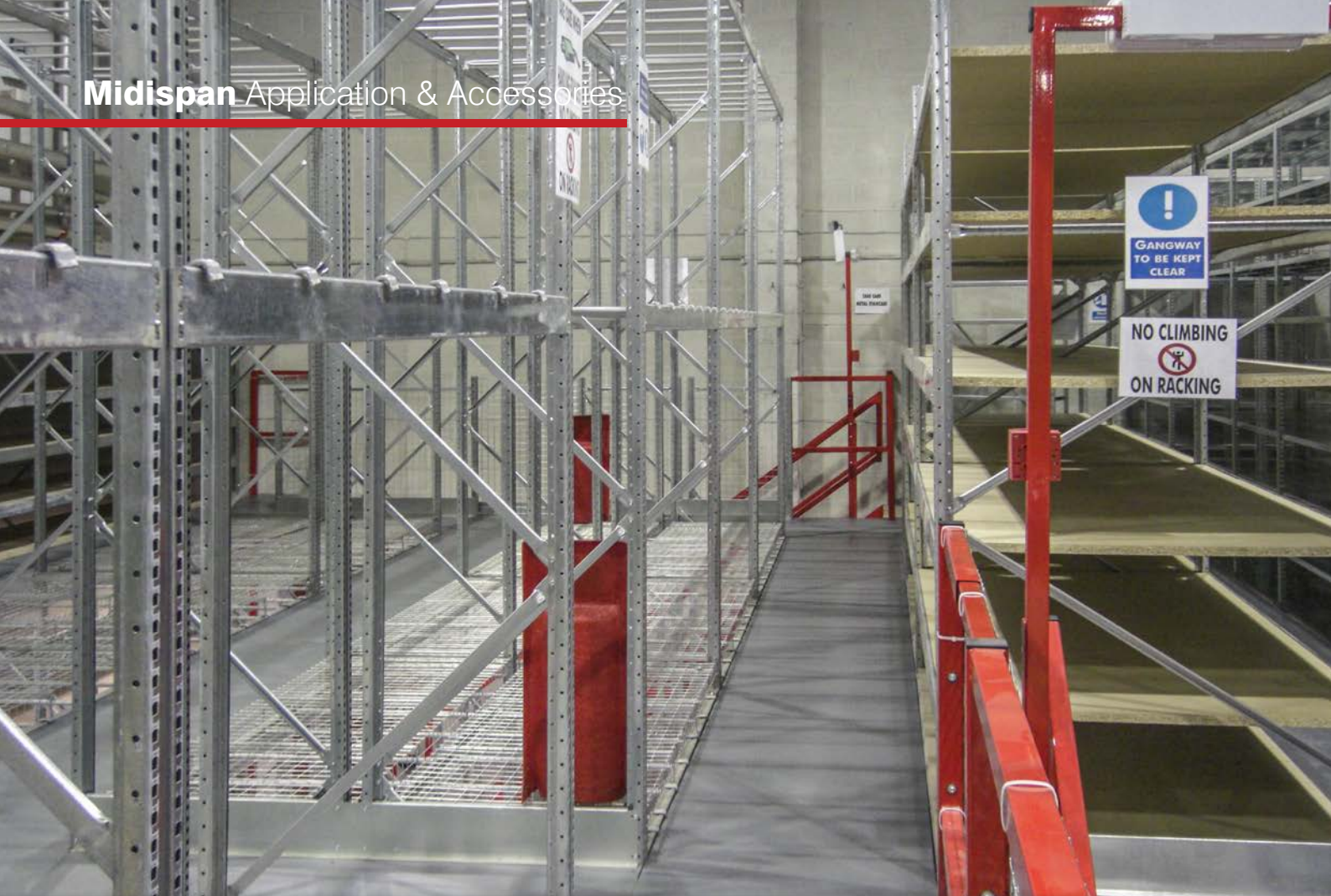


Chipboard Decking



Tyre Racking





Multi-Tier Application

A combination of M70 upright with CB100 box profile beam provides a perfect solution for a multi-tier application. With frame heights of 9000mm and 8800kg frame loading capacity the system can be used to create effective storage environments with multiple floor levels.

