

Frame Configurations

Frame Configurations & Joining

The four frame duties - Medium, Heavy, Extra Heavy & Super Heavy - are available in the following ranges:

1. Normal Range.

The Normal Frame Range consists of MASTER & STANDARD heights, generally suitable for pallet racking installations up to 6m high. Where future height extensions are envisaged, only frames from the MASTER RANGE should be used.

2. Joining Range.

The Joining Frame Range is designed so that frames may be placed upon one another in installations exceeding 6m high, or where future height extensions are envisaged.

Three types of Joining frame are available:

A. Base Joining Frames.

Each frame commences with a horizontal and diagonal tie positioned 150mm from the base, followed by a series of 600mm pitched diagonal ties, with the final diagonal terminating 300mm from the top of the frame.

Note: Base joining frames must never be used as top or intermediate sections.

B. Central Joining Frames.

These frames are usually used when racks exceed 11.85m in height and are available in a restricted height range, based on 600mm increments and commencing at 1800mm high. Each frame is diagonally braced only, with both base and top diagonals terminating 300mm from the end of the uprights.

Note: Central joining frames must only be used as intermediate sections - never at the base or top.

C. Top Joining Frames.

These frames commence with a diagonal tie 300mm from the base of the upright and continue in 600mm increments, terminating with one or two horizontal ties, dependant upon the height. **Note:** Top joining frames must never be used as base or intermediate sections.

It should be noted that all diagonal ties terminate 300mm from the joint, allowing a further diagonal to be placed across the joined frame sections.

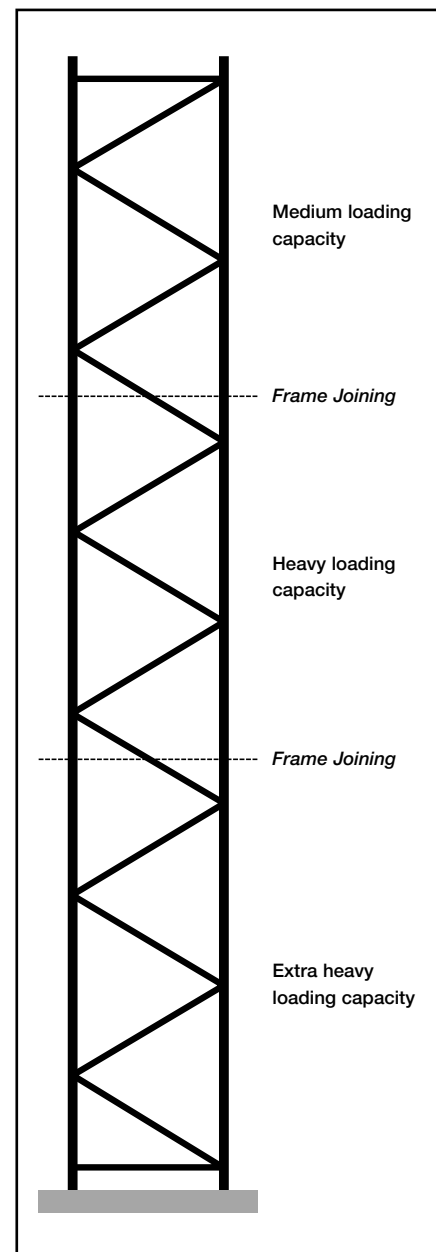
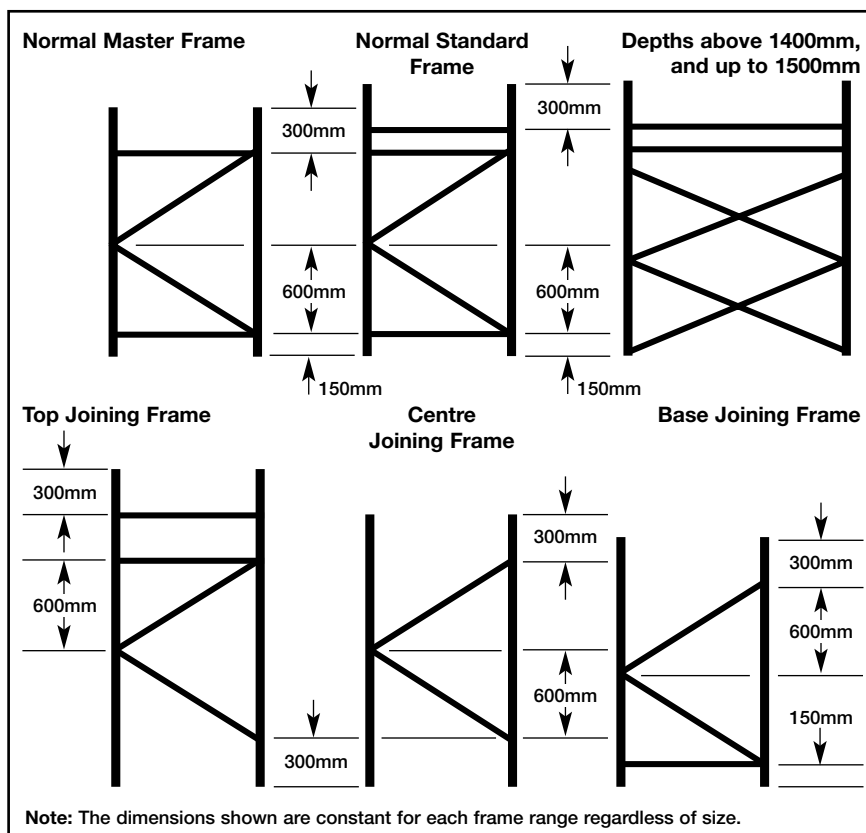
Frame sections are joined using BOLTED JOINING UNITS at each upright joint

(see page C16 for part number system & description).

The benefits of this frame design are:

- Frame configurations for 'high-rise' installations can be built up economically with heavy duty sections at the base, lighter duty sections above.

- It creates a continuously diagonally braced structure without the gaps which would otherwise occur around the joint areas.



Section C Primary Components - Pallet Racking Design Manual

Frame Component Breakdown

For Frame Depths from 500mm - 1400mm inclusive

FRAME HEIGHTS	NORMAL FRAMES ● = MASTER				JOINING BASE FRAMES				JOINING TOP FRAMES				JOINING CENTRE FRAMES			
	Diagonal Ties	Horizontal Ties	Bracing Nuts & Bolts	Bracing Spacers	Diagonal Ties	Horizontal Ties	Bracing Nuts & Bolts	Bracing Spacers	Diagonal Ties	Horizontal Ties	Bracing Nuts & Bolts	Bracing Spacers	Diagonal Ties	Horizontal Ties	Bracing Nuts & Bolts	Bracing Spacers
1050 ●	1	2	4	2												
1200	1	3	6	4					1	1	3	2				
1350	1	3	6	4					1	2	5	4				
1500	1	3	6	4					1	2	5	4				
1650 ●	2	2	5	2	2	1	4	2	1	2	5	4				
1800	2	3	7	4					2	1	4	2	2		3	2
1950	2	3	7	4					2	2	6	4				
2100	2	3	7	4					2	2	6	4				
2250 ●	3	2	6	2	3	1	5	2	2	2	6	4				
2400	3	3	8	4					3	1	5	2	3		4	2
2550	3	3	8	4					3	2	7	4				
2700	3	3	8	4					3	2	7	4				
2850 ●	4	2	7	2	4	1	6	2	3	2	7	4				
3000	4	3	9	4					4	1	6	2	4		5	2
3150	4	3	9	4					4	2	8	4				
3300	4	3	9	4					4	2	8	4				
3450 ●	5	2	8	2	5	1	7	2	4	2	8	4				
3600	5	3	10	4					5	1	7	2	5		6	2
3750	5	3	10	4					5	2	9	4				
3900	5	3	10	4					5	2	9	4				
4050 ●	6	2	9	2	6	1	8	2	5	2	9	4				
4200	6	3	11	4					6	1	8	2	6		7	2
4350	6	3	11	4					6	2	10	4				
4500	6	3	11	4					6	2	10	4				
4650 ●	7	2	10	2	7	1	9	2	6	2	10	4				
4800	7	3	12	4					7	1	9	2	7		8	2
4950	7	3	12	4					7	2	11	4				
5100	7	3	12	4					7	2	11	4				
5250 ●	8	2	11	2	8	1	10	2	7	2	11	4				
5400	8	3	13	4					8	1	10	2	8		9	2
5550	8	3	13	4					8	2	12	4				
5700	8	3	13	4					8	2	12	4				
5850 ●	9	2	12	2	9	1	11	2	8	2	12	4				
6000	9	3	14	4					9	1	11	2	9		10	2