





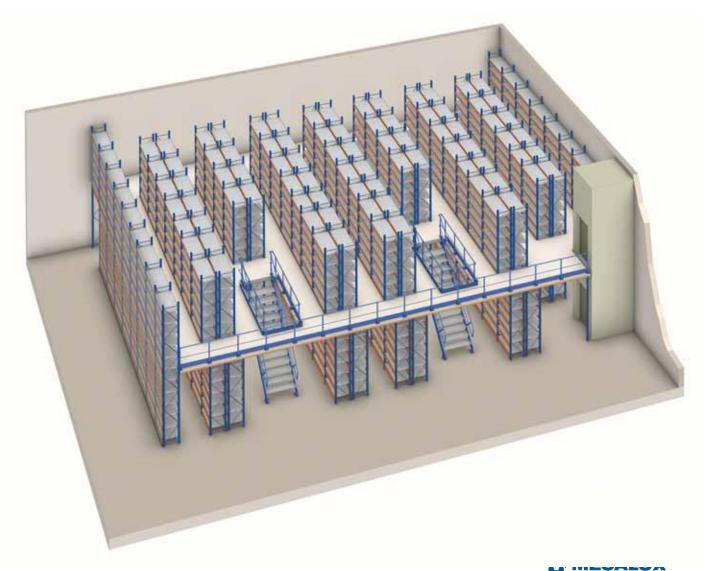
The importance of taking full advantage of the space of the warehouses requires solutions which make it possible to access the highest levels.

One of these solutions consists of installing high-bay racking with one or several levels of gangways or elevated aisles supported on the racking itself.

Access to the different levels of gangways is made by means of stairways located in suitable places, fitted in function of accessibility and safety.

As a complement to the stairways, freight lifts or scissor lifts can also be installed.





The areas of application for this type of racking are extremely varied:

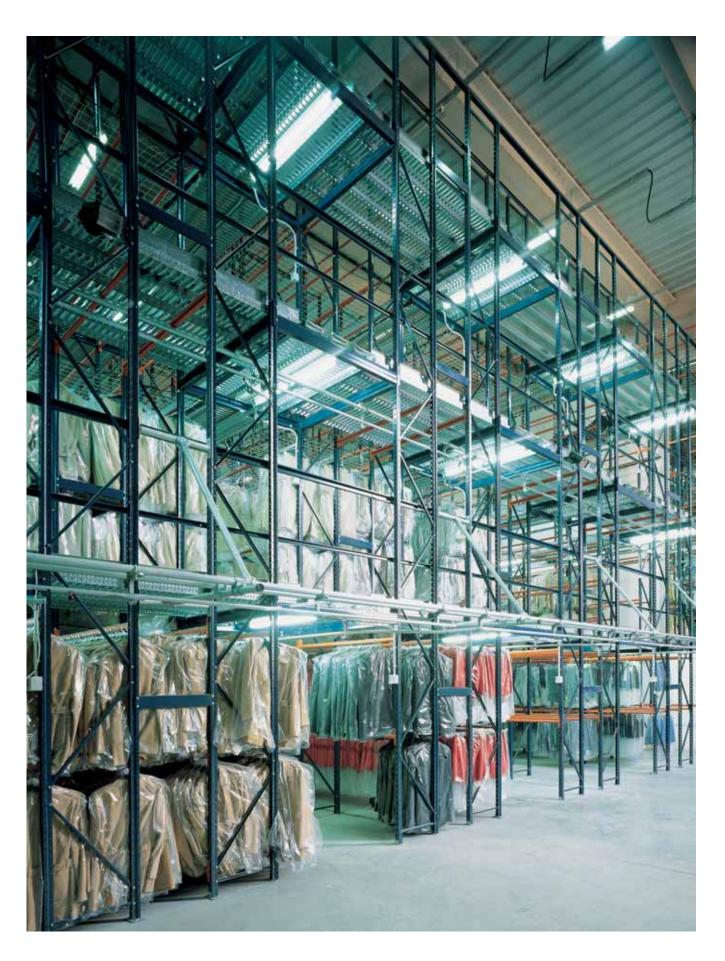
- Warehouses for spare parts.
- Warehouses for industrial supplies and DIY products.
- Archives.
- Bookshops.
- Packaging warehouses.
- Warehouses for hanging garments.

To this end, and with basic racking for picking as a base, the different complements and accessories available can be added:

- Drawers and separators.
- Side meshes.
- Hangers.
- Cross-ties and reinforcements.



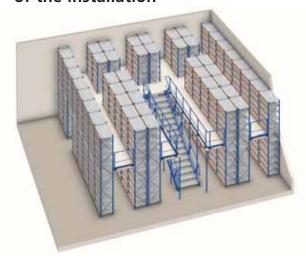




The different potential combinations make it possible to adapt to the characteristics of the warehouse, and to needs such as accessibility, safety and ergonomic work. There are several possibilities for the location of the access stairways: at the side, at the front, in the centre of the installation or between two racks as can be seen in these examples.

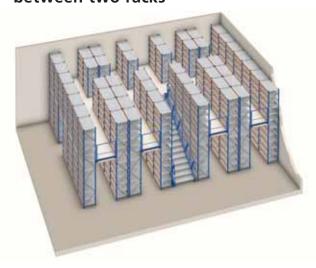
It is common practice to fit a platform or mezzanine at the front as a consolidation area or as a provisional deposit for the goods.

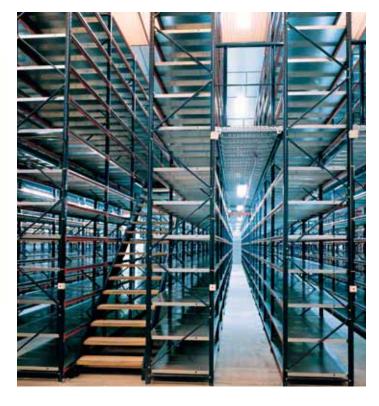
# Front access in the centre of the installation



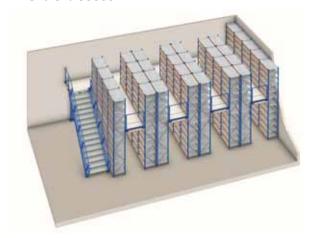


# Front access between two racks



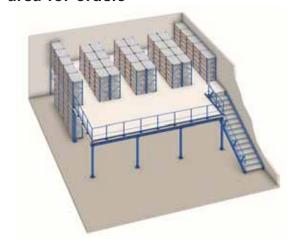


### **Side access**





Side access with consolidation area for orders



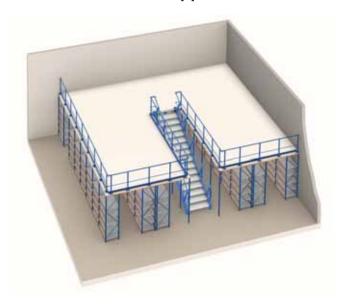




Another very commonly-used combination involves building an open mezzanine in the upper part of the racking, either with one or two floors or more, as can be seen in these examples.

This upper part can be used to store more bulky products or as a working area.

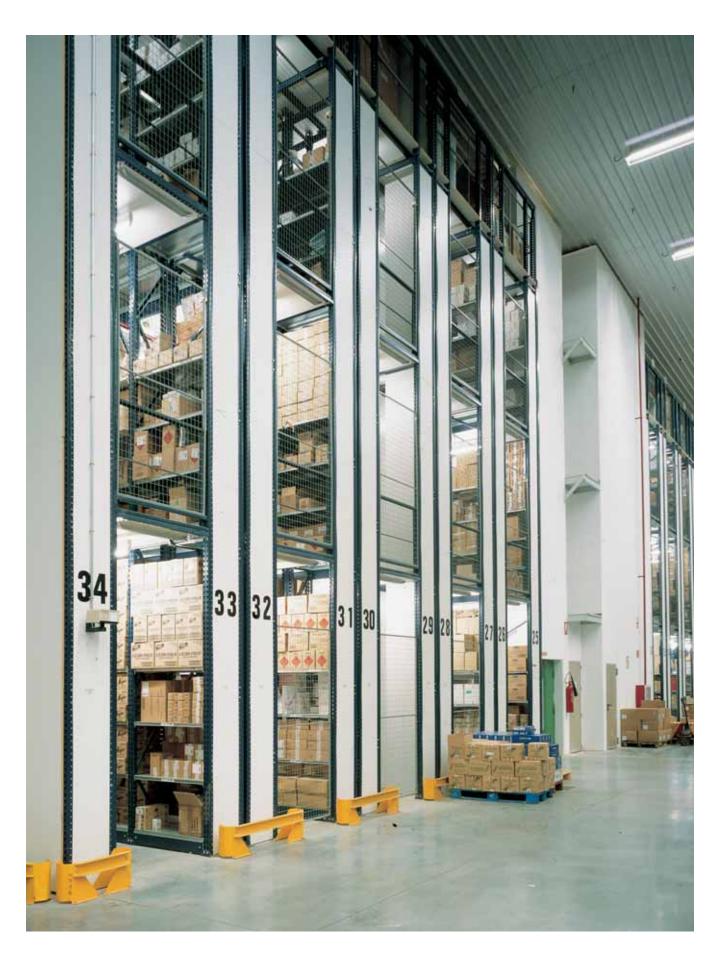
### Mezzanine in the upper floor







Racking for picking with gangways

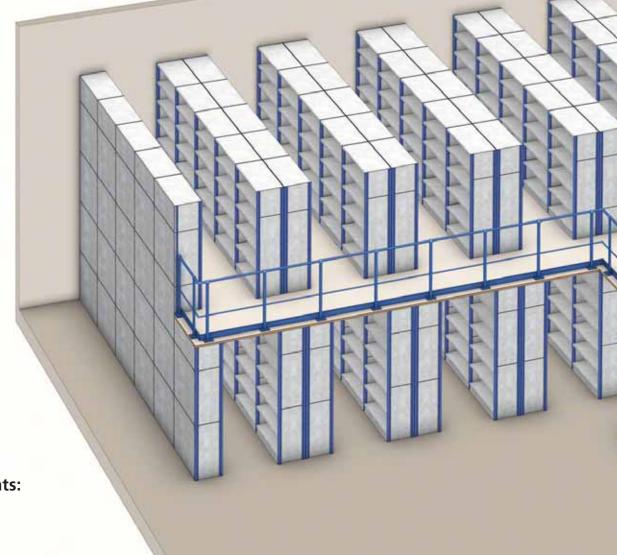


## Construction System of M3 Racking

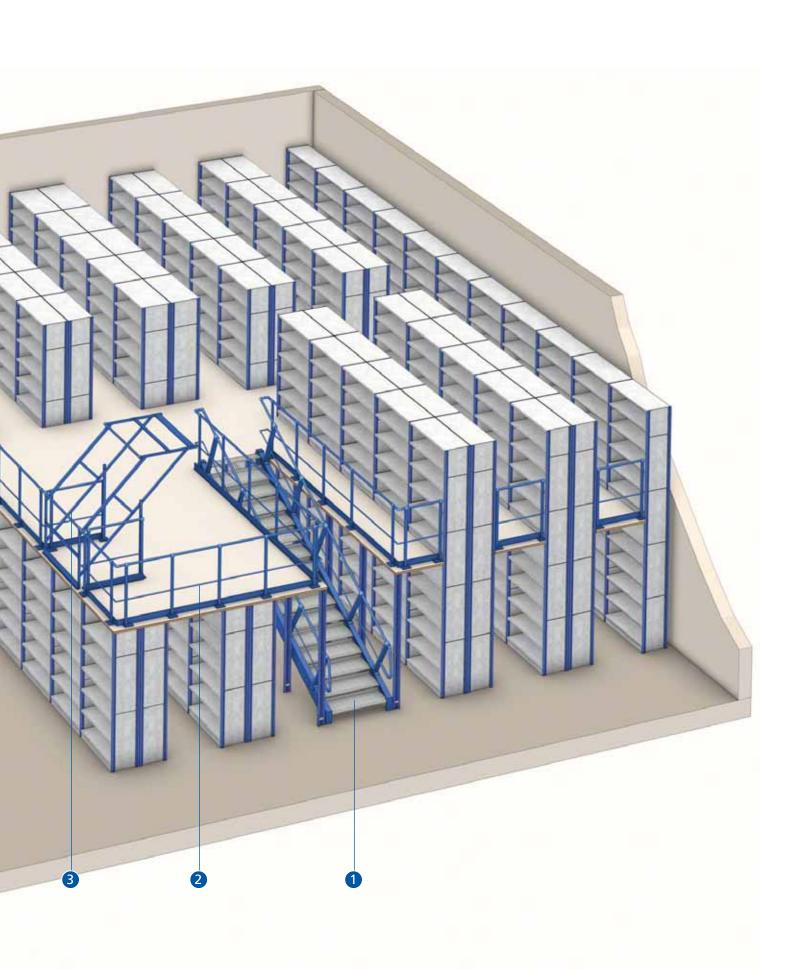
 $\label{eq:mid-position} \mbox{Mid-position gangways can be fitted in any of the existing models of racking.}$ 

In the following examples, a single warehouse built with M3 and M7 racking can be seen.

### M3 Racking



- 1) Stairway
- 2) Handrail
- 3) Swinging safety door

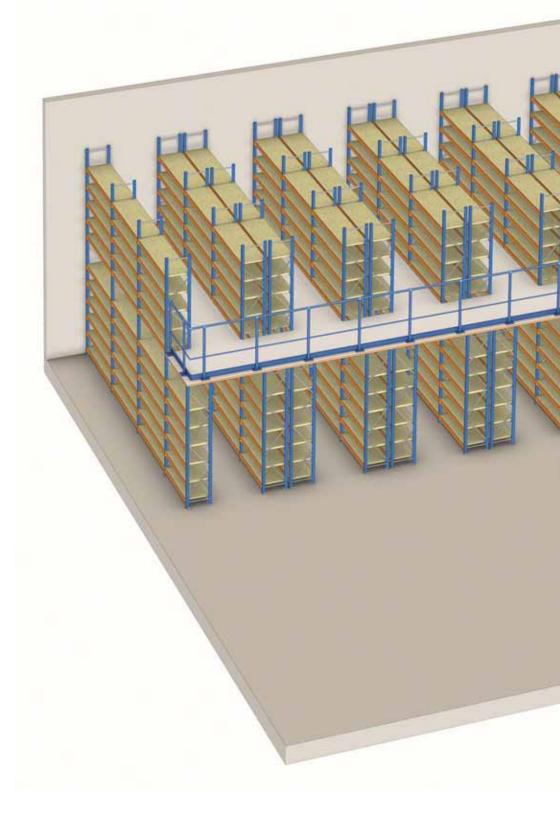


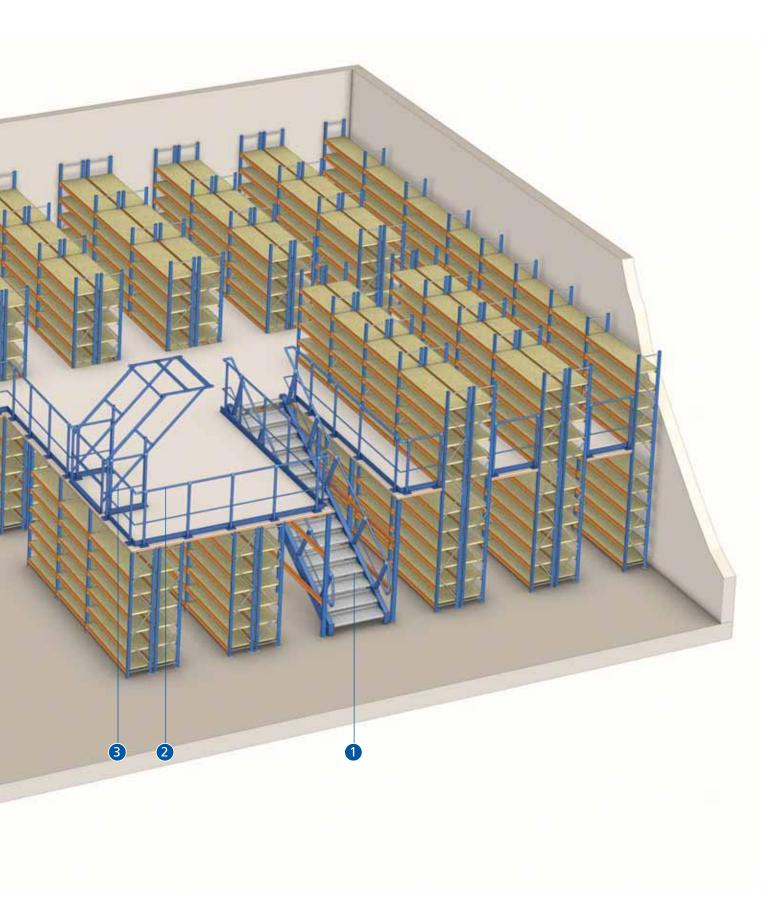
## Construction System of M7 Racking

### M7 racking

Similar to M3 racking, this system only varies in terms of the support profiles for the  $gangways\, and\, the\, specific\, construction\, system.$ 

- 1) Stairway
- 2) Handrail
- 3) Swinging safety door





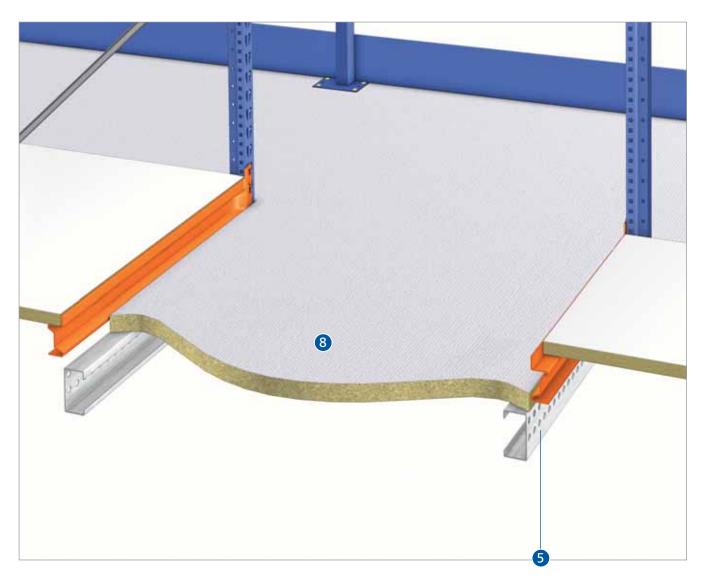
### Close-up of the profiles and flooring in the M3 system



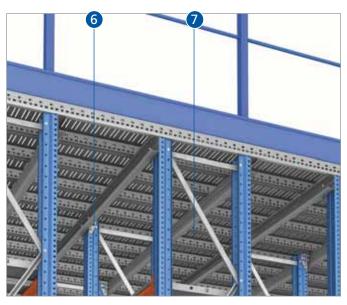
- 1) M3 gangway profile
- 2) M3 gangway profile bracket
- 3) Metal floor
- 4) Wooden floor



### Close-up of the profiles and flooring in the M7 system



- **5)** C-1020 profile
- **6)** L7 gangway supports
- **7)** Metal floor
- 8) Wooden floor



Different types of warehouse floor are available which adapt to the different needs in function of the load, the type of work, the circulation of forklift trucks, ventilation needs, etc.

#### Wooden floor

The flooring is formed by interconnected chipboards with an interlocking system which produces an extremely solid floor. Another type of wooden floor is made from high density fibres or with a fireproof treatment.



#### 38 MA-ML wooden floor

38mm-thick chipboard with a rough anti-slip melamine finish on its upper part, giving the flooring a great resistance to abrasion. White melamine is used below to increase the level of luminosity in the warehouse.



#### Wooden floor plus metal sheeting

This flooring is installed when heavy carts or pallet trucks are moved over the floor and it is necessary to minimise the level of noise from such movements.



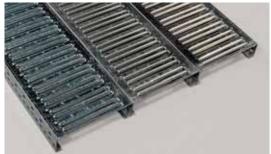




#### **Metal floors**

The metal floors have a high load capacity and the different models have a greater or lesser slotted or bored surface area in function of the needs of ventilation or water piping when fire-fighting systems are installed.

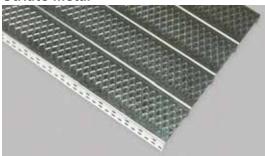
#### **Slotted metal**



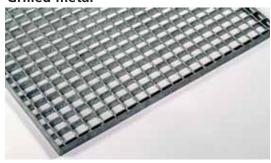
#### **Perforated metal**



#### Striate metal



#### **Grilled metal**





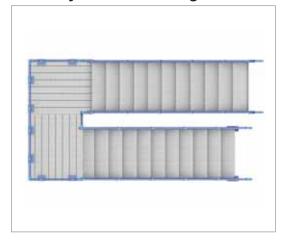


The stairways designed by Mecalux are easy to assemble, resistant and adaptable to different heights (the same stairway can be used for several sizes by changing the angle of inclination). In addition, they meet the different building standards currently in force in Europe.

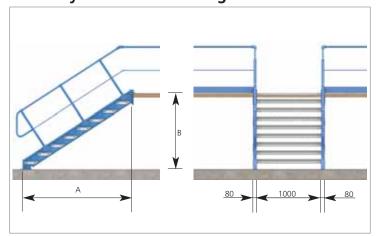
They are usually fitted with 8, 10, 12 or 15 steps in function of the height between the warehouse floor and mezzanine floor. A starway with more than 15 steps requires a midlanding.

| HEIGHTS AND GAUGES AVAILABLE |               |      |      |      |
|------------------------------|---------------|------|------|------|
| NO. OF<br>STEPS              | SIZES (in mm) |      |      |      |
|                              | A             |      | В    |      |
|                              | Min.          | Max. | Min. | Max. |
| 8                            | 2418          | 2585 | 1320 | 1665 |
| 10                           | 2990          | 3200 | 1615 | 2030 |
| 12                           | 3560          | 3810 | 1910 | 2400 |
| 15                           | 4415          | 4730 | 2350 | 2960 |

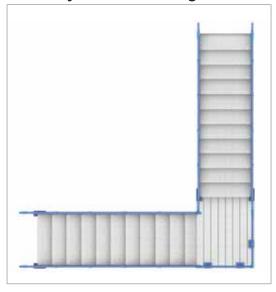
#### Stairway with a landing at 180°



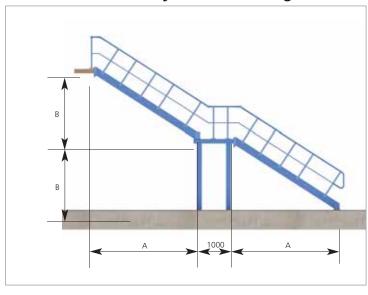
### Stairway without a landing



#### Stairway with a landing at 90°

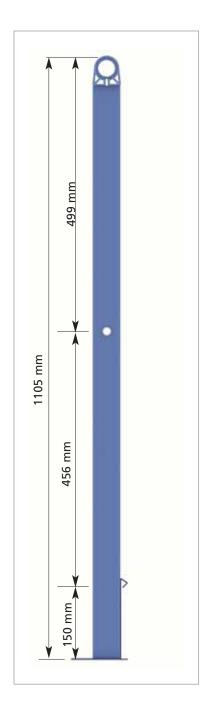


### Continuous stairway with a landing



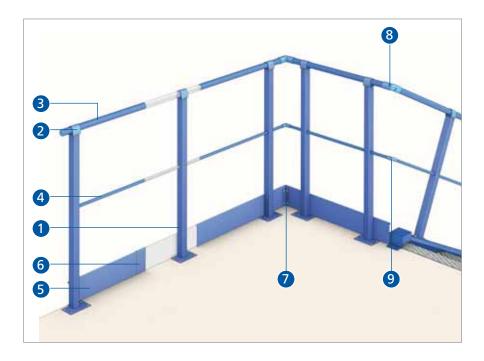


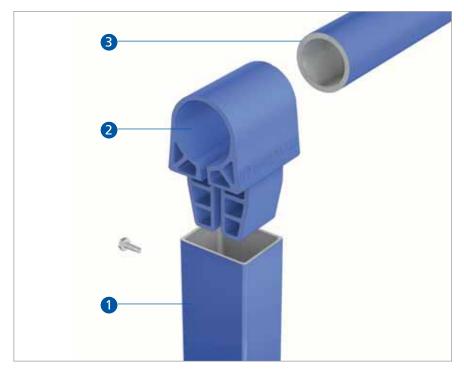




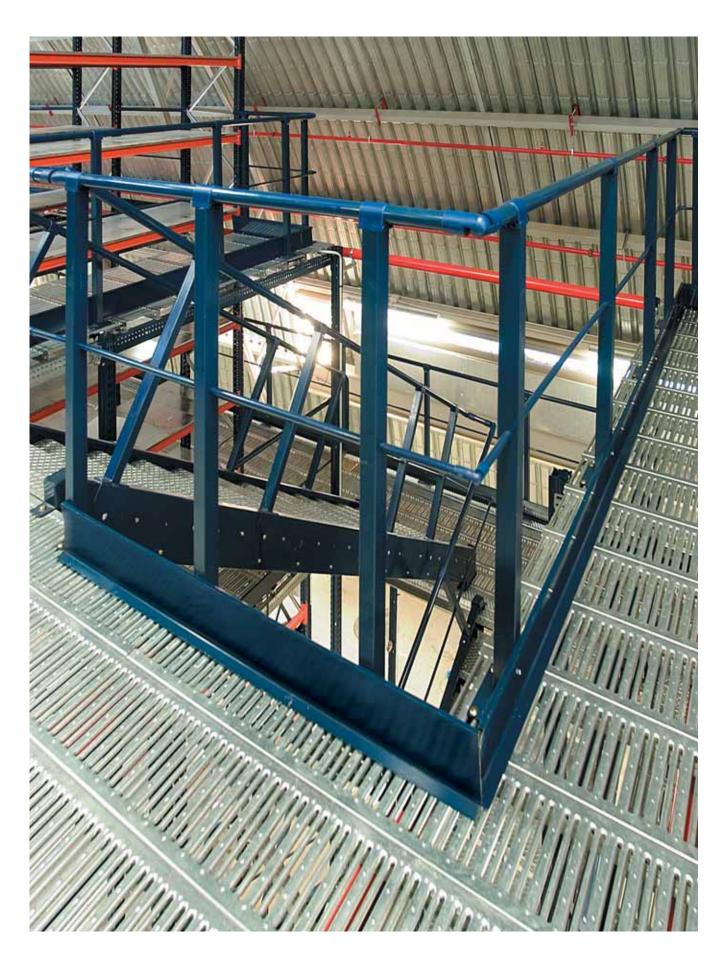
The protection railings are built using round and rectangular tubing connected together by means of clamped joints. In the lower part protection guards are fitted which prevent  $objects \, from \, falling \, off \, the \, mezzanine.$ 

The railings of the high floors are connected to the railings of the stairways by means of knuckle joints which enable components to be fitted with different degrees of inclina $tion. The components of the \ railings \ of the \ stairways \ have \ similar \ characteristics.$ 





- 1) Railing upright
- 2) Railing handrail support
- 3) Railing handrail
- 4) Railing mid tube
- 5) Kick board (guard)
- 6) Kick board (guard) splice
- **7)** Kick board (guard) splice bracket
- 8) Handrail knuckle joint
- 9) Mid tube knuckle joint



### **Swinging safety door**

This is the best system in order to create a loading and unloading area for the goods handled by means of forklift trucks and pallet trucks. They have two positions depending on where access is made from. Entry to the area from both sides at the same time is not possible. The weight of the component is balanced so that it is easier to open or close.



### **Swinging doors**

The doors open inwards, and come with a kick board below and a safety latch at the top.

They allow access to goods from the outside or can be used to mark off a working area.



### **Sliding doors**

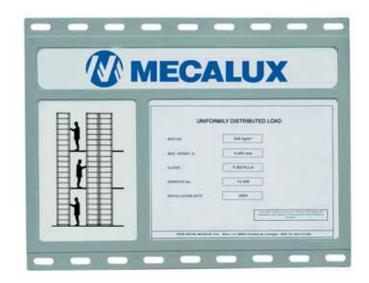
Sliding doors can be fitted which enable access to closed areas and allow goods to be entered, generally using mechanical devices, from the warehouse floor level.



#### **Identification label**

These plates enable the technical characteristics of the installation to be identified.

They are fitted in easily visible areas at the ends of the racks.







e-mail: info@mecalux.com - www.mecalux.com

#### MECALUX UK Ltd.

BIRMINGHAM - Tel. 0121 3336 602

Unit 9, Network Park Duddeston Mill Road Saltley, Birmingham B8 1 AU - (United Kingdom) Fax 0121 3335 622

#### MECALUX, SA

**HEAD OFFICE - Tel. + 34 932 616 913** 

Silici, 1 08940 Cornellà de Llobregat Barcelona (SPAIN) Fax + 34 932 632 682

#### MECALUX HAS A PRESENCE IN MORE THAN 70 COUNTRIES WORLDWIDE

Offices in: Argentina - Belgium - Brazil - Canada - Chile - Czech Republic - France - Germany - Italy - Mexico - Netherlands Panama - Peru - Poland - Portugal - Slovakia - Spain - Turkey - United Kingdom - Uruguay - USA

