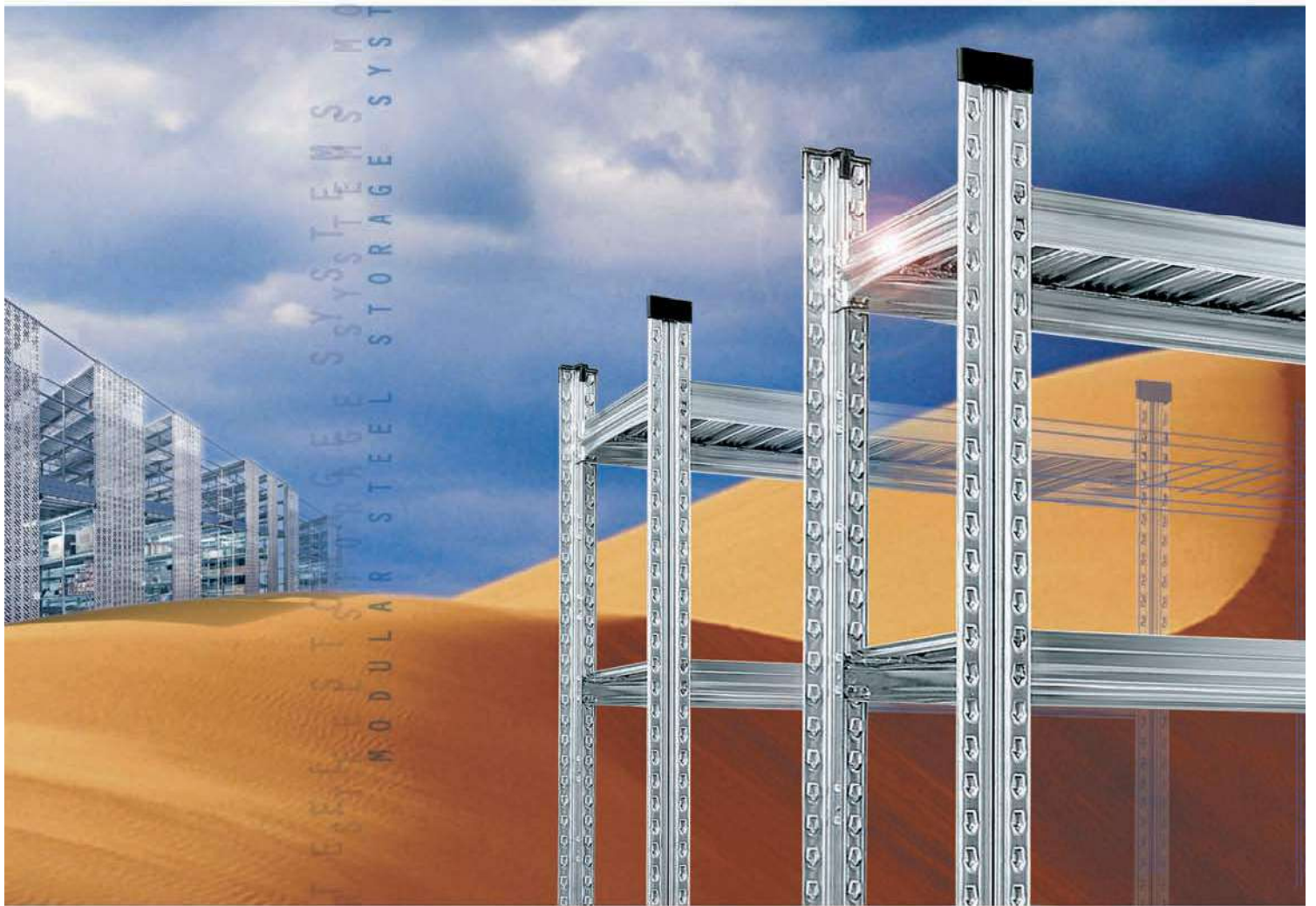


MODULAR STEEL STORAGE SYSTEMS

# SUPER 1/2/3

PATENTED BOLTLESS SHELVING



MODULAR



**METALSISTEM**  
SISTEMI E STRUTTURE PER IL MAGAZZINO

# DIAGRAM FOR ASSEMBLING BRACING FOR FRAMES

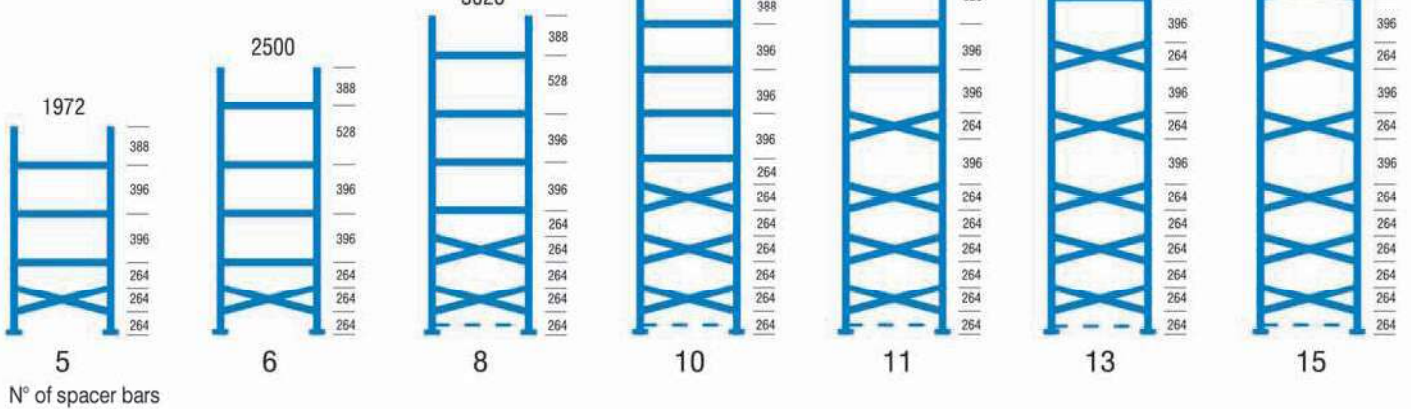
320 - 400 - 500 - 600 - 700 - 800 mm in depth

## LEGEND

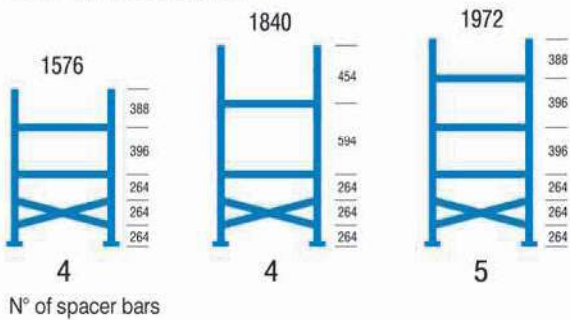
- Diagonal / Horizontal Spacer Bars
- - - Locking Frame Spacer Bar



### SUPER 1-2-3 Series



### SUPER ZERO Series



SUPER-ZERO uprights and frames are allowed with the use of SUPER-ZERO beams and shelves, only and exclusively.  
 Bay lengths 900 / 1050 / 1200 mm only, with a max. load capacity of 200 daN/shelf, uniformly distributed loads.

### TWO TIER STRUCTURES PLATFORMS

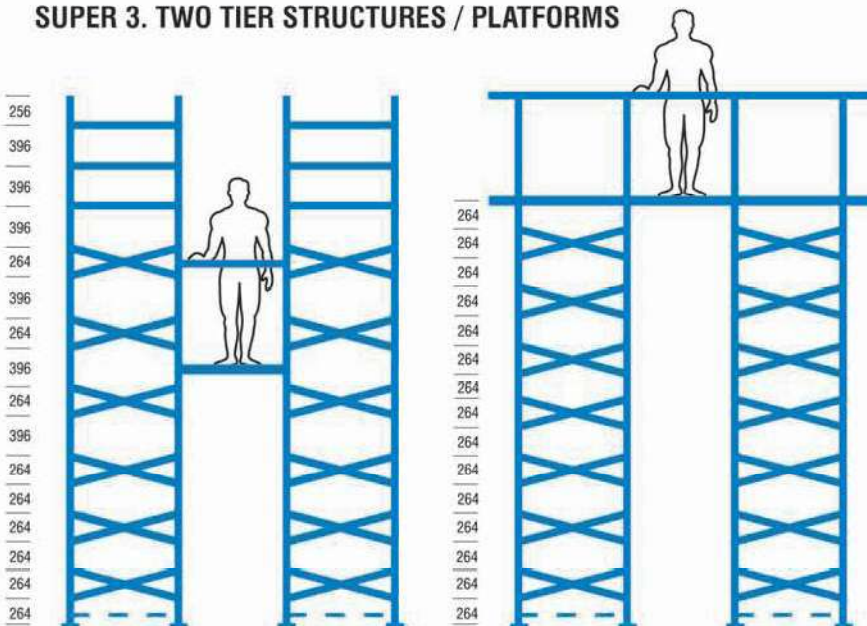
In case of two tier structures with suspended walkways the frames are to be assembled as shown in case "A" at left (i.e. the standard frame assembly diagram). In case of platforms with continuous floor decking, the frames have to be assembled with pairs of diagonal spacer bars only, at centre distances of 264 mm, up to the level of the platform (see case "B" at left).

In both the cases the frames must be securely bolted to the floor slab using the heavy duty base plates (art.n° 67006) and the locking frame spacer bars.

Staircases made from standard components and integrated into the two-tier-structure have to be reinforced in an appropriate way, using the reinforced SUPER 3-upright (art.n° 99230) either side of the staircase. METALSISTEM strongly recommends to comply with all safety standards mentioned in this brochure.

The maximum load bearing capacity of walkways/decking within two-tier structures or platforms is 300 kg/m<sup>2</sup> and the maximum width of the walkways is 1200 mm. The maximum shelf bay length is 1500 mm.

### SUPER 3. TWO TIER STRUCTURES / PLATFORMS



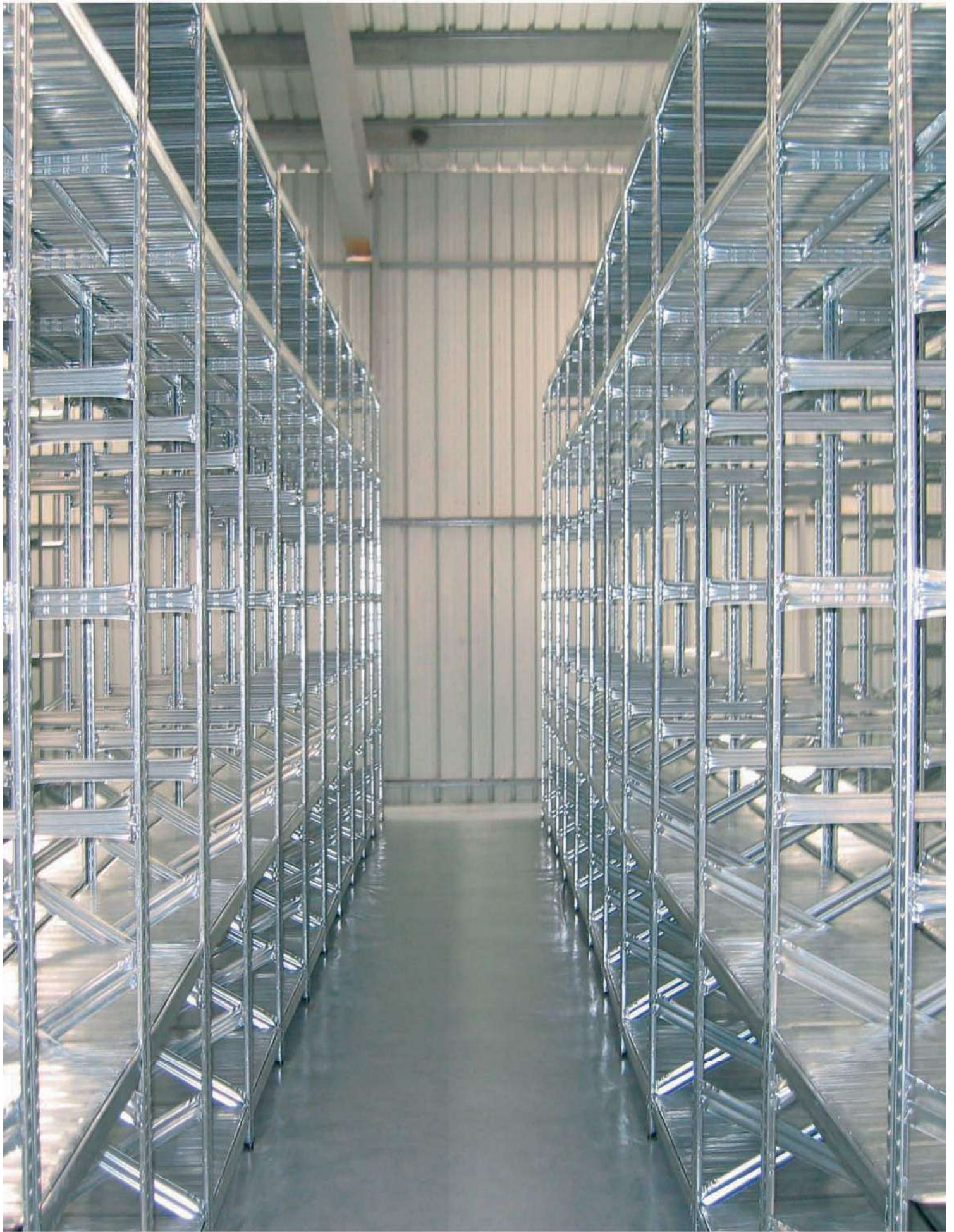
**CASE "A"**  
Two tier structure with suspended walkways

**CASE "B"**  
Platform with continuous floor















## THE PRODUCT

The fully adjustable SUPER 1/2/3 systems have been designed to meet the needs of light to medium duty storage. They are also highly suitable for the construction of two tier structures (with the SUPER 3 system). The design of the various components is the result of rigorous technical testing and the highly specialised knowledge developed over years of experience in the field of metal processing.

This experience has enabled METAL-SISTEM to offer innovative products of the highest quality, highly competitively priced, and to produce a highly technical solution to the most important



shelving problems, such as rapid assembly, stability, low cost and load bearing capacity.

The design allows for high load bearing from light gauge materials. The use of high quality zinc coated steel ensures a high level of durability.

The structural components of the SUPER 1/2/3 systems are made from high tensile steel, certified according to EN 10204 3.1B.

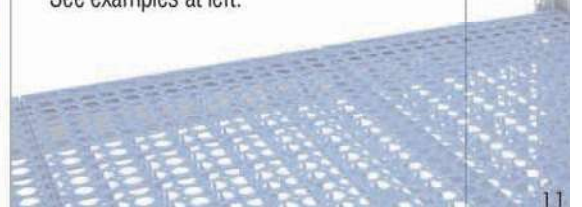






The safety and the quality of the product has always been a primary aim of METALSISTEM and is recognised by TÜV PRODUCT SERVICE in Munich, one of the most rigorous E.C. commissions in the field of quality and safety certification. The product meets the requirements of the Equipment Safety Law.

Thanks to its attractive high-tech design, SUPER 1-2-3 shelving is pleasing to the eye and can provide unique solutions for applications in domestic environments. See examples at left.





## ASSEMBLY INSTRUCTIONS

### Base plates

Fit the metal base plate onto the upright, using pliers to guide the two tongues on the plate into the ribs on the upright. Then tap the base plate into the ribs with a hammer. Plastic base plates should be used for the SUPER 1 system only (Ref.1). Double plastic base plates are available for back-to-back bays.

These can also be used as top caps for double uprights (Ref.29).

Heavy duty base plates (Ref.1b) must be used in the following cases:

- when building platforms and/or two-tier structures with suspended walkways;

- when building staircases, under the uprights of the staircase;
- if the height of the shelving is over 3 metres or exceeds over 5 times the depth of the shelving;

In all the other cases customers may use the normal standard base plates.

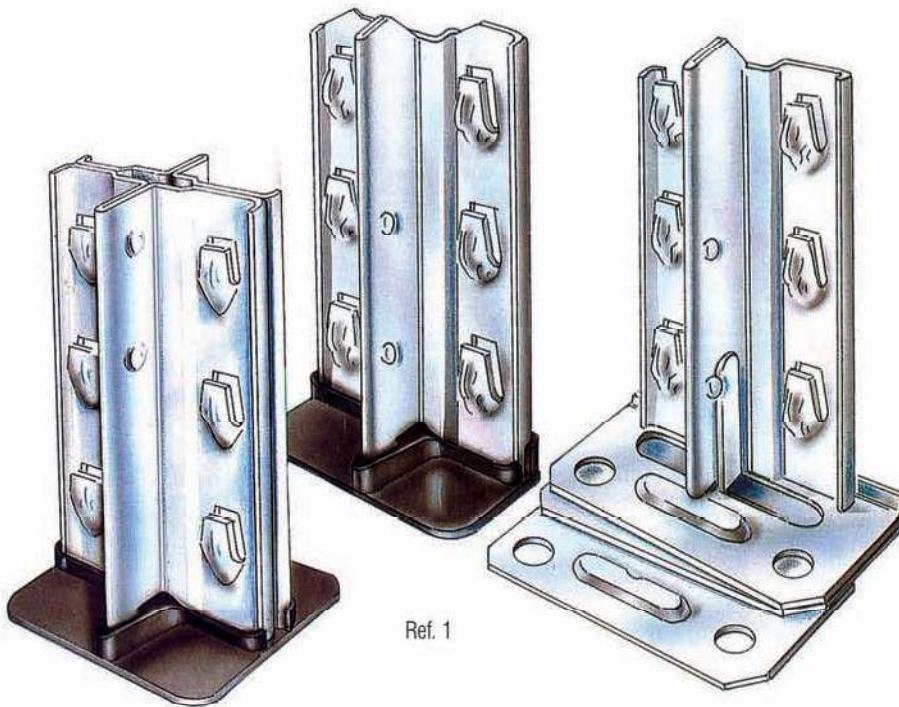
Heavy duty base plates are always to be assembled in conjunction with locking frame spacer bars.

### Spacer bars

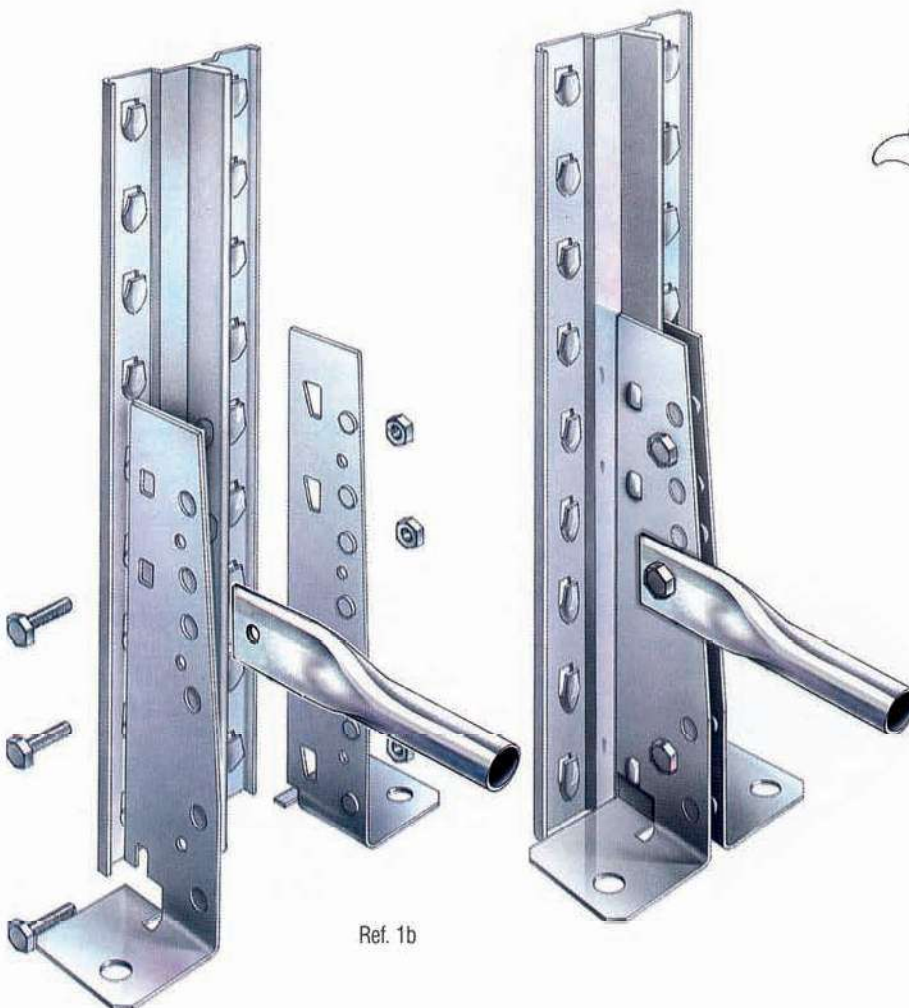
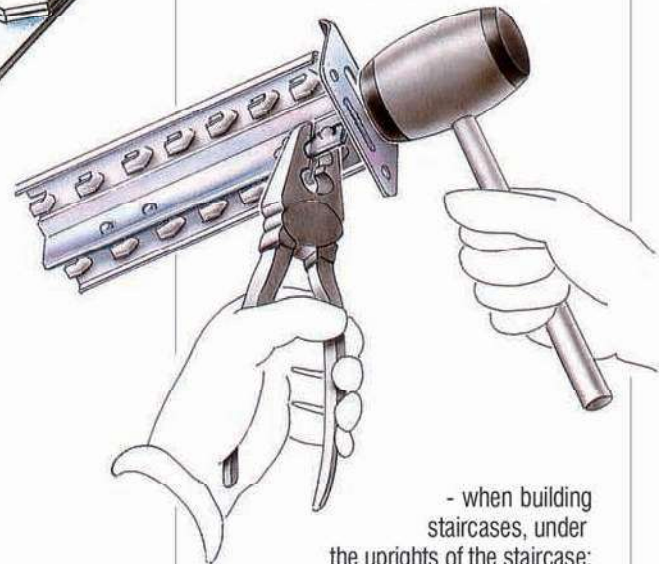
To fit spacer bars, refer to the diagram on pages 4/5 to determine the exact position and quantity.

Insert the horizontal and diagonal spacer bars into the grooves in the corner of the upright, locating the wide part of the slot over the ribs on the upright and keeping the spacer bars tight to the upright, in order to keep it square; then tap down into the narrow part of the slot alternating from side to side.

To achieve correct assembly, the spacer bar anti-release tongues should be closed (Ref.2).

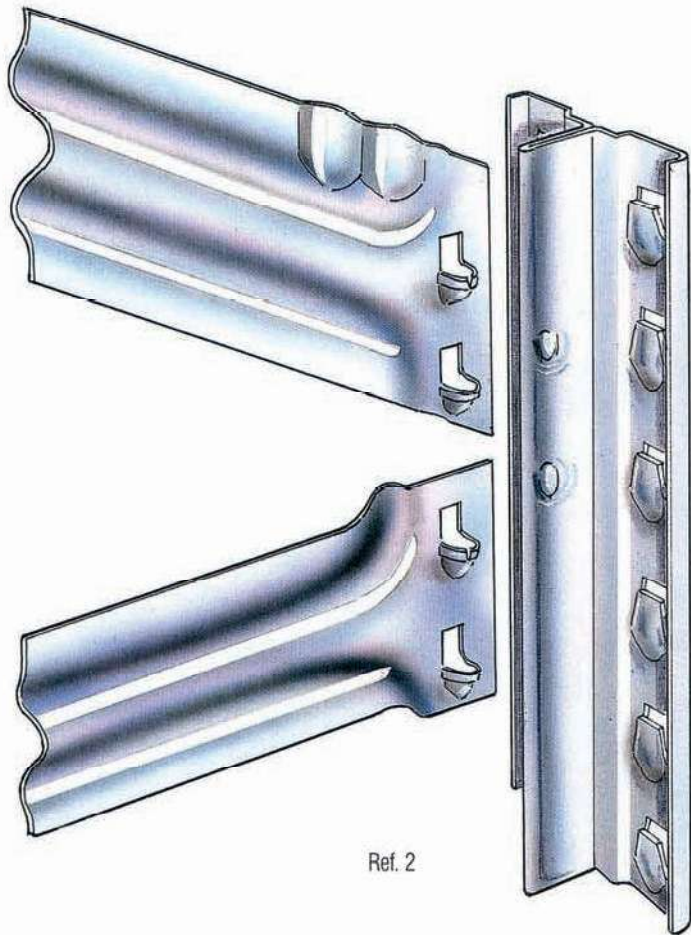


Ref. 1



Ref. 1b

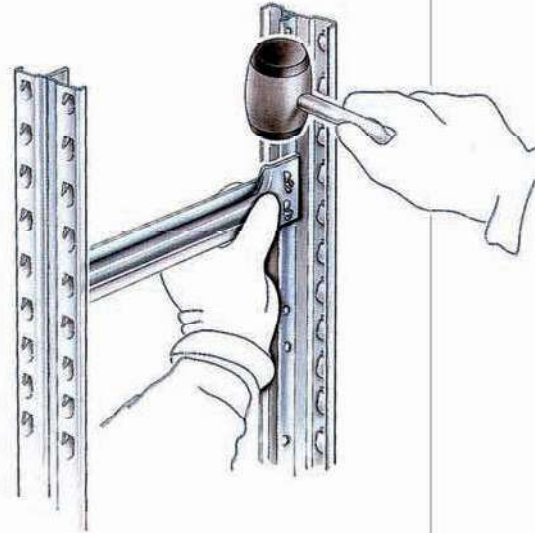




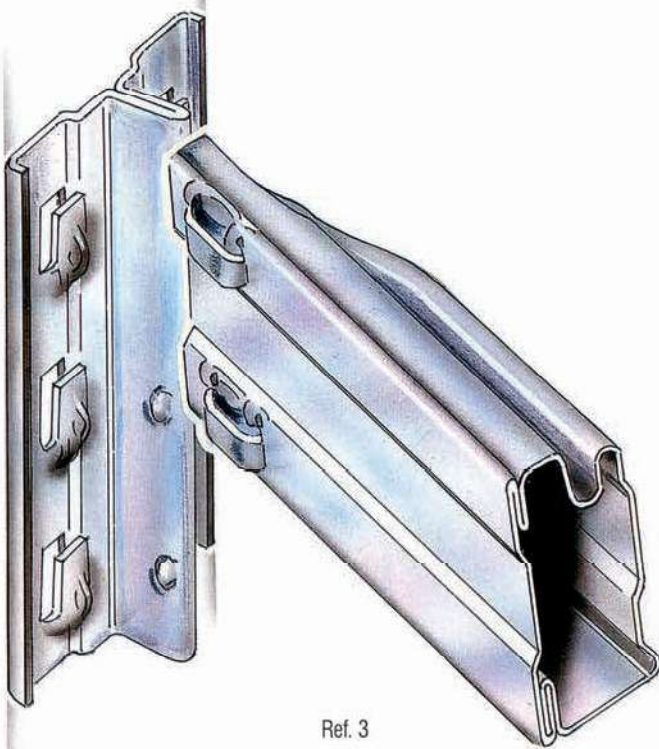
Ref. 2

## Beams

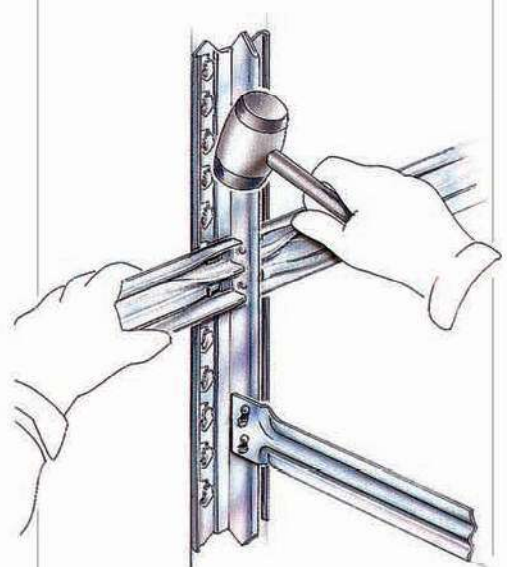
Take the frames, assembled with bracing and base plates: keep them as perpendicularly as possible and fit the beam by tapping it down onto the tongues, close to the upright,



with a plastic-faced hammer to avoid damage to the beam (Ref. 3). The beams, once assembled, should be secured with the respective beam locking pins (see page 21, Ref. 22).



Ref. 3

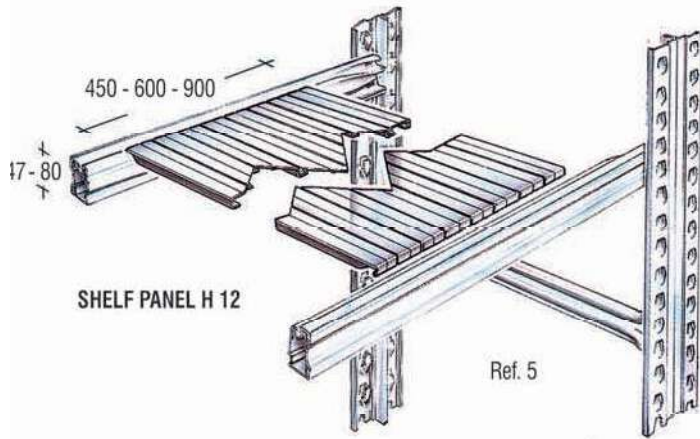


For the storage of tyres or round materials which are placed directly onto the beams, plastic strips are available to avoid damage to the products stored; these strips are fitted into the recess of the beams (see page 21, Ref. 21).



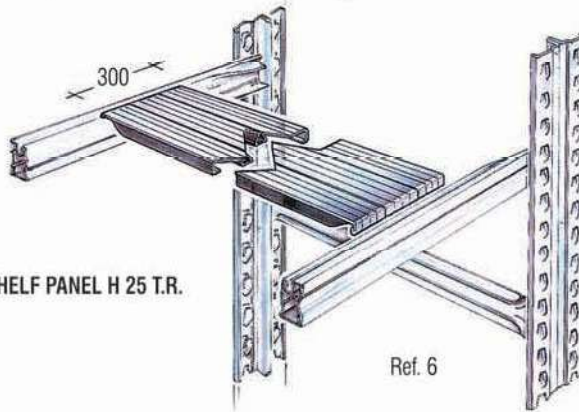






SHELF PANEL H 12

Ref. 5



SHELF PANEL H 25 T.R.

Ref. 6

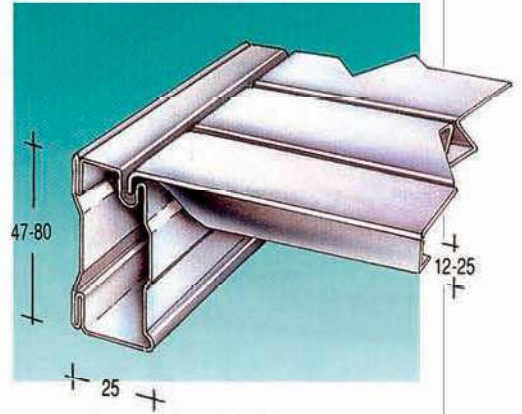


Ref. 60



## Shelves

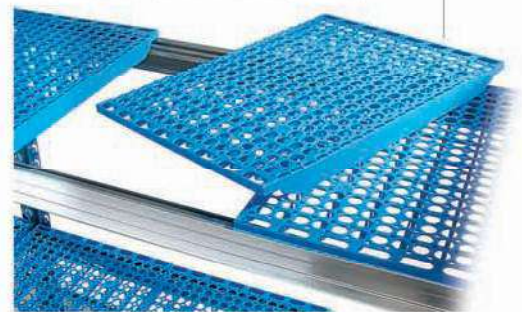
Shelves of profile 12 mm, 450-600-900 mm wide, are produced in depths varying from 320 to 700 mm. Shelves of profile 25 mm and 300 mm wide are supplied in depths varying from 400 to 800 mm (Ref. 5-6).



Ref. 6 bis

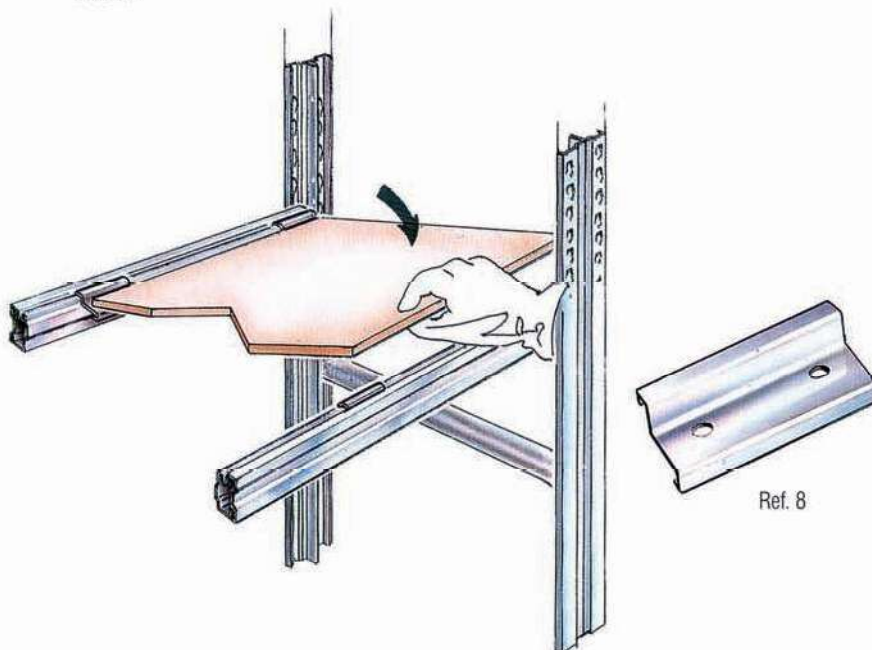
## Perforated plastic shelf panels

The perforated plastic shelf panels are made from high quality polypropylene, suitable for use within the food sector. The perforation is > 50% of the shelf surface area. Available in two different colours: yellow and light blue, for frame depths 320, 400, 500 mm. (Ref. 60).

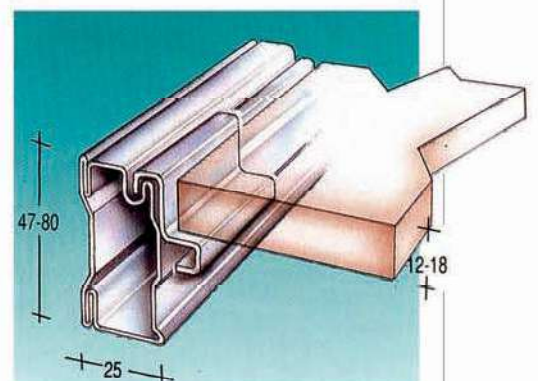


## Chipboard shelves

Chipboard shelves of thickness 12 or 18 mm can be fitted using the clips shown at left (Ref. 8).

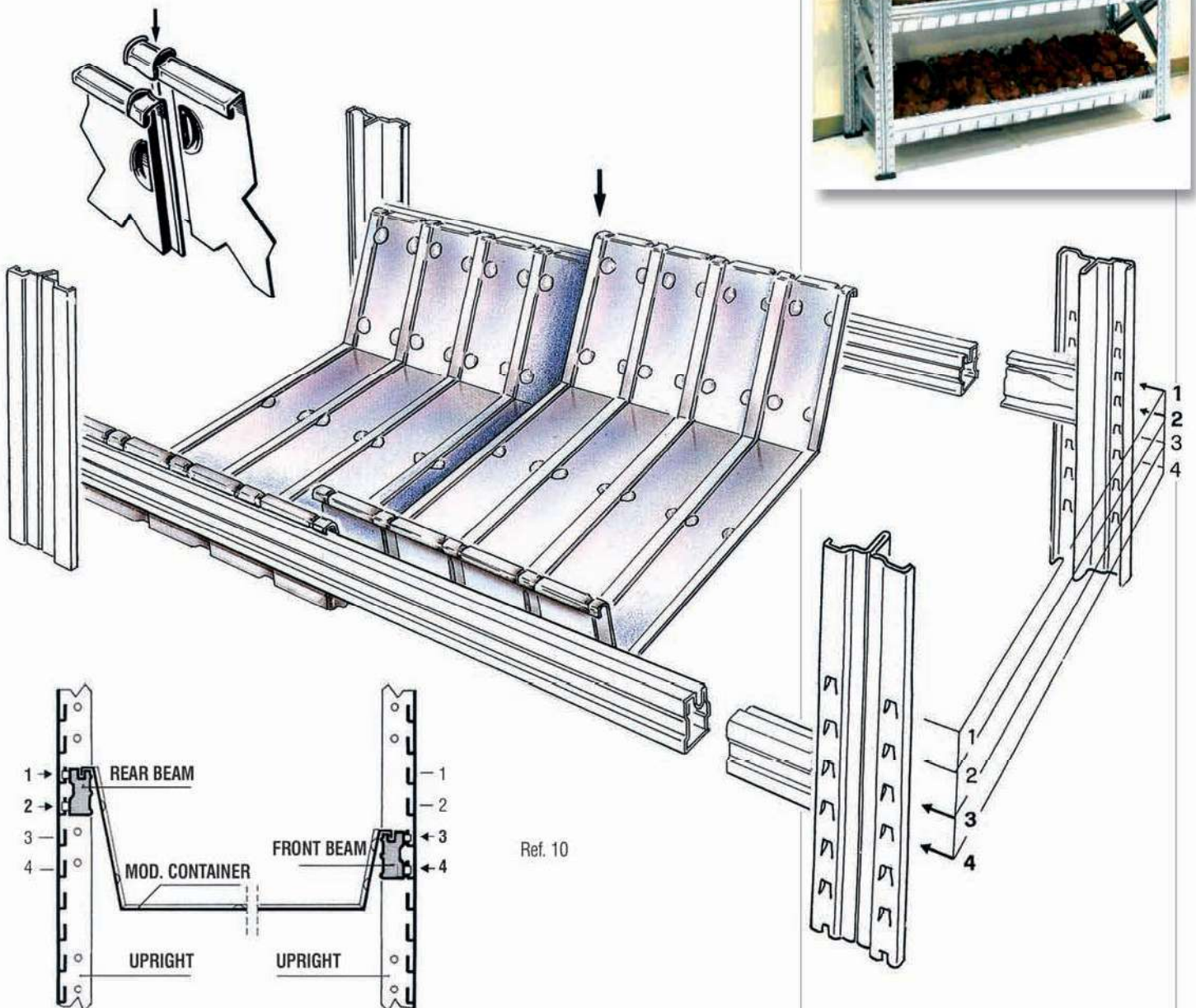
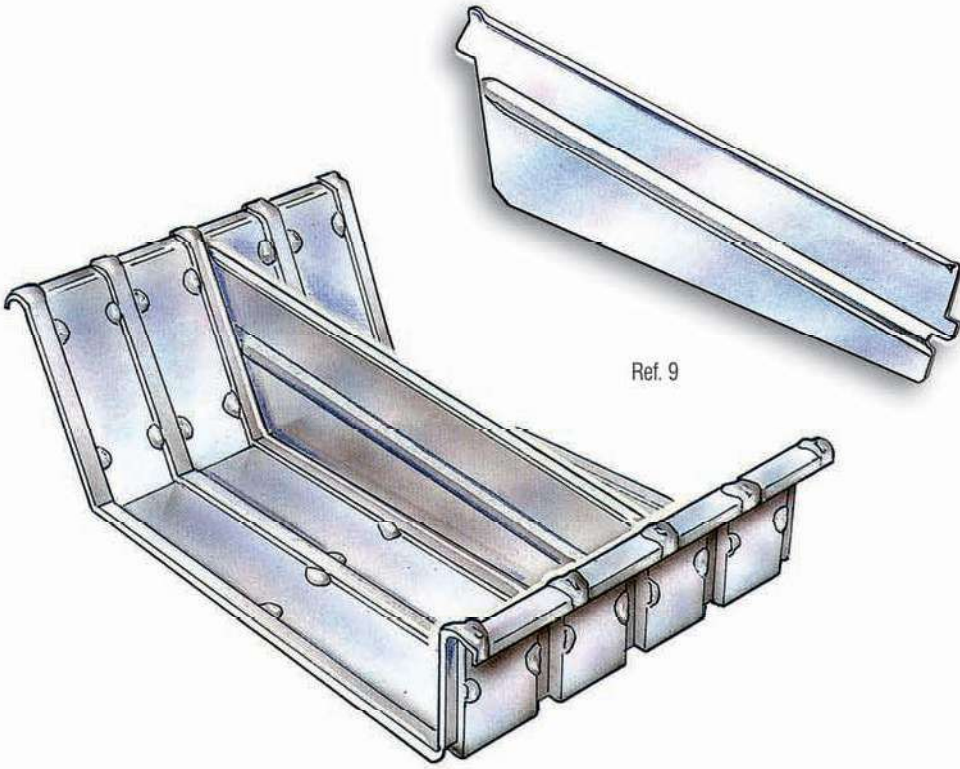


Ref. 8





# Modular containers





Insert the containers from left to right, and join them together by overlapping the beginning of the following container onto the end of the preceding one, pressing them into the recess of the beams.

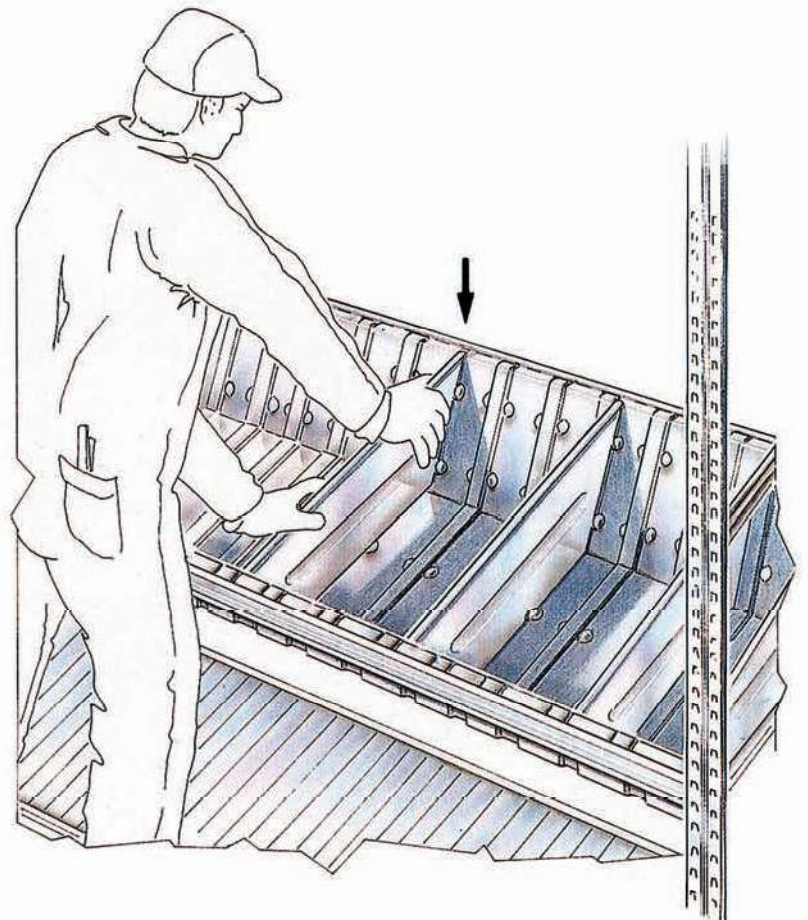
To assemble the containers correctly, the rear beam should be fitted two pitches higher than the front one (Ref. 10).

Fit the dividers into the special slotted seats, pushing down to locate (Ref. 9).

When exceeding the depth of 800 mm, it is advisable to use back-to-back bays, to increase stability.



The capacity of the containers can be increased by fitting bin front and rear panels 200 or 300 mm high.



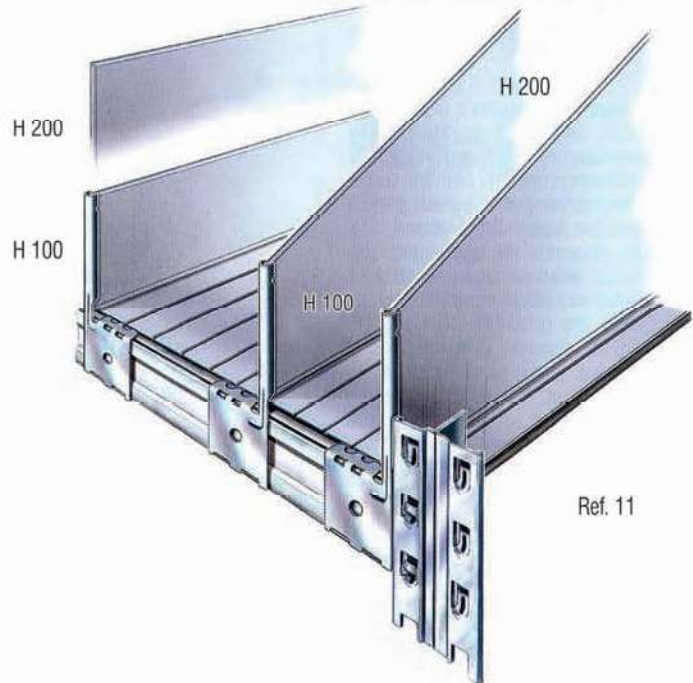


## DIVIDERS

A large range of dividers is available.

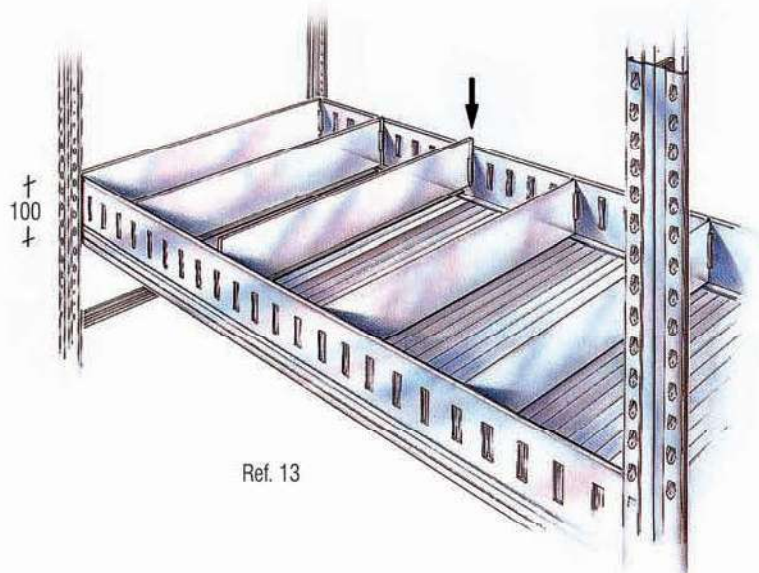
### Vertical sliding dividers

These have been designed to separate loose items (Ref. 11). The concept of these dividers is based on the following components: a couple of clips (version at right/at left), and vertical dividers, available for all frame depths and in two different heights (H=100mm / H=200 mm), as well as in the profiled version (H200/100 mm).



### Shelf trays

These comprise a bin front and rear panel 100 mm high placed on a normal shelf with adjustable dividers from 320 to 600 mm in depth (Ref. 13).

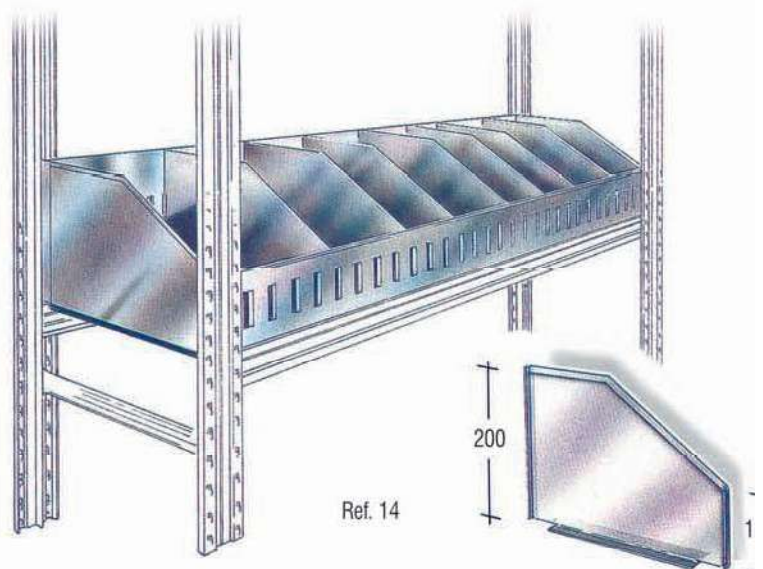
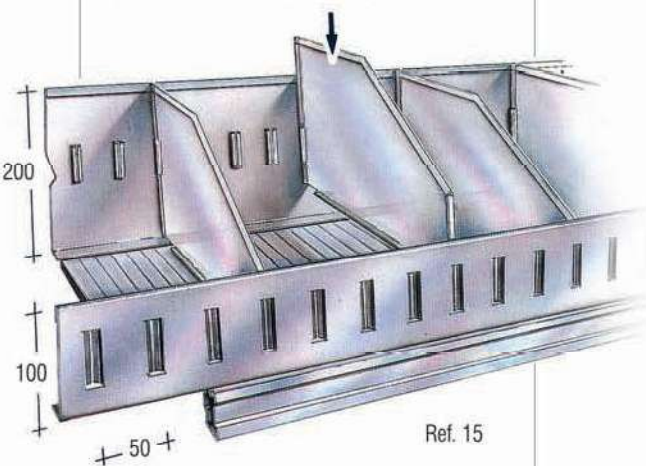


### Chest of drawers

The modular drawers are fully integrated with the SUPER 1-2-3 series and are located directly on the frames. A cost effective solution for the storage of small items.



Bin front panels 100 mm high and rear panels 200 mm high are fitted with profiled dividers (Ref. 14/15).

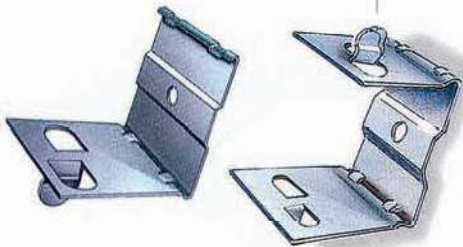






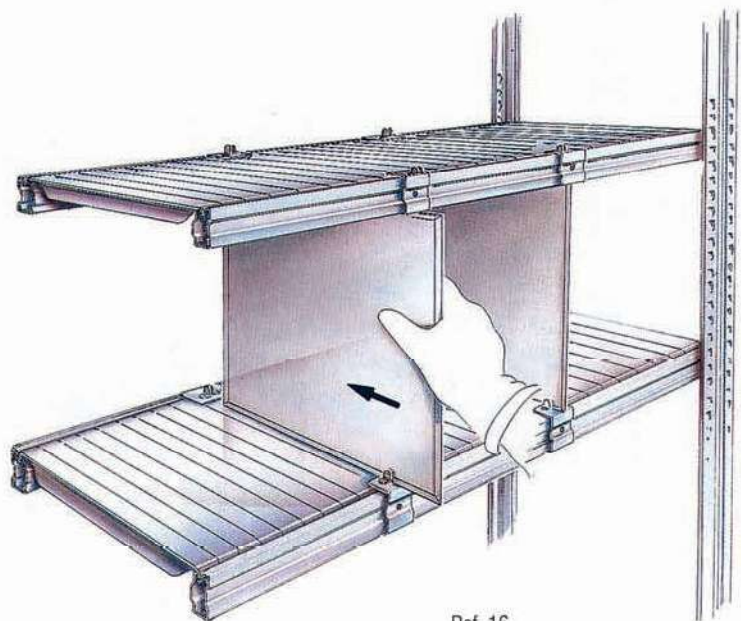
### Plastic Bins "Bull Series"

Open fronted plastic bins are also available for the storage of loose items. More information on page 51.



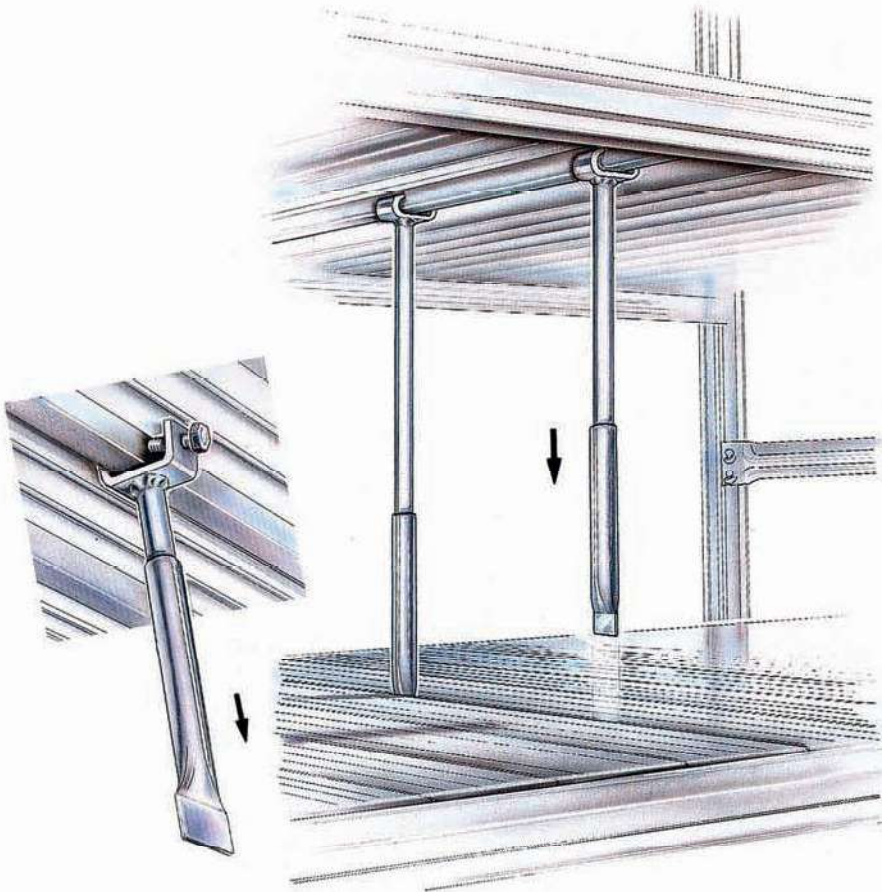
### Fixed height dividers

Available in three different heights: 244-344-444 mm. They can be inserted in any position on the shelf by means of spring clips located on the beams H47 (Ref. 16).



Ref. 16





Ref. 17

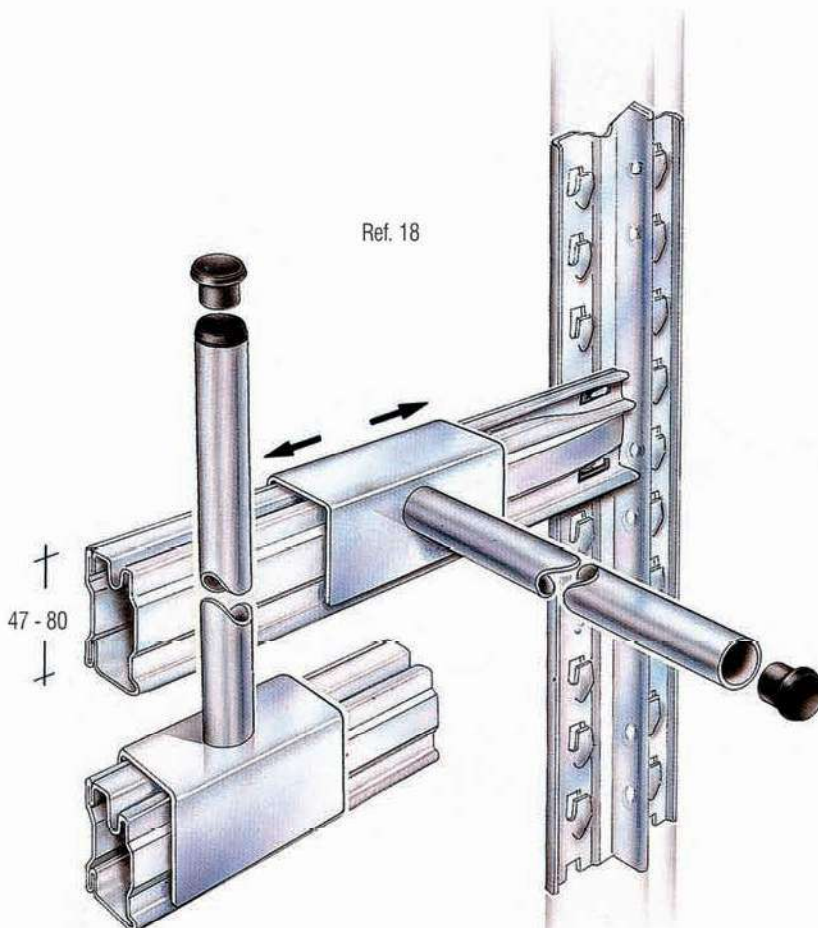
### Telescopic Tube Dividers

Used for the separation of cylindrical components or materials difficult to store (windscreens and panels, etc.). They comprise 2 tubes of 18 mm diameter sliding one inside the other. They are fixed to the upper shelf by means of a clamp/screw connection (8MA). A minimum of two tubes should be used for each division (Ref.17).



### Dividers for exhaust pipes

Spigots designed for the separation of tubes, exhausts and conduits, etc. They are used both vertically and horizontally and are fitted on to the beams anywhere in the length (not suited for hanging loads) (Ref.18).





## ACCESSORIES

### P.V.C. top caps.

PVC top caps are to be fitted onto the top of the upright, in all applications (Ref. 20).

### Oval shaped tubes and beams.

The oval shaped beams and tubes are compatible with most types of hanger and provide a cost effective solution to garment storage and for hanging loads (Ref. 19 / 20). The garment hanging shelving can be designed on a single or double entry basis and equipped with shelves. The oval tubes fitted onto the spacer bars alone will not stabilise the structure in the horizontal plane and have to be combined with beams above and below.



### Tyre Storage.

The oval shaped beams can also be used for the storage of tyres (see page 10).

In this case, please refer to the technical handbook to identify correct use and appropriate load capacities.

In the case that the tyres will be stored on H-47-mm beams, it is obligatory to use the SUPER-3 version only and exclusively, both for the beams and the frames. Maximum allowed bay length: 1200 mm. Maximum allowed frame depth: 400 mm, to ensure safe storage and to prevent torsional deflection of the beams.

### Plastic strip for glass shelves.

It can be fitted on the beams in order to protect glass shelves or delicate materials (Ref.21).

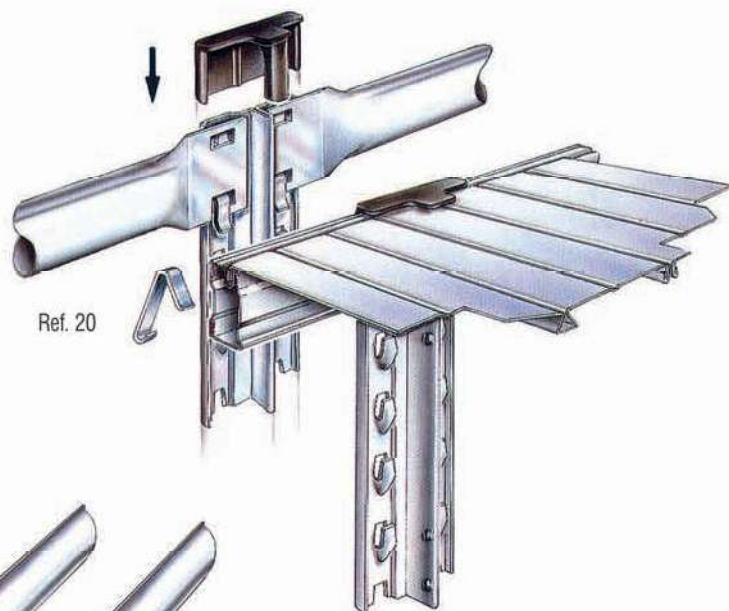
### Security pins.

In order to prevent accidental lifting of the beams and shelves, the security pins should be used in all applications (Ref.22). Assembly instructions as per the sketch at right.

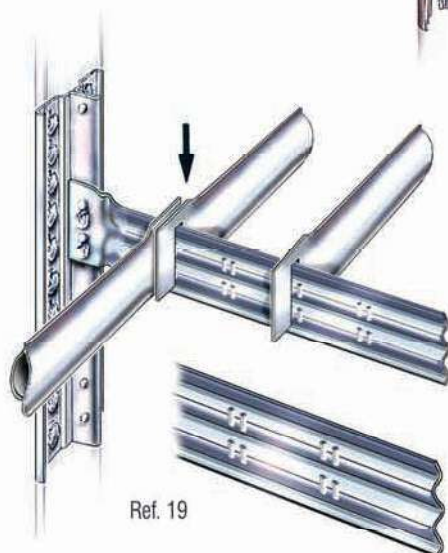
### Label Holder

It can be located in any position on both H47 and H80 beams.

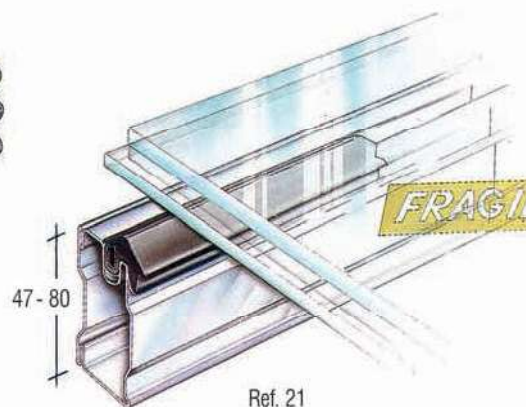
Dimensions 100x40 (Ref.23).



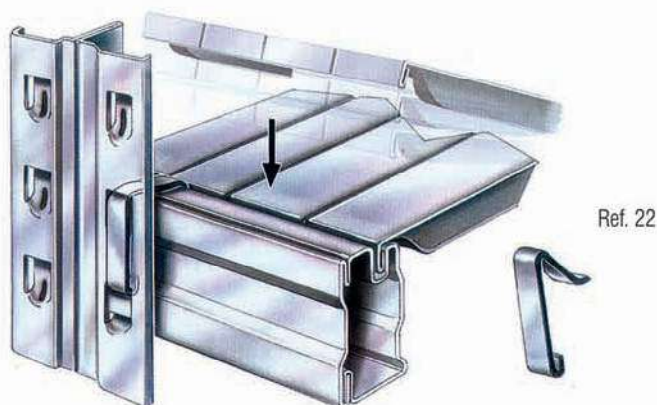
Ref. 20



Ref. 19



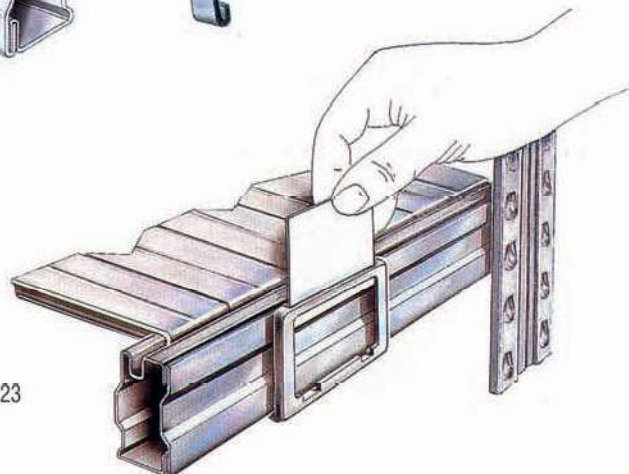
Ref. 21



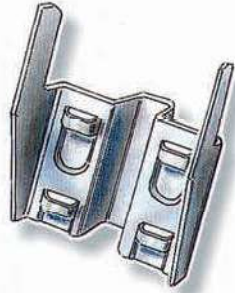
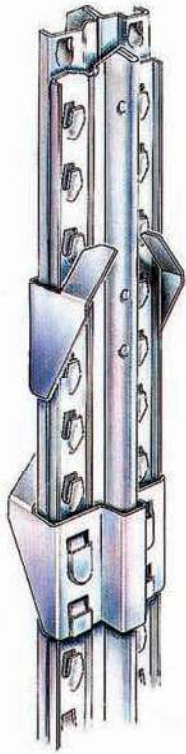
Ref. 22



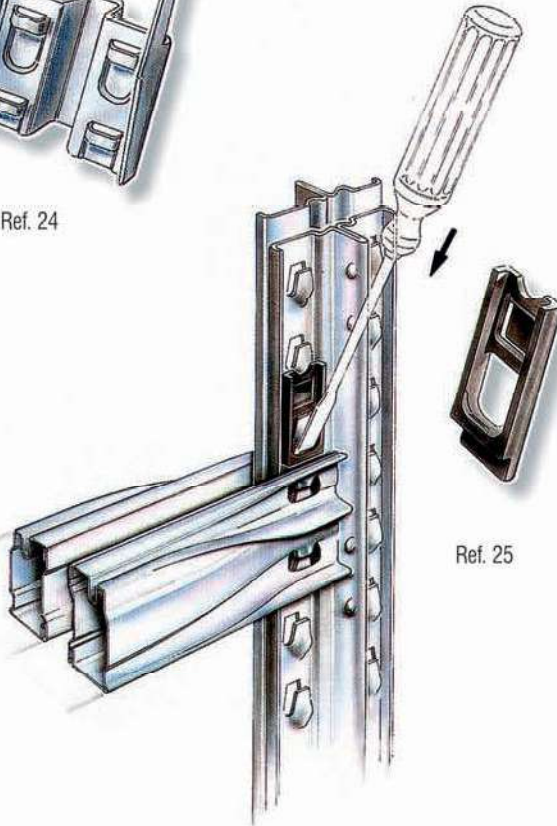
Ref. 23







Ref. 24



Ref. 25

### Frame back-to-back clips

They are used to fix the frames together when building back-to-back bays to improve stability. They are located at mid height (Ref. 24).

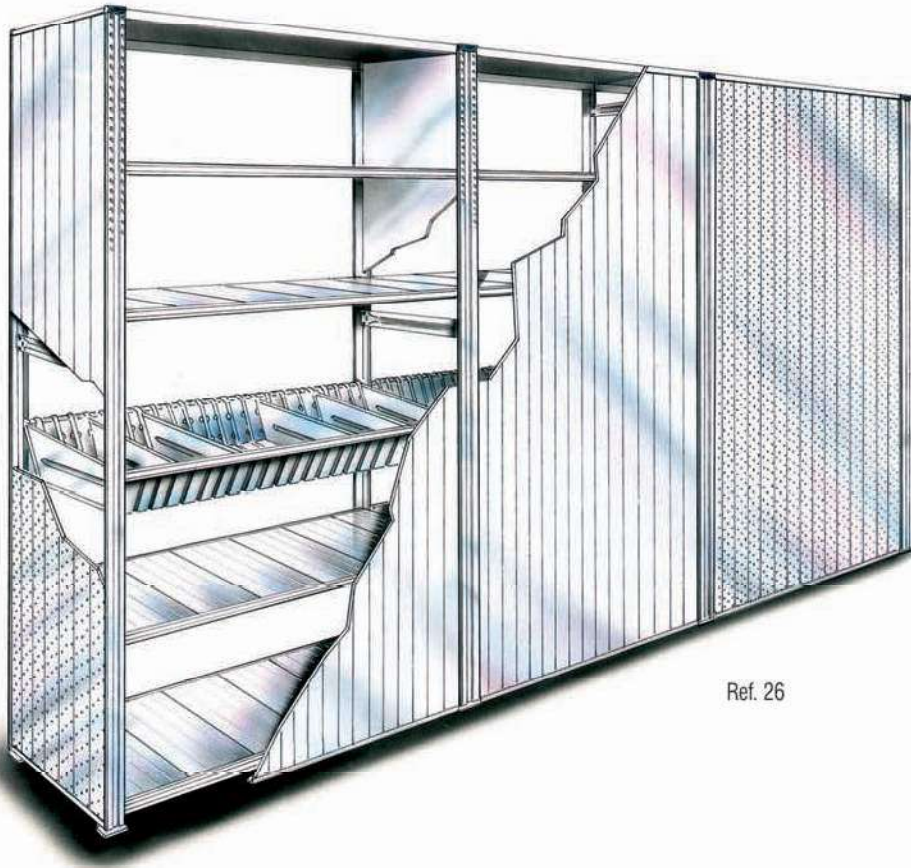
### Security pins for beams in back-to-back bays

They are used to prevent accidental lifting of the beams when building back-to-back bays (Ref. 25).



### CLADDING BACK AND END PANELS H25

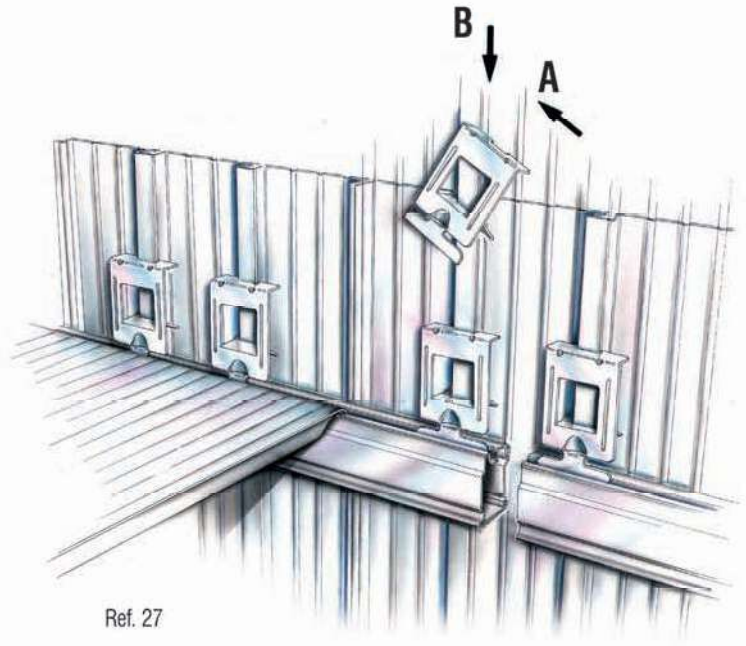
Back and end panels are produced in two standard sizes (200 wide x 25 mm profile and 300 wide x 25 mm) and in varying heights of 1485-1940-2480 mm. Back and end claddings in any dimension can be built up in a modular form, using channel profiles "U" and "H" as end and middle joints (Ref. 26).



Ref. 26



In the case of the standard modular back/end panels being lower than the respective frame, "H"-section profiles may be used at the bottom of the panels, to achieve equal height (Ref. 31).

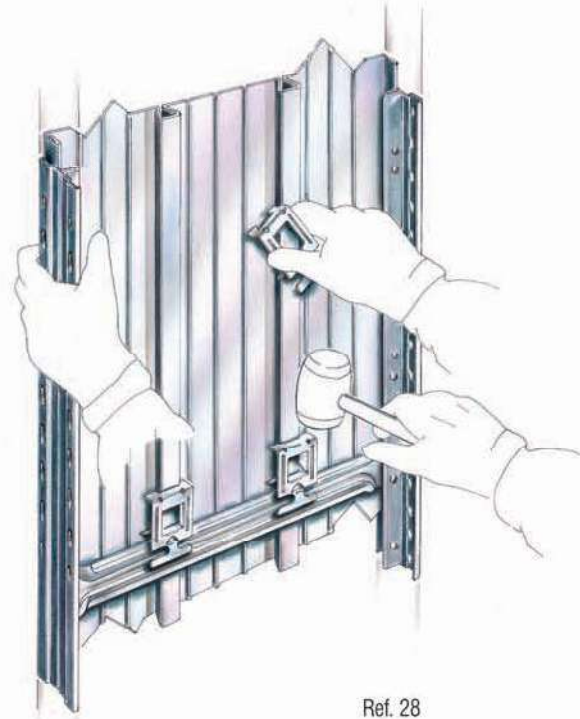


Ref. 27

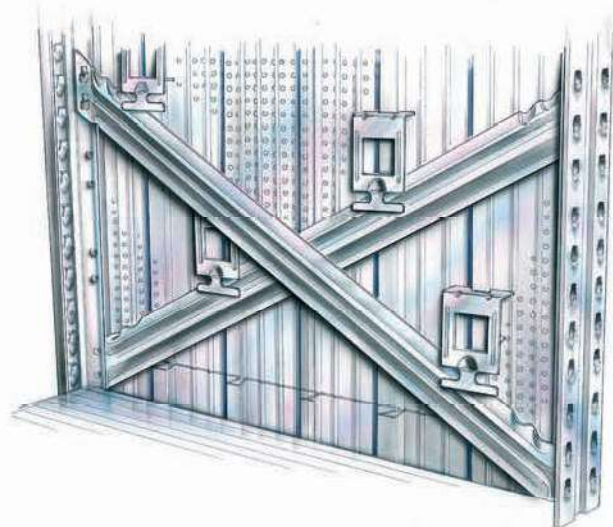
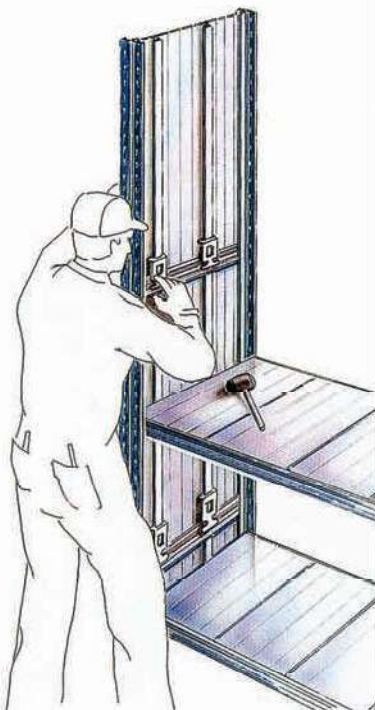


Punched hole back and end panels H25 (according to European Standard) are also available, similar to those described before, with 5 mm holes at 25 mm centres.

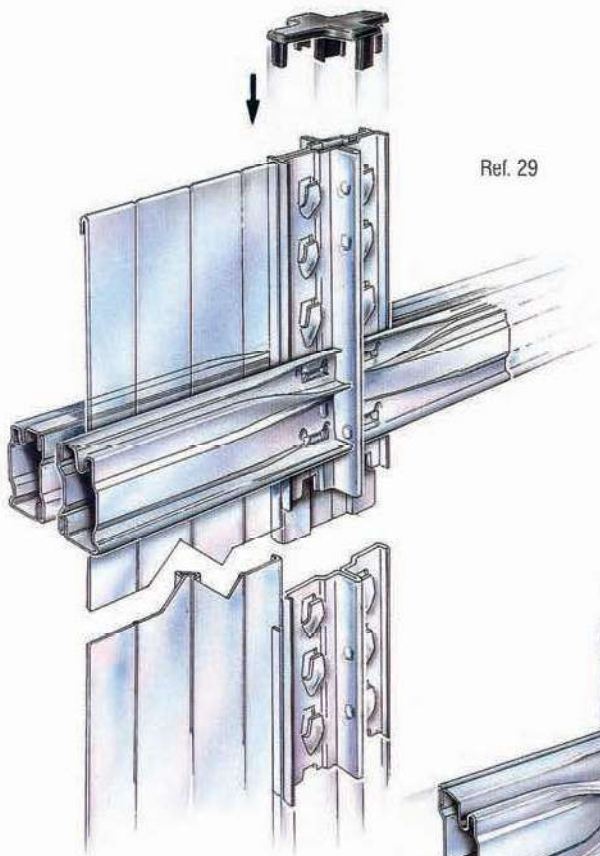
Special fixing clips are used to fasten the back cladding (Art. 68108 - Ref. 27) and frame end panels (Art. 68107 - Ref. 28).



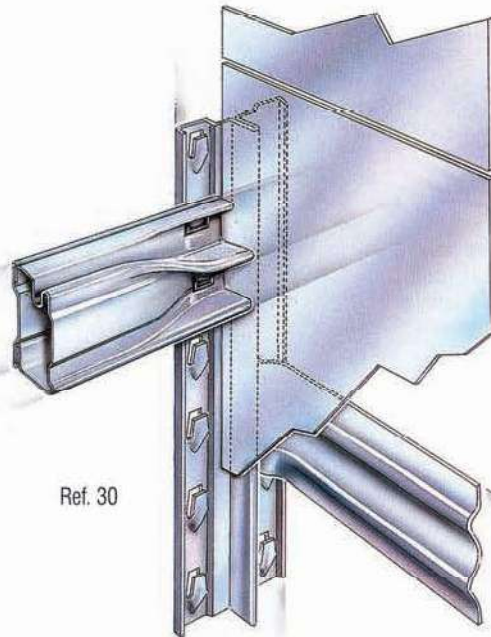
Ref. 28







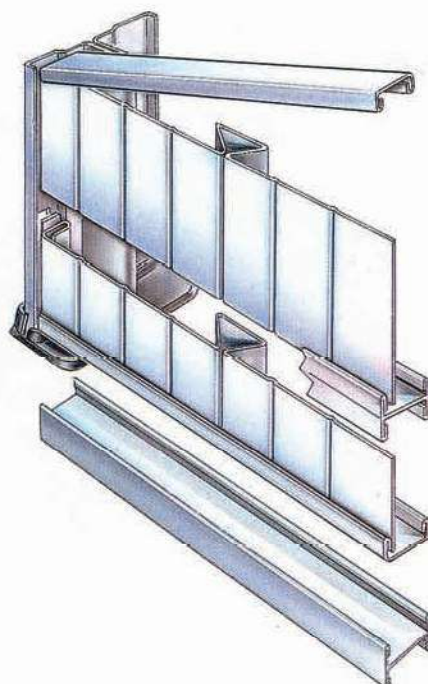
Ref. 29



Ref. 30



Ref. 31



## Back panels H 12 for back-to-back bays

These panels are produced in 600 and 900 mm wide modules and respective compensation panels and in varying heights of 1485-1940-2480 mm (Ref. 29). Any combination in height in the case of back-to-back bays can be made by locating a couple of SUPER 1 beams at junction points, as shown in the sketch at the bottom at left (Ref. 31).



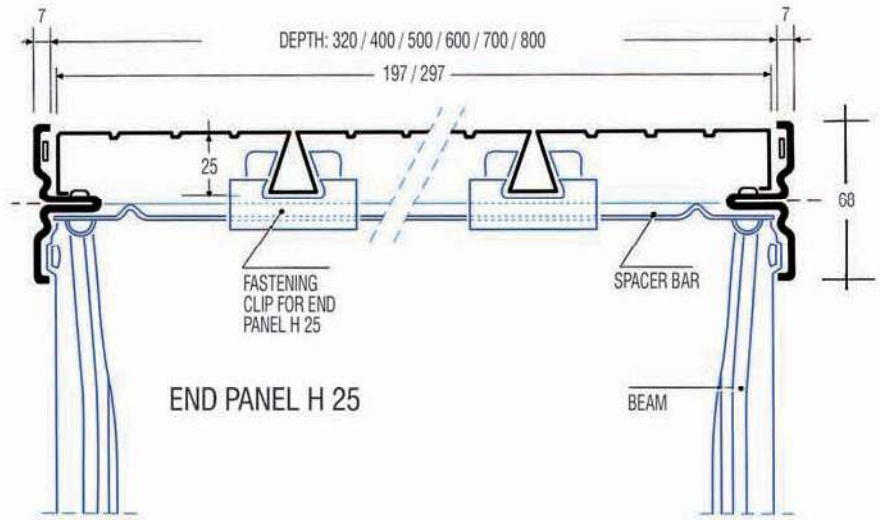


## Side cladding

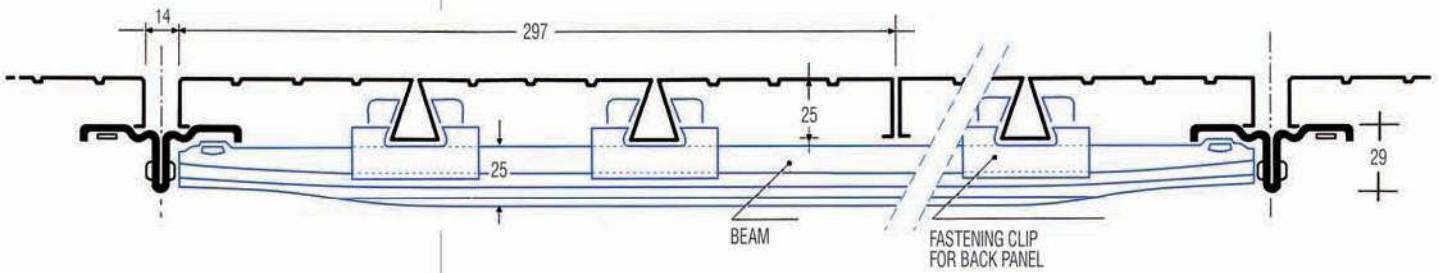
This type of cladding can be used to enclose individual bays within shelving runs and is available for all frame depths. Side cladding panels are fitted between the diagonal spacer bars of the frames. Side frame claddings of any height can be provided combining modular standard cladding panels locating "H" section middle joints (Ref. 30).

When ordering side frame claddings, the respective frames should be built with diagonal spacer bars only; i.e. the horizontal spacer bars have to be replaced with diagonals.

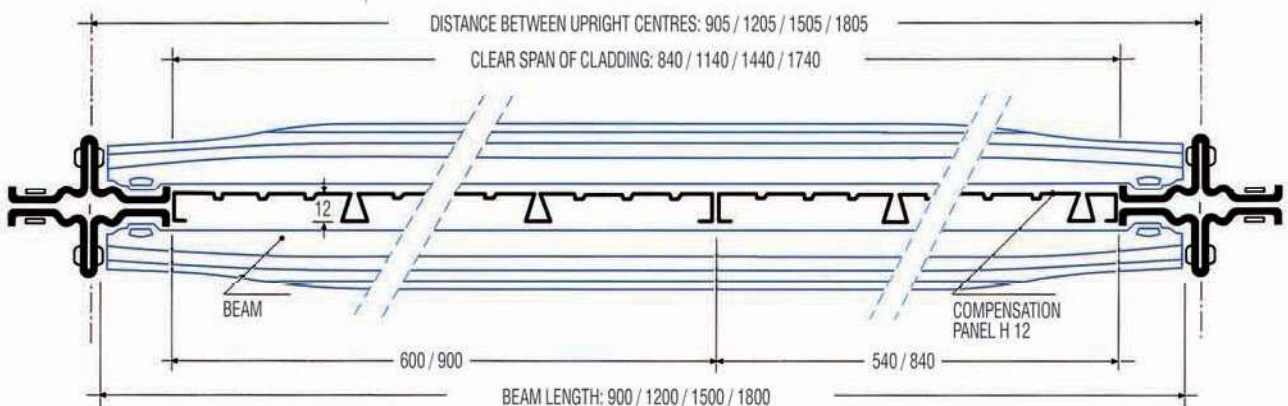
The sketches shown below and beside explain the design and assembly of the various cladding components.



BACK PANEL H 25



BACK PANEL H 12 FOR BACK-TO-BACK BAYS



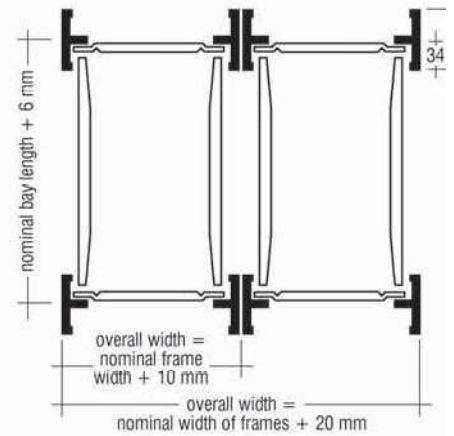


## SUPER 3

### Two-tier-structures with suspended walkways

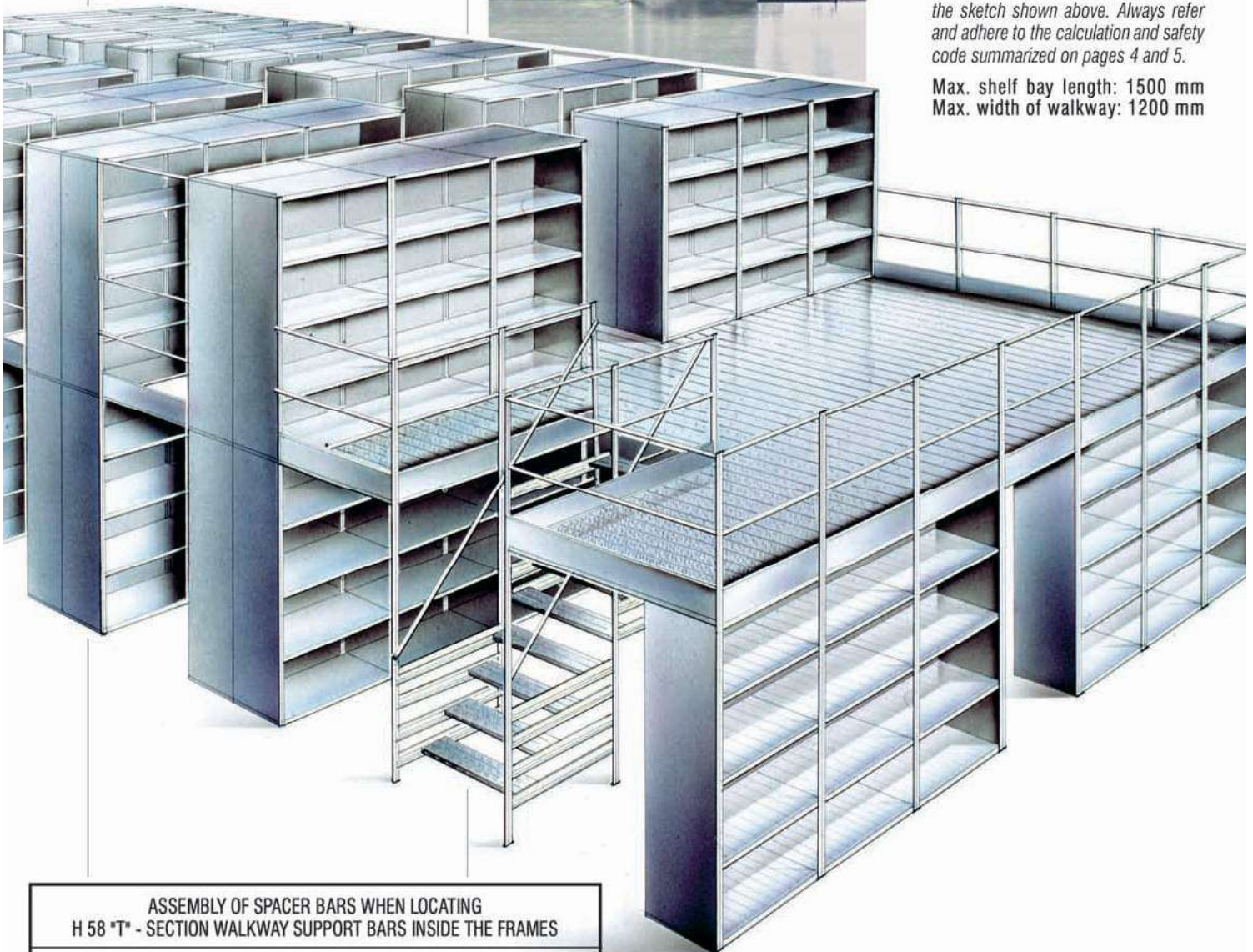
(max. load bearing capacity = 300 daN/m<sup>2</sup>)

Two tier structures, even varied and complex have been designed by METAL-SISTEM combining light weight with high strength in the METALSISTEM tradition, avoiding any type of bolting or welding.



When designing two tier structures, consider the dimensions and details of the sketch shown above. Always refer and adhere to the calculation and safety code summarized on pages 4 and 5.

Max. shelf bay length: 1500 mm  
Max. width of walkway: 1200 mm



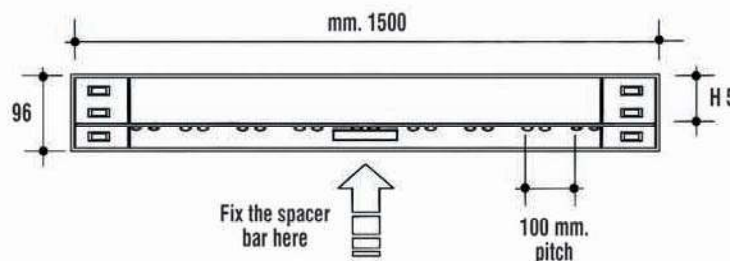
#### ASSEMBLY OF SPACER BARS WHEN LOCATING H 58 "T" - SECTION WALKWAY SUPPORT BARS INSIDE THE FRAMES

L 900 : NO SPACER BAR

L 1200 : ONE SPACER BAR AT THE CENTRE

L 1500 : ONE SPACER BAR AT THE CENTRE

- NOTE:**
- The spacer bars connecting the "T"-walkway support bars must be ordered in a special length (10 mm narrower than those used to assemble the standard frame).
  - When building staircases, customers should fit one spacer bar under each stair tread.
  - The load bearing capacity of the H58-T-section walkway support bars are stated on page 50.









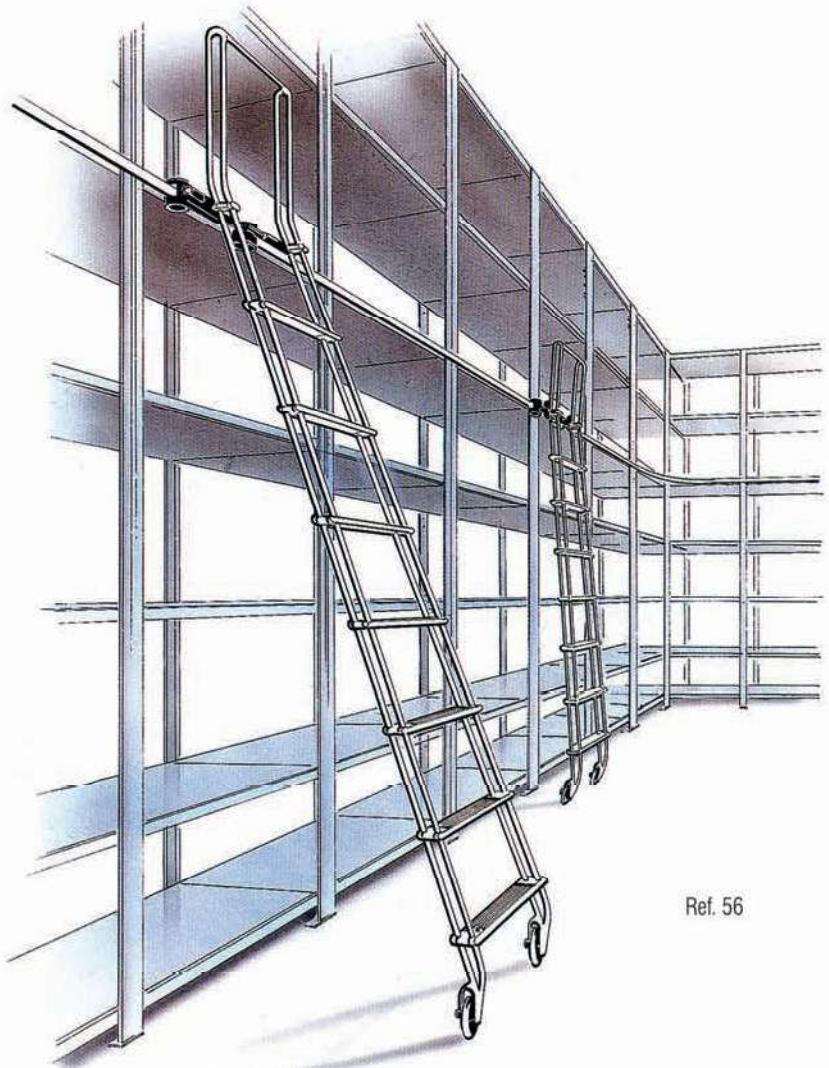
## Mobile Shelving

Thanks to its attractive high-tech design, SUPER 1-2-3 is also a highly suitable and cost effective mobile shelving solution, that can be applied to all environments.



## Mobile Ladders

Mobile Ladders are available in 2.5 and 3 meter height and can be supplied with guide rails and curves to adapt them to any environment (Ref. 56).



Ref. 56



# SIMPLY SUPER - DO-IT-YOURSELF - PATENTED BOLTLESS SHELVING KITS

“SIMPLY SUPER” are do-it-yourself shelving kits, conceived for easy use within the domestic environment.

SIMPLY SUPER is available in two different heights - 1840 and 1576 mm - with 5 or 4 shelf levels in height, respectively.

Starter bays can be easily integrated with add-on-bays. All of them in 900 mm width and 400 mm depth.

Shelves can be regulated in height at a 33 mm pitch.



SIMPLY SUPER is made from prime quality high tensile steel, certified according to EN 10204 3.1B.

## BULL SERIES - PLASTIC BINS - Ref. page 19

COLOURS	BULL 1	BULL 2	BULL 3	BULL 4 BULL 4/D	BULL 5	BULL 6 BULL 6/D	BULL 7 BULL 7/D
green ●	●	●	●	●	●	●	●
blue ●	●	●	●	●	●		
red ●	●	●	●	●	●		
yellow ●	●	●	●	●	●		
grey ●	●	●	●	●	●		

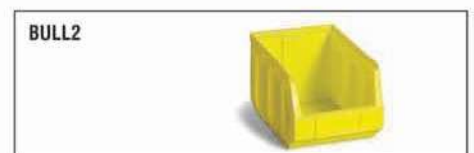
Open fronted bins with very strong structure. Easily to be placed one upon another. Large front label holder. Made from high density polyethylene, for use in environments ranging from -40°C up to +80°C. Fracture and breakage proof. Resistant to acids, oils, solvents and detergents. Ergonomic line with comfortable handles for lifting. Base completely flat and anti-skid. Full length return to clip to louvred panels. Brilliant colours and agreeable design.



BULL 1

L. 105 x D. 88/70 x H. 54

Package of 100 pcs.



BULL 2

L. 105 x D. 167/140 x H. 82

Package of 48 pcs.



BULL 3

L. 144 x D. 237/190 x H. 123

Package of 38 pcs.



BULL 4

L. 205 x D. 345/270 x H. 164

Package of 24 pcs.



BULL 5

L. 298 x D. 485/400 x H. 189

Package of 12 pcs.



BULL 4/D

L. 406 x D. 345/270 x H. 164

can be equipped with 1, 2 or 3 mobile dividers  
Package of 8 pcs.



BULL 6/D  
BULL 6

L. 372 x D. 600/460 x H. 250

Package of 4 pcs.



BULL 7  
BULL 7/D

L. 442 x D. 700/540 x H. 300

Package of 4 pcs.

● = available without fixed divider

◆ = available with fixed divider



\* = horizontal connection element (only for BULL 6 - 6/D and BULL 7 - 7/D)



**METALISTEN**



FEM section X

SUPER 1 / 2 / 3



MODULAR STEEL STORAGE SYSTEMS