# Selective Pallet Rack

Interlake MECALUX

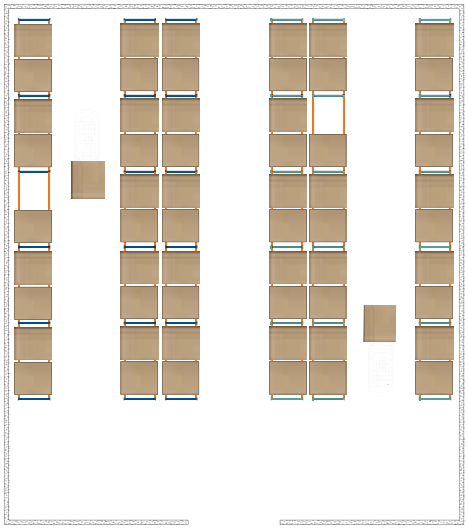
**Available in both bolted and welded configurations, Interlake Mecalux Selective Pallet Rack is the most universal system for direct and individual access to each pallet.**

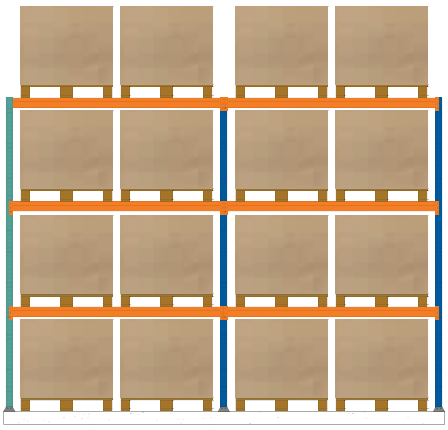
## Selective Pallet Rack

Combining vertical frames with horizontal load beams, selective pallet rack provides total accessibility to the product. Easily the most popular racking system in use today, it provides versatility for warehouses that have a wide variety of product types. It is manufactured from high-strength steel and other quality raw materials, which are certified to meet our stringent specifications.

Interlake Mecalux roll-formed selective pallet rack is available with bolted or welded frame configurations. Beams are mounted to the frame and held in place with a piston lock connector. This allows the beams to be seated securely without risk of accidental disengagement and enables them to be rearranged simply and easily when necessary. A variety of accessories are also available to improve the performance of the selective rack.

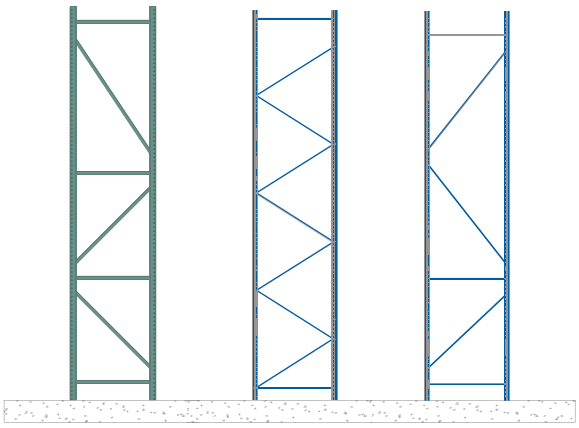
When a selective pallet rack system is designed for maximum throughput and storage capacity, the resulting system is built to accomodate years of growth.





## Advantages

- Immediate access to every load provides efficient use of floor space and minimizes load/unload time.
- Automatic beam-to-frame locking reduces installation time and simplifies re-profiling.
- Handling one pallet requires no need to move others.
- Increases load flexibility in terms of both weight and volume.
- Availability of a wide variety of sizes, gauges and accessories custom fit to any application.



*Top:* Standard Selective floorplan.
*Middle:* Front elevation with combined Welded and Bolted frames.
*Bottom, left to right:* Welded strut pattern; Bolted strut pattern for U101 and U122; Bolted strut pattern for U77, U80, and U82.

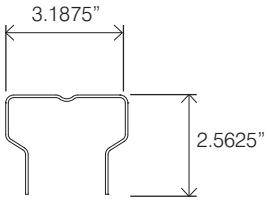
# Frames

## Frames

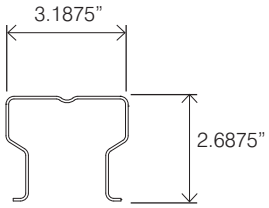
Standard frames are made up of two posts (columns), horizontal and diagonal bracing (struts), and footplates. Posts are available in a variety of gauges and lengths as well as configurations for seismic zones. Columns are braced along the vertical length to be more resistant to axial loading and to restrict separation and twisting of the column sections under load.

The capacities shown are:

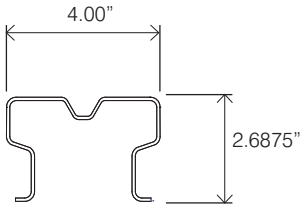
- applicable for non-seismic use only.
- shown in pounds (lbs) and for product load plus dead load (dead load = 2.0% of product load).
- only valid when used with Interlake Mecalux published beam sizes.
- accurate for static loads only.



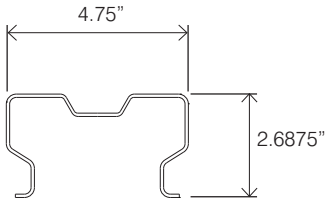

**U77 = 15 ga**




**U80 = 14 ga**
**U82 = 12 ga**



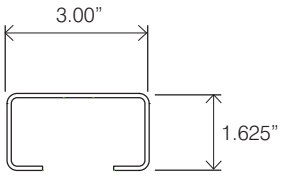

**U101 = 13 ga**



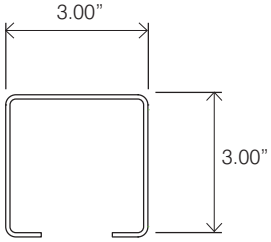

**U122 = 12 ga**

| Bolted Post Capacity[2] (lbs) | | | | | |
|---|---|---|---|---|---|
| Maximum Unsupported Length[1] | U77 | U80 | U82 | U101 | U122 |
| | 0.067" thick | 0.070" thick | 0.105" thick | 0.090" thick | 0.105" thick |
| | 15 Gauge | 14 Gauge | 12 Gauge | 13 Gauge | 12 Gauge |
| 36" | 20,930 | 26,520 | 38,820 | 36,440 | 47,880 |
| 42" | 20,930 | 25,880 | 37,800 | 36,440 | 47,880 |
| 48" | 19,980 | 24,540 | 35,480 | 36,440 | 47,880 |
| 54" | 18,710 | 23,040 | 33,120 | 35,060 | 47,880 |
| 60" | 17.290 | 21,360 | 30,360 | 33,480 | 47,500 |
| 66" | 15,730 | 19,500 | 27,560 | 31,740 | 45,600 |
| 72" | 14,010 | 17,460 | 24,680 | 29,820 | 43,700 |
| 78" | 12,150 | 15,260 | 21,420 | 27,760 | 41,600 |
| 84" | 10,480 | 13,160 | 18,480 | 25,520 | 39,380 |
| 90" | 9,130 | 11,460 | 16,100 | 23,120 | 37,040 |
| 96" | 8,020 | 10,080 | 14,140 | 20,540 | 34,560 |

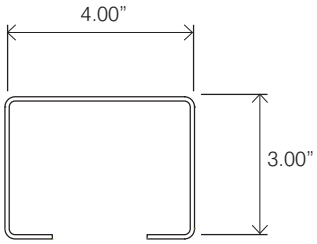
**025 = 13 ga**




**070 = 14 ga**
**075 = 13 ga**
**077 = 12 ga**
**079 = 11 ga**




**095 = 13 ga**
**099 = 11 ga**




| Welded Post Capacity[2] (lbs) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Maximum Unsupported Length[1] | 025 | 070 | 075 | 077 | 079 | 095 | 099 |
| | 0.090" thick | 0.070" thick | 0.090" thick | 0.105" thick | 0.120" thick | 0.090" thick | 0.120" thick |
| | 13 Gauge | 14 Gauge | 13 Gauge | 12 Gauge | 11 Gauge | 13 Gauge | 11 Gauge |
| 36" | 23,400 | 28,600 | 38,400 | 44,300 | 50,000 | 37,500 | 60,200 |
| 42" | 21,900 | 25,900 | 34,600 | 39,800 | 44,900 | 37,500 | 60,200 |
| 48" | 19,300 | 23,000 | 30,600 | 35,200 | 39,700 | 36,300 | 57,900 |
| 54" | 16,700 | 20,000 | 26,400 | 30,400 | 34,300 | 33,900 | 53,200 |
| 60" | 15,000 | 17,700 | 23,100 | 26,600 | 30,000 | 31,300 | 48,400 |
| 66" | 13,400 | 16,000 | 20,900 | 24,000 | 27,100 | 28,500 | 43,500 |
| 72" | 11,700 | 14,400 | 18,700 | 21,400 | 24,100 | 25,800 | 38,700 |
| 78" | 10,300 | 12,800 | 16,500 | 19,000 | 21,300 | 23,200 | 34,500 |
| 84" | 9,100 | 11,400 | 14,700 | 16,900 | 19,000 | 21,700 | 31,900 |
| 90" | 8,000 | 10,200 | 13,100 | 15,100 | 16,900 | 20,100 | 29,400 |
| 96" | 7,100 | 9,200 | 11,800 | 13,500 | 15,200 | 18,600 | 26,800 |

All posts are cold roll formed using 55,000 P.S.I. minimum yield steel and have been designed to meet RMI specifications.

(1) Maximum unsupported length is measured from the floor to the top of the first beam to top of beam; use the larger of these dimensions.

(2) These capacities assume that all component parts are: a. Manufactured by Interlake Mecalux. b. In good condition. c. Properly maintained.

# Beams

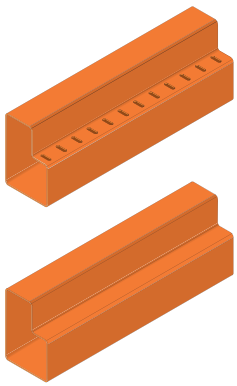
## Beams

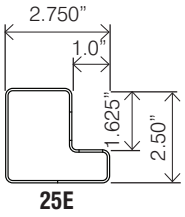
Load beams are roll formed with a 1-5/8" step along the top inside edge for holding load support components such as pallet supports or wire decks. Capacities are for uniformly distributed product load plus dead load per pair of beams (dead load = weight of beams) and are applicable for non-seismic use only.

## Slotted and Unslotted

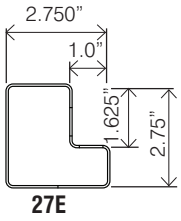
Beams can be slotted on the step ledge at 1" centers as an option. Slots allow the penetration of a fabricated tab to restrict the horizontal movement of a crossbar (pallet support). Due to the manufacturing process, slot cut-off points are random at the end of each beam.

All beams receive two solid coats of paint on every surface and are then oven baked. Beam safety factor conforms to current RMI standards (RMI specs). The allowable distributed load per pair of beams is based on a maximum deflection of L/180 (1/180th of beam span).

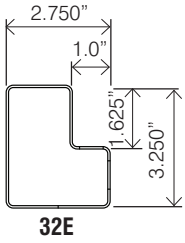




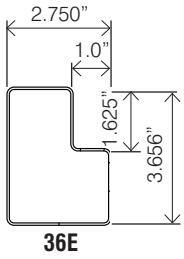
25E



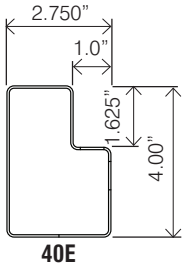
27E



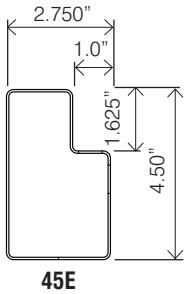
32E



36E



40E



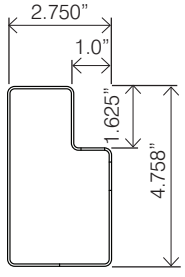
45E

## Slotted and Unslotted Step Beam Capacity [2] (lbs per pair)

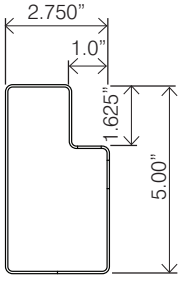
| Span [1] | 25E | 27E | 32E | 36E | 40E | 45E | 47E | 50E | 55E | 59E | 65E | 65Q |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 48" | 4,370 | 5,020 | 6,590 | 7,770 | 8,840 | 10,540 | 11,580 | 12,470 | 14,470 | 15,120 | 15,120 | 15,120 |
| 54" | 3.910 | 4,490 | 5,910 | 6,950 | 7,910 | 9,410 | 10,350 | 11,140 | 12,910 | 14,480 | 15,120 | 15,120 |
| 60" | 3,550 | 4,060 | 5,370 | 6,300 | 7,160 | 8,510 | 9,360 | 10,070 | 11,660 | 13,080 | 15,120 | 15,120 |
| 66" | 3,380 | 4,110 | 5,450 | 6,390 | 7,250 | 8,600 | 9,470 | 10,180 | 11,790 | 13,210 | 15,120 | 15,120 |
| 72" | 2,870 | 3,560 | 5,040 | 5,890 | 6,680 | 7,920 | 8,720 | 9,380 | 10,850 | 12,150 | 14,190 | 15,120 |
| 78" | 2,470 | 3,060 | 4,690 | 5,480 | 6,200 | 7,340 | 8,090 | 8,690 | 10,050 | 11,250 | 13,140 | 15,120 |
| 84" | 2,150 | 2,660 | 4,120 | 5,120 | 5,790 | 6,850 | 7,550 | 8,110 | 9,370 | 10,480 | 12,230 | 15,120 |
| 90" | 1,900 | 2,340 | 3,630 | 4,660 | 5,430 | 6,420 | 7,080 | 7,600 | 8,780 | 9,820 | 11,450 | 15,120 |
| 96" | 1,690 | 2,080 | 3,230 | 4,130 | 5,030 | 6,040 | 6,670 | 7,160 | 8,260 | 9,230 | 10,770 | 14,350 |
| 102" | 1,510 | 1,860 | 2,900 | 3,690 | 4,490 | 5,710 | 6,310 | 6,760 | 7,810 | 8,720 | 10,160 | 13,530 |
| 108" | 1,360 | 1,670 | 2,620 | 3,330 | 4,040 | 5,260 | 5,990 | 6,420 | 7,400 | 8,260 | 9,620 | 12,810 |
| 114" | 1,240 | 1,520 | 2,380 | 3,020 | 3,660 | 4,750 | 5,540 | 6,100 | 7,040 | 7,850 | 9,140 | 12,170 |
| 120" | 1,130 | 1,380 | 2,170 | 2,750 | 3,330 | 4,320 | 5,030 | 5,630 | 6,710 | 7,480 | 8,710 | 11,580 |
| 126" | 1,040 | 1,270 | 1,990 | 2,520 | 3,040 | 3,940 | 4,600 | 5,140 | 6,350 | 7,080 | 8,240 | 10,950 |
| 132" | 960 | 1,170 | 1,840 | 2,320 | 2,800 | 3,620 | 4,220 | 4,710 | 5,910 | 6,780 | 7,890 | 10,480 |
| 138" | 890 | 1,080 | 1,700 | 2,140 | 2,580 | 3,330 | 3,890 | 4,340 | 5,440 | 6,460 | 7,570 | 10,040 |
| 144" | 830 | 1,010 | 1,590 | 1,990 | 2,400 | 3,080 | 3,600 | 4,020 | 5,020 | 5,970 | 7,270 | 9,650 |
| 150" | - | - | - | - | - | - | 3,340 | 3,730 | 4,660 | 5,530 | 7,000 | 9,050 |
| 156" | - | - | - | - | - | - | 3,120 | 3,470 | 4,330 | 5,140 | 6,530 | 8,410 |
| 162" | - | - | - | - | - | - | 2,910 | 3,240 | 4,050 | 4,790 | 6,080 | 7,830 |
| 168" | - | - | - | - | - | - | 2,730 | 3,040 | 3,790 | 4,480 | 5,690 | 7,310 |

(1) Beams longer than 90" that support decking must be tied together to prevent spreading. Beams over 108" long should have an extra lateral support installed mid-span.

(2) These capacities assume that all component parts are: a. Manufactured by Interlake Mecalux. b. In good condition. c. Properly maintained.



47E



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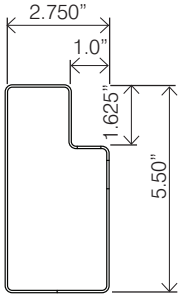
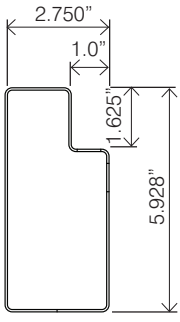
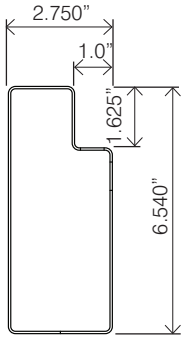


55E



59E



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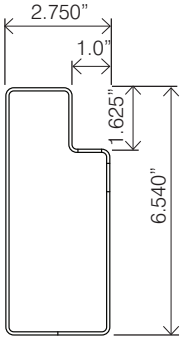
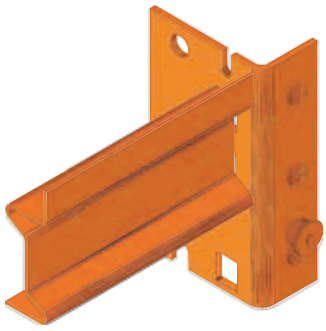


65Q

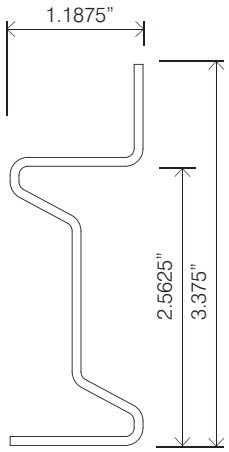
# Beams

## Z Beams

Z beams are a lighter capacity beam designed to support particle board or wire decking. Named "Z" because of the profile, Z beams are used in the construction of picking areas. They are available with a 3-pin tear drop connection to fit securely within a selective bay.



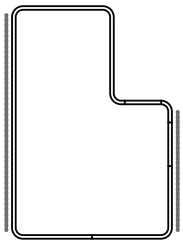
| Z Beam Capacity (lbs per pair) | | |
|---|---|---|
| Span | ZS-U60 | ZS-U65 |
| 48" | - | - |
| 54" | 3,800 | - |
| 60" | 3,600 | - |
| 72" | 3,000 | 1,985 |
| 78" | 2,800 | 1,808 |
| 84" | 2,600 | 1,742 |
| 90" | 2,600 | 1,654 |
| 92" | 2,400 | 1,566 |
| 96" | 2,350 | 1,433 |
| 102" | 2,220 | - |
| 108" | 2,100 | - |

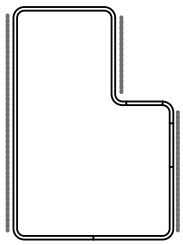


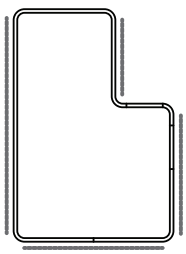

**ZS Beams-U65 = 14 ga**
For use with wire decking

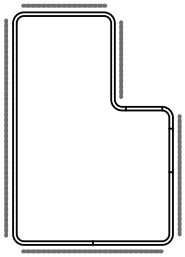
## Weld Type Options

Under normal, static loading conditions, the "A" weld is sufficient. The end plates are welded to the beam along the front and rear face of the beam edge. For certain seismic loading conditions, "B", "C", or "D" welds are also available.


"A" Type Weld


"B" Type Weld

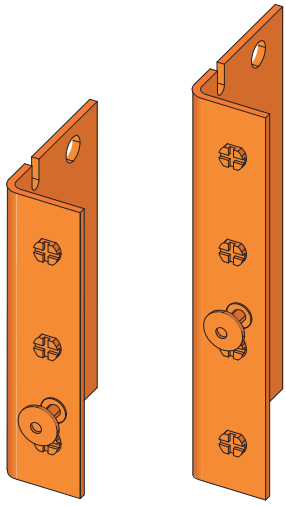

"C" Type Weld


"D" Type Weld

## End Plates

The foundation of the Interlake Mecalux selective rack system is the unprecedented beam-to-upright connection offered in the Piston Lock automatic locking device. The stud design and column punching draw tighter together under load to create the industry's most secure connection while maximizing system capacity.

Our proprietary locking system engages automatically upon beam seating, making installation and re-profiling easier while protecting against accidental beam release. The piston lock is damage- and tamper- resistant, and stays snugly in place during use.

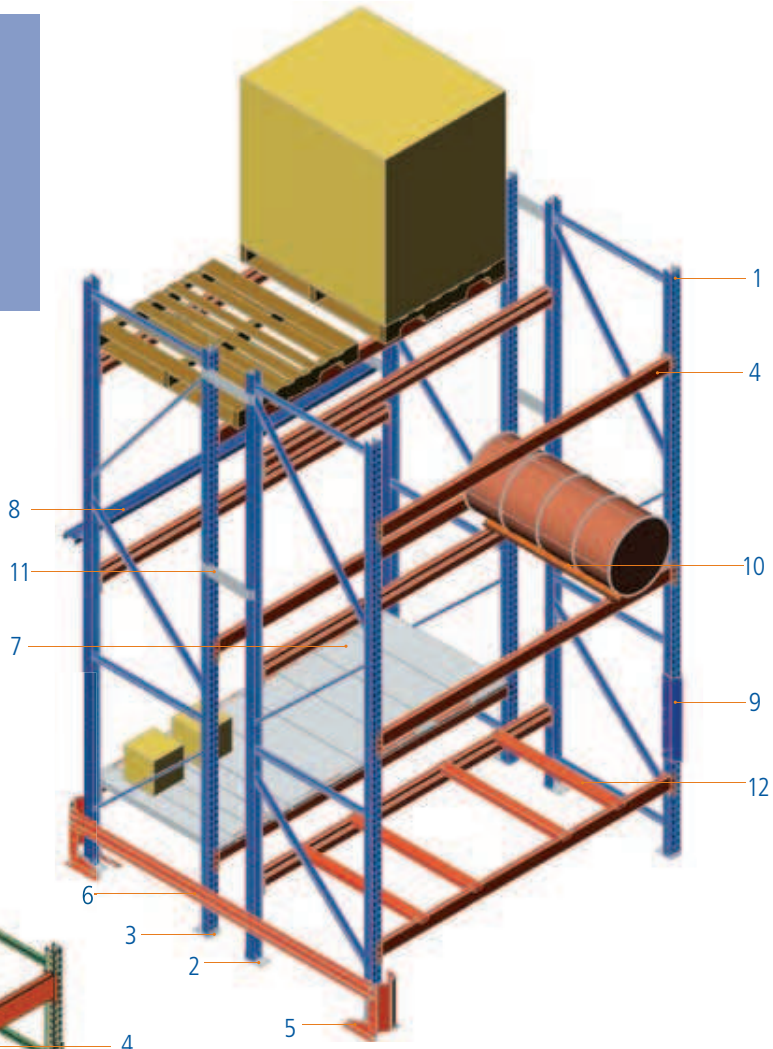


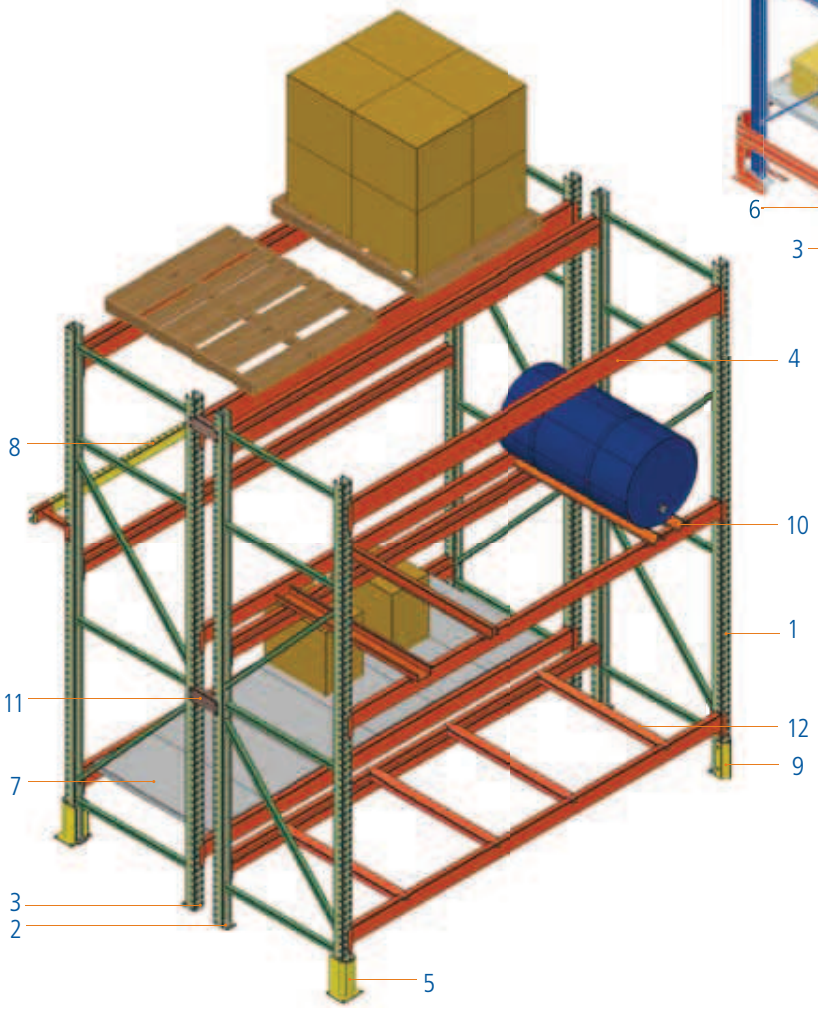
# Components and Accessories

1) Frame
2) Footplate
3) Shim
4) Beam
5)Post protector
6) End aisle protector
7) Galvanized steel panel
8) Palletstop
9) Bolt-on column protector
10) Drum support
11) Row spacer
12) Pallet support

## Welded Frames

Interlake Mecalux welded frames have a powder coat finish in Vista Green and, as with bolted, have a tear drop punch. The bracing and footplates are welded to the frame columns by AWS certified welding technicians. Horizontal and diagonal struts are cut to a length that penetrates the column and then permanently attached with a 1" fillet weld at each connection.

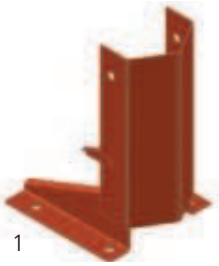



## Bolted Frames

Interlake Mecalux bolted frames are painted Mecalux Blue with a Cataphoresis paint process. With Cataphoresis, the frames are electro-statically immersed in epoxy paint to ensure that the paint saturates every surface. This provides corrosion resistance to rival galvanizing. The bracing and footplates are bolted to the tear drop punched frame columns. All bolts are Grade 5 with a serrated locking nut for a secure connection. In many seismic applications, the footplates are welded to the column for additional stability. Bolted frames are shipped assembled unless otherwise requested.

A variety of accessories are available for selective rack systems. From pallet supports to column protectors, Interlake Mecalux has accessories to meet any need. Some examples of these accessories are shown below.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## Bolted Accessories

1. Column Protector
2. Corner Guard
3. Bolt-on Post Protector
4. End of Aisle Protector
5. Wall Tie

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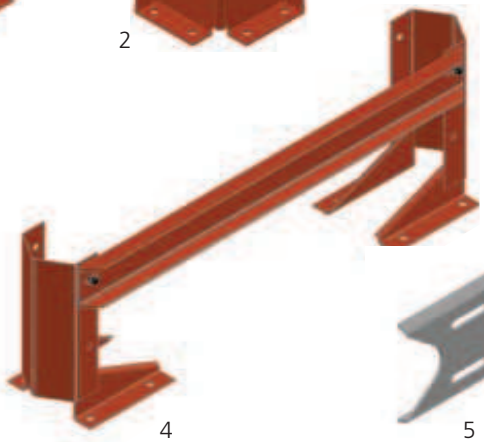
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## Welded Accessories

1. Bolt-On Post Protector
2. Column Protector
3. Row Spacer
4. Wall Tie

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## Beam Accessories

1. Drum/ Coil Bed
2. Fork Clearance Bar
3. Skid Channel
4. Roll -In Pallet Support
5. Double-Flanged Pallet Support

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