

IRON FIST® PALLETS RACK



+ STURDY STRUCTURE



- Elimination of the welding between beam and connector: now a single piece.
- Widening of the vertical section of the point of junction between beam and upright, thanks to flattening at that point, in order to increase the angle the thrust line and load-bearing axis.
- Narrowing of the horizontal section of the beam at the point of junction with the upright. This allows to reduce the tendency of the beams to rotate to one side due to the concentration of the pressure on their internal sides, brought to bear by the weight of the pallets.
- Double contact point of the beam on the upright (hooking teeth, plus conical joint), instead of the single point of the traditional beams.
- The system features taper fit couplings, which when subjected to pressure reinforce the connection between upright and beam.

+ SAFETY



- Greater static resistance, thanks to increased sturdiness.
- Greater dynamic resistance to shocks during the handling phase.
- No sharp corners.
- Purple coloring, easily visible and differentiated from the other convetional signaling colors in use (red=hot water or overheated steam, yellow=gas, etc.).
- The uprights feature an exclusive ground-anchor system, with stops on the feet, for guaranteeing stronger anchorage for increased safety in seismic conditions.

+ HIGHT RESISTANCE TO ENVIRONMENTAL AGENTS AND MECHANICAL WEAR

 Z200 zinc-plated uprights for greater protection with respect to market standard (normally Z100). The excellent zinc transfer effect thus obtained provides increased protection even on the contact edges of the parts.

+ COMPETITIVENESS

- Elimination of welding thanks to the innovative press work production process.
- Reduction of the height of the beams with unaltered load capacity and performance features.
- Better exploitation of space during transport. The side frames can be broken down for shipping
 and the cross pieces and the braces assembled at destination. This permits increased economy
 of space and therefore of shipping costs with respect to the traditional system, which requires
 shipping the end frames with the cross pieces and the braces already assembled.
- Reduction of the number of alternative parts, thanks to the fact that the beams are interchangeable
 with various sizes of uprights. This implies limitation of number of single parts to be kept on hand
 and therefore lower costs, and offers the customer the opportunity to reuse the same beams even
 in the case the series of uprights is changed.
- Greater overall system adaptability, thanks to fact that beam connection requires only 50 mm.

FREEDOM OF CONFIGURATION

 The uprights (series 130) feature an exclusive center fastening system for high-resistance antiseismic bracing that permits free shifting of the beams. In terms of safety in seismic conditions, this means flexible exploitation of vertical spaces.

EASY ASSEMBLY



 The special shape of the square-head assembly bolt assures fast tightening when the self-locking nut is screwed down (elastic stop).

PROMPT DELIVERY

 Thanks to the innovative production process and the drastic reduction of the number of variations in the types of beams.

IRON RON FIST®:

DIFFERENT COMPANIES, ONE SOLUTION.

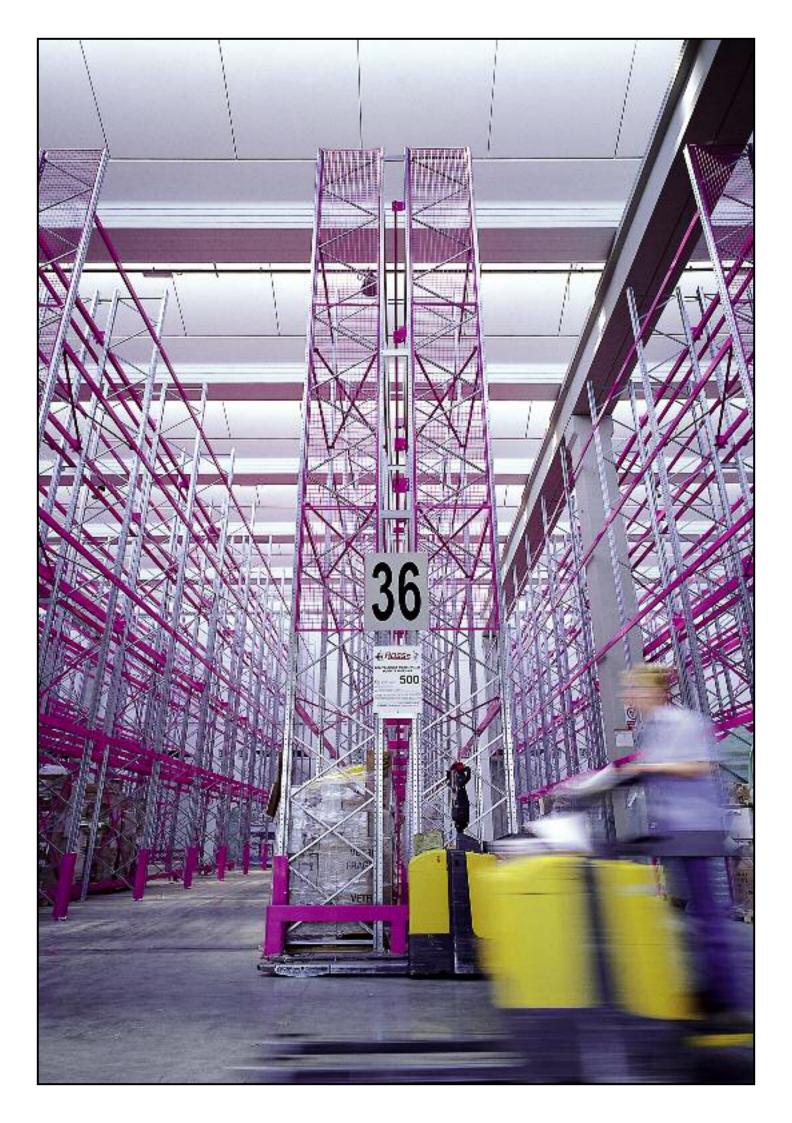
COOP ITALIA, SESTO FIORENTINO, ITALY

National central warehouse supplying the non-grocery sector. Earthquake-proof installation realized using **IRON FIST**_® with a pallet holder and drive-in configuration for loading units of 500 Kg.









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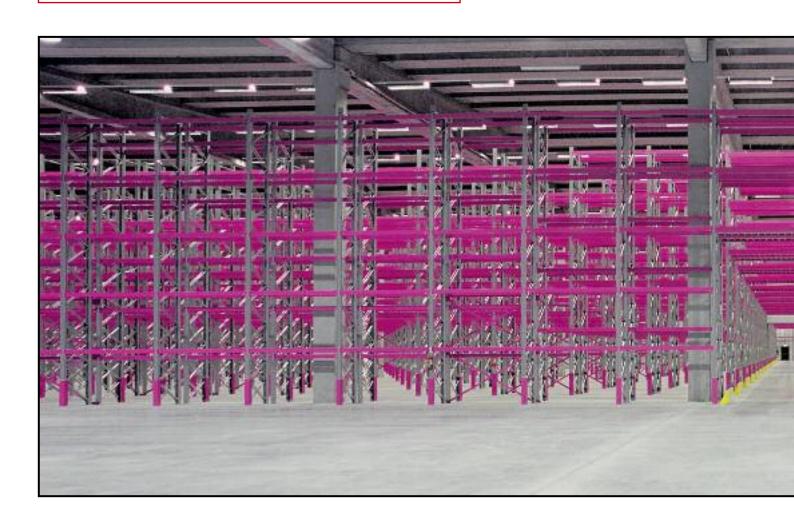
CONAD, SAN SALVO CHIETI, ITALY

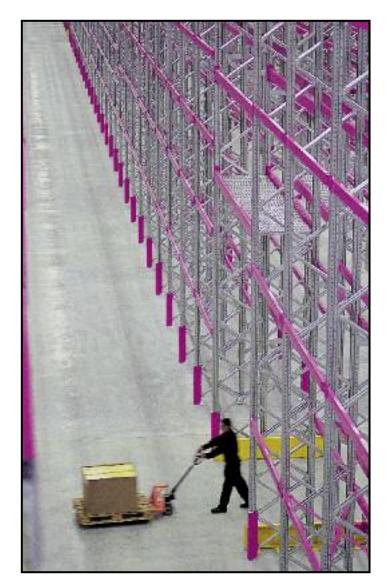
Distribution centre. Installation for aseismic structure realized using **IRON FIST**_®.



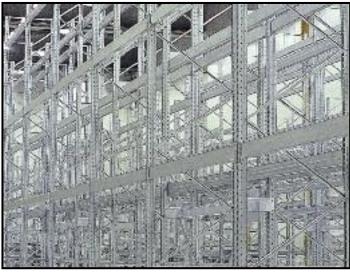
TECHNICAL DATA

PALLET PLACES: 50.000 (ABOUT 7.000 IN COLD ROOM) - PALLET PLACE CHARGE CAPACITY: Kg. 1.000 - FRAME HEIGHT: 9.000 mm - LEVELS NUMBER: 5 + GROUND - MEDIUM BAY LENGHT: 2.700 mm - PASSAGEWAY LENGHT: 230 m - ROWS NUMBER: 34 - CHARGE UNIT TYPOLOGY: EURO PALLET - EARTHQUAKE-PROOF INSTALLATION











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SNUVERINK & TWEPA, ENSCHEDE, HOLLAND

Warehouse for storing corrugated cardboard boxes. Installation realized using **IRON FIST** $_{\odot}$, series 90/150, for 4 loading units on Europallets of 450 kg. each.







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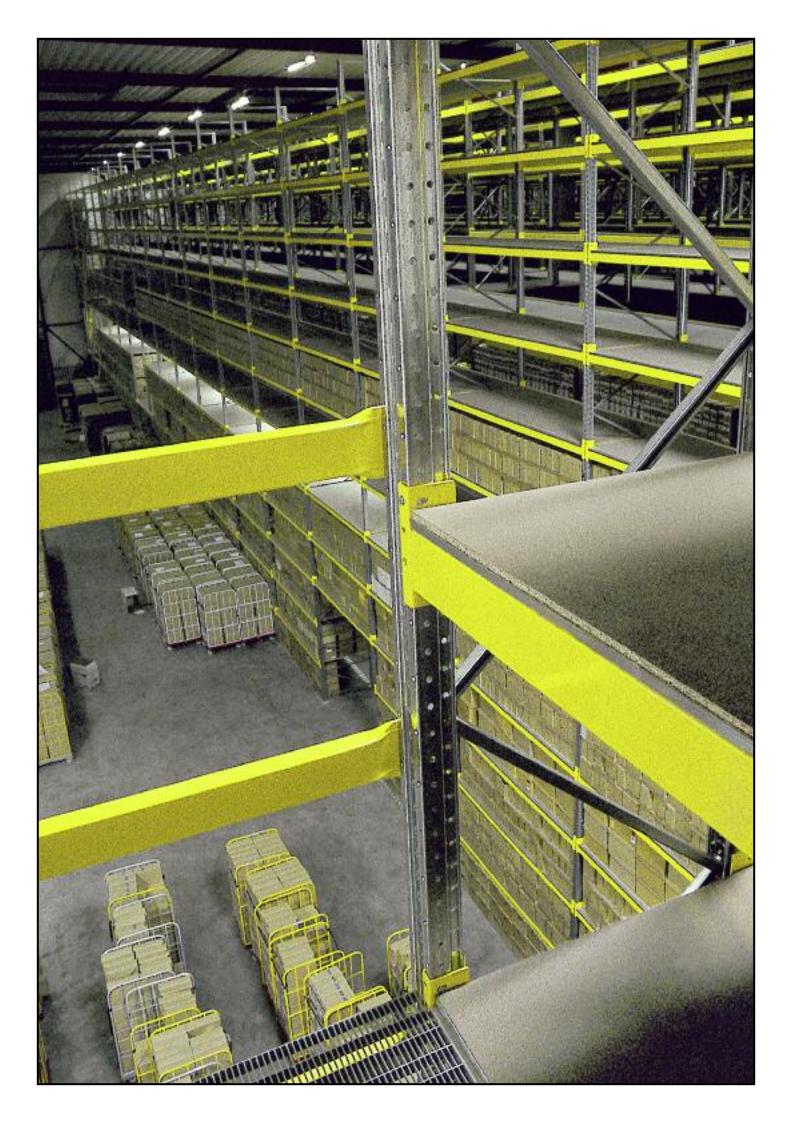
EUROSTORAGE, AMSTERDAM, HOLLAND

Warehouse for storing records. Installation realized using **IRON FIST**_®, series 90/200, with loading surfaces made of fire-resistant MDF and walking surfaces with open grating suitable for trolleys.







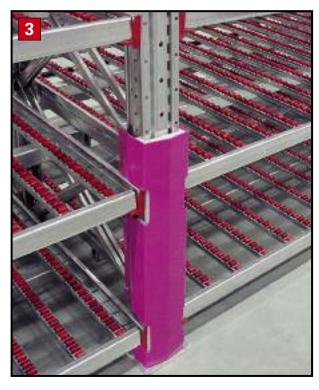


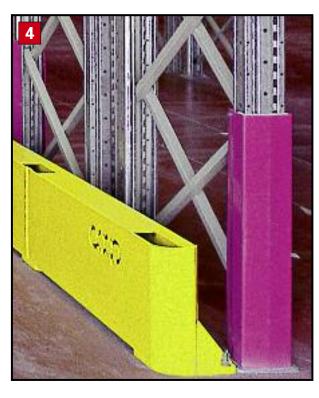
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ACCESSORIES: DIFFERENT REQUIREMENTS, ONE SOLUTION.







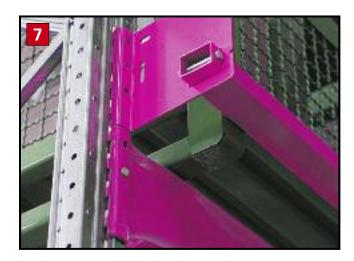


- 1. Detail of protection tubes with plastic support*
- 2. Rollers detail
- 3. Shaped upright protection*
- **4.** Frame protection* + upright protection
- 5. Shelves clasping with not-crushing profile
- 6. Shelf with open plank and tube protection
- 7. Back stop pallet
- 8. Detail rollers and open plank
- **9.** Iron Fist installation with coils support
- * production upon request













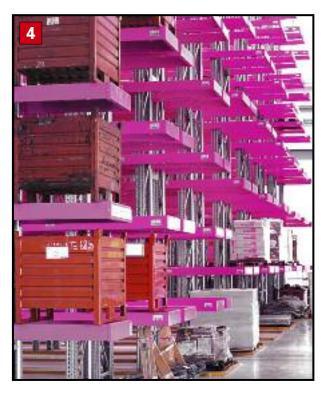
FIST. IRON FIST.

ACCESSORIES: DIFFERENT REQUIREMENTS, ONE SOLUTION.

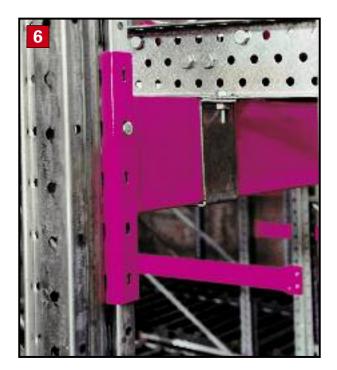












- 1. Floor anchorage for earthquake-proof cross bracing
- 2. Joint for sismic strengths conduction
- 3. Vertical dividers for long materials
- 4. Bays of charge
- **5.** Gravity movement installation for packages

- **6.** Details gravity movement installation for pallets
- 7. Gravity movement installation for pallets





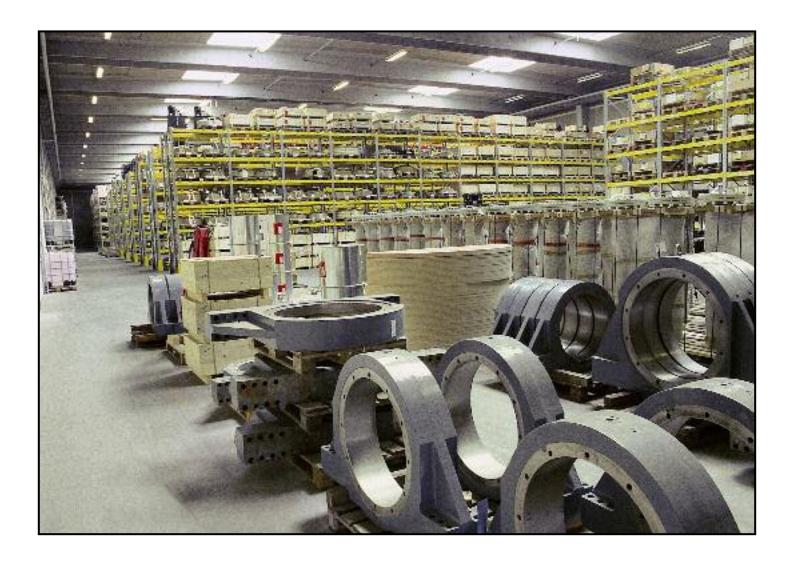
IRON RON FIST®:

DIFFERENT COMPANIES, ONE SOLUTION.

BONUS ENERGY, BRANDE, DENMARK

Warehouse for the storage of mechanical, electrical and electronic components for the production of wind driven electric generators. Installation realized using **IRON FIST**_®, series 90/150, for a loading unit of 1200 kg.









IRON RON FIST®:

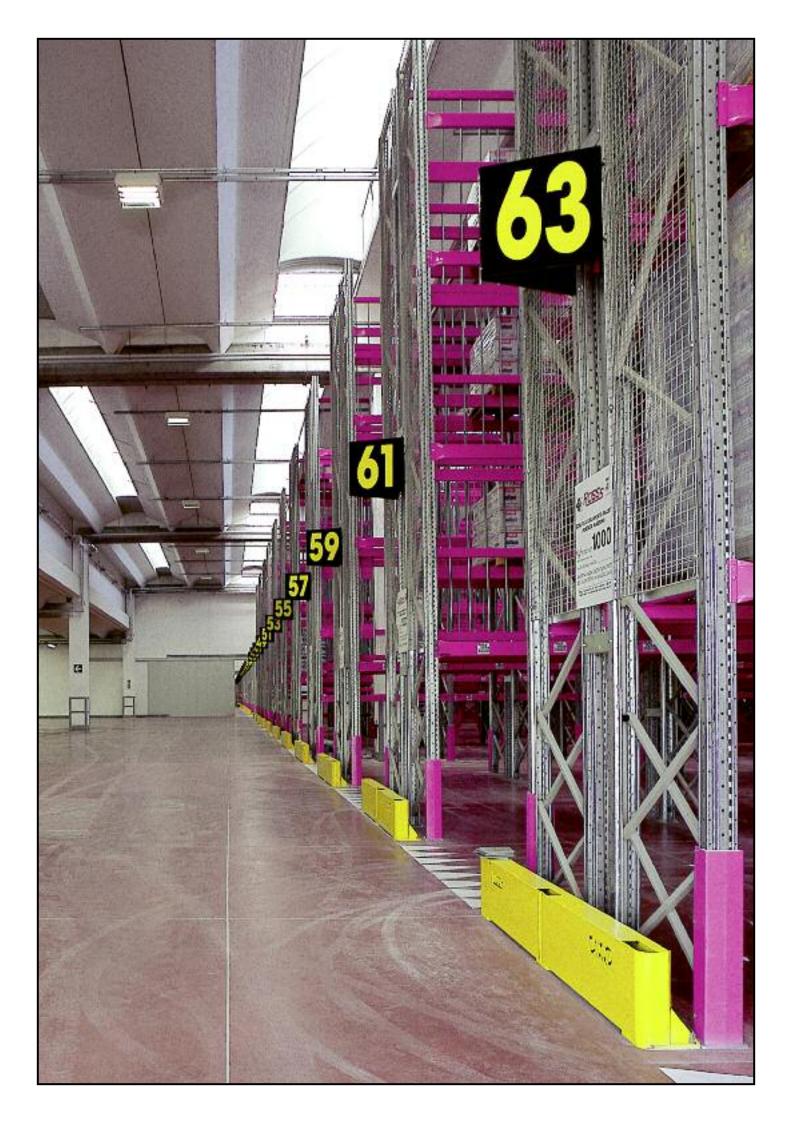
DIFFERENT COMPANIES, ONE SOLUTION.

UNICOOP FIRENZE, SCANDICCI, ITALY

Inter-regional central warehouse for the distribution of food-non food. Earthquake-proof installation realized using **IRON FIST** $_{\odot}$, series 130/250, for loading units of 1000 kg.







FIST. RON FIST.

DIFFERENT COMPANIES, ONE SOLUTION.

C.M.C.P. NV, NAZARETH, BELGIUM

Warehouse for the storage of flues and relevant components. Installation realized using **IRON FIST** $_{\circ}$, series 70/150, for 4 loading units on Europallets of 150 kg. each.







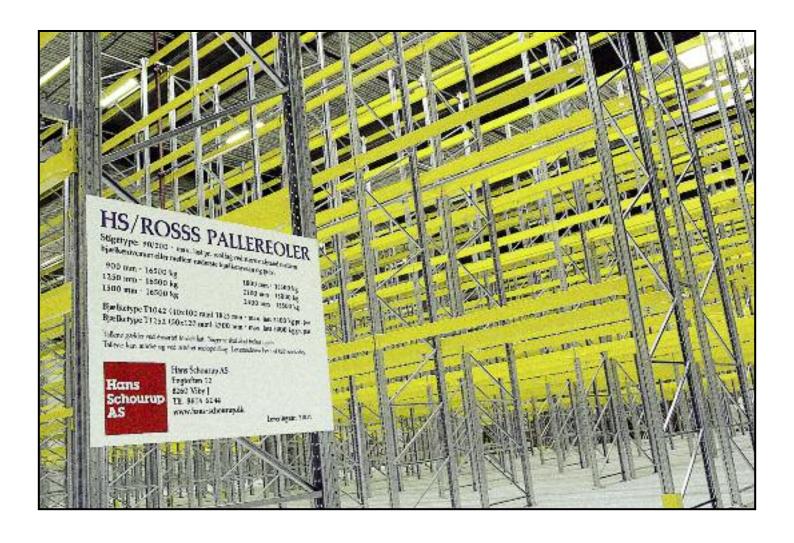
IRON RON FIST®:

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MAERSK LINE, ÅRHUS, DENMARK

Central customs warehouse in the Århus dock area. Installation realized using **IRON FIST**_®, series 90/200, for loading units of 1000 kg.





FIST® IRON FIST®

TECHNICAL DATA: ALL THE INFORMATION.

Steels used

UPRIGHTS

The steel used for making the uprights is of a certified structural type, Fe E350 G, with a minimum unit yield strength of 350 N/mm2. The product is obtained from galvanized coils, using a pressing and cold roll forming process.

BEAMS

The steel used for making the beams is of a certified structural type, S235JR ex Fe 360, with a minimum unit yield strength of 235 N/mm2. The product is obtained from tubular bars with a pressing process.

BASE PLATES

The steel used for making the base plates is of a certified structural type, S235JR ex Fe 360, with a minimum unit yield strength of 235 N/mm2. The product is obtained from pickled coils with a pressing process, followed by galvanizing.

DIAGONALS AND TRAVERSES

The steel used for making the diagonals and traverses is of a certified structural type, Fe E250 G, with a minimum unit yield strength of 250 N/mm2. The product is obtained from galvanized coils by cold roll forming.

CONNECTORS FOR WELDED BEAMS

The steel used for making the connectors is of a certified structural type, S235JR ex Fe 360, with a minimum unit yield strength of 235 N/mm2. The product is obtained from coils with a pressing process.

DRIVE-IN PALLET SUPPORT GUIDE

The steel used for making the pallet support guide is of a certified structural type, Fe E350 G, with a minimum unit yield strength of 350 N/mm2. The product is obtained from coils with a pressing process.

DRIVE-IN UPPER CONNECTION

The steel used for making the upper connection is of a certified structural type, S235JR ex Fe 360, with a minimum unit yield strength of 235 N/mm2. The product is obtained from sheet metal or coils with a pressing process.

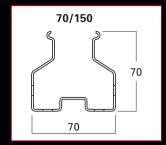
DRIVE-IN BRACING MEMBERS

The steel used for making the bracing members is of a certified structural type, S235JR ex Fe 360, with a minimum unit yield strength of 235 N/mm2. The product is obtained from bars with a pressing process.

Uprights for frame formation

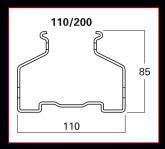
70 Series

The 70 series upright is available in a thickness of 15/10, with a hooking step every 50 mm.



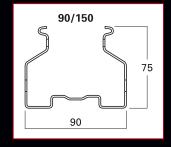
110 Series

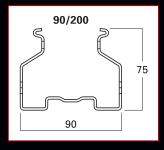
The 110 series upright is available in a thickness of 20/10, with a hooking step every 50 mm.



90 Series

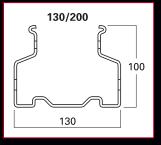
The 90 series upright is available in a thickness of 15/10 and 20/10, with a hooking step every 50 mm.

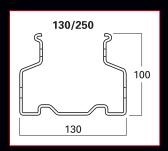




130 Series

The 130 series upright is available in a thickness of 20/10 and 25/10, with a hooking step every 50 mm.

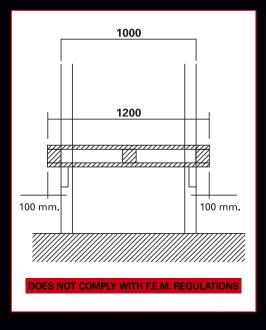


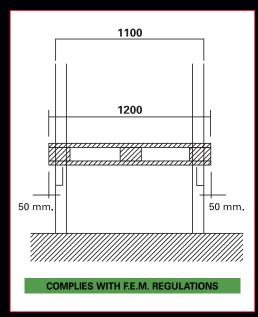


N.B. Frames are supplied unassembled.

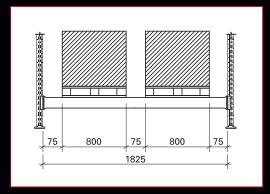
Standardization of frames according to F.E.M. regulations.

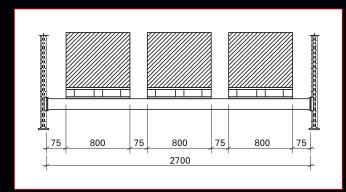
As established by F.E.M. regulation 10.3.01, it is recommended that the depth of the frames be chosen according to the size of the pallet or container to be stored. In order to comply with this regulation, we have introduced a new frame depth.

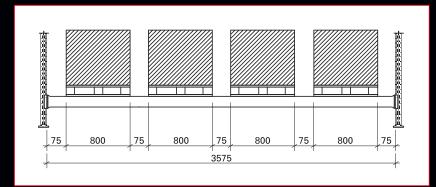




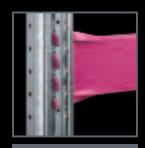
As established by F.E.M. regulation 10.3.01, it is recommended that the depth of the frames be chosen according to the size of the pallet or container to be stored. In order to comply with this regulation, we have introduced new beam lengths.











IRON FIST



DRIVE-INS



UNIZINC



MARKET



DUBLEZ



COMPACTIBLES



ROTARIES



SEQUOIA



FALSE CEILING



KOMPRESSOR



UNIMONDIAL



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