# **SUPER 1/2/3**

PATENTED BOLTLESS SHELVING



















FEM section X

בוכוולטר תצוגה ואיחסון בע"מ איזור תעשיה הר טוב ת.ד.11049.ד בית שמש, 20000 טל. 29905888 פקס: 62-9916596 בית שמש, 20000 שמיטול E-mail: info@rbuchwalter.com www.rbuchwalter.com



## THE GROUP







Founded in 1968, METALSISTEM commenced its activities specialising in the design and production of machinery for the cold profiling of metals.

The experience gathered, numerous highly innovative patents resulting from intense research and development and the considerable market success of the first range of cold form zinc coated profiles quickly channelled METALSISTEM into the production of the latter of its activities.

Today the METALSISTEM Group is an articulated network of companies with its head office and main production facility in Rovereto, Italy.

The Group has consolidated its position as one of the major industries within the Material Handling Sector.

Through products and services aimed at providing complete assistance for all warehousing, product showcasing and sales outlet requirements, the companies of the METALSISTEM Group are able to offer their customers a wide range of products of the highest quality, highly competitively priced, with very rapid delivery times and a first class back up service, as well as tailor made solutions providing efficient and rational use of internal storage areas and material handling environments.

Lightness, strength and modular form, coupled with the ease of integrating and expanding already existing structures are but a few of the successful features of the METALSISTEM storage and shelving systems.

The success of the METALSISTEM Group is the result of a precise managerial choice based on research of new production technologies and continuous development and innovation of its product range.

A direction which has produced numerous international patents (testament to the uniqueness of the METALSISTEM product), continuing improvements in safety, quality and versatility. METALSISTEM's company strategy is to offer products of the highest quality, very competitively priced, with rapid delivery times backed up by a first class service.

The numerous product lines are conceived and designed by METALSISTEM's internal Research and Development Centre, as are the profiling lines and equipment required for their manufacture.

The automated production facilities for the cold profiling of metals have enabled METALSISTEM to achieve one of the highest levels of productivity in the world, today.

Rigorous laboratory tests are conducted on the prime material entering production, and on the final product, thus ensuring the continuing evolution of efficiency and quality standards.

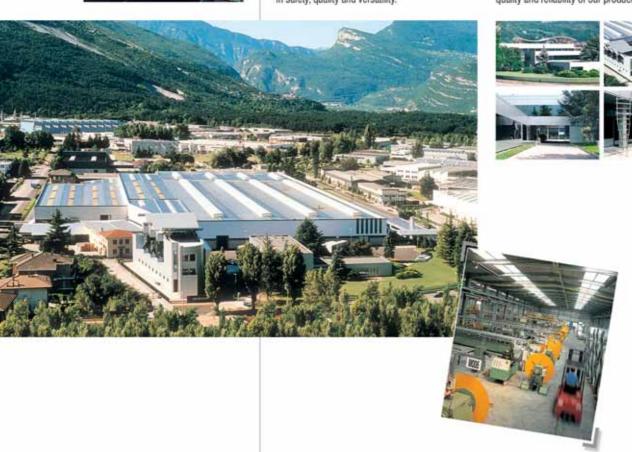
All products have elevated structural characteristics and ensure high quality standards recognised by the most important European certification bodies, such as Germany's TÜV Product Service GmbH, Austria's Ö-NORM, Rome's I.S.P.E.S.L., ACAI/CISI (Associazione Costruttori Acciaio Italiani - Sezione Costruttori Italiani di Scaffalatura Industriale), the latter of which METALSISTEM has membership, and others.

The company's ISO 9001 quality assurance system is certified by IGQ.

With an annual turnover of exceeding 260 Million Euro, the METALSISTEM Group premises occupy a total area of 230.000 m², 125.000 of which are dedicated to production.

The METALSISTEM Group affiliated companies and distributors provide a world wide commercial network covering the domestic market and the industrialised nations of the world, able to satisfy the most demanding needs.

We value greatly the high level of trust that is placed in us by our customers and feel that it is proof of the quality and reliability of our products.

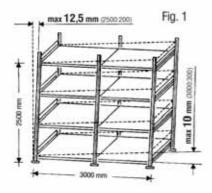


#### STANDARD SPECIFICATIONS CALCULATION AND SAFETY **STANDARDS**

The correct use of the product, both from the technical and design point of view indemnifies both the manufacturer and the customer in the event of improper use. Therefore, METALSISTEM recommends that customers follow its code of practice for design and utilisation of its products.

Ref. No. SUPER 2 System: Year of Construction; 1996 Frame Load Capacity (u.dl.): 2000 kg 200 kg Shelf Load Capacity (u.dl.): 10 kg Weight of Load Unit: Distance between ground 700 mm and first beam level

> METALSISTEM declines all responsability for improper or non authorized use of the racking and its accessories.



#### a) Floor slab loading.

Loading capability should be checked before installation.

b) Site installation. It is of utmost importance that installations are assembled by skilled labour only.



Frames should be built in strict accordance with the assembly diagram shown at right. Particular attention should be paid to a proper assembly and location of security pins

#### c) Rack alignment.

Once the shelving is assembled, it is necessary to align it vertically and horizontally. The perpendicular deviation should not exceed 1/200 of the height (with a maximum

of 15 mm) and correspondingly the horizontal deviation 1/300 of the bay length. See fig. 1.

d) Load bearing capacity plate. Load capacity plates should be fixed in a prominent position and show the product series, the year of construction, the maximum load per bay, per shelf and per sq.mt. (in the case of platforms and/or two-tier-structures), as well as the weight of the load units and the distance from the ground to the first load level.

e) Rack safety standard. In the case of hand loaded static shelving, if the height of the frame is over 3 metres or exceeds over 5 times its depth, the frames must be securely bolted to the floor slab (using the heavy duty base plate art. 67006) and fitted with wall bes or overhead ties (see fig. 2). It is not allowed to use single sided shelving that exceeds over 8 times its depth, unless the frames are connected through walkways or fitted with wall ties or equivalent. The use of cross bracings (vertical and horizontal cross bracing) is necessary in the case of rack runs with frame heights over 3 metres, with less than 4 bays or with distances of more than 700 mm in height between the load levels. The frames must be securely bolted to the floor slab using the heavy duty base plates (art. 67006) and the locking frame spacer bars. As an alternative solution to the use of cross bracings customers may fit the shelving with wall ties or similar. This is valid only in case that the wall or the structure is adequate for that scope and provide an equal or better grade of constraint compared to cross bracing. Within seismic regions it is not allowed at all to use any type of wall ties or similar. For specific calculations and design customers should contact the Metalsistem Technical Department.

f) Installation design.

SUPER 123 structures are to be used as hand loaded shelving only and not as pallet racking, with forklifts, or with wheeled equipment on two-tier-structures. METALSISTEM declines all responsability for improper or non authorized use of the shelving and its accessories

g) Two tier structures/platforms.

Two tier structures with suspended walkways are to be designed exclusively with the SUPER 3 system and must comply with all safety recommendations. In case of platforms with continuous floor/decking (see page 5 - case "B"), the frames are to be assembled as shown in the assembly diagram, i.e. using exclusively diagonal spacer bars, at centre distances of 264 mm, up to the level of the platform. Uprights must be assembled with locking frame spacer bars and heavy duty base plates (art. n° 67006), securely bolted to the floor slab. Staircases must be adequately reinforced and built with the reinforced SUPER 3 uprights only (art. nº 99230), either side of the staircase. The correct use of all safety components mentioned in this brochure is obligatory. The maximum load bearing capacity of walkways/decking within two-tier-structures and platforms is 300 kg/m², the maximum width of walkways is 1200mm, and the maximum shelf bay length is 1500 mm. The frames must be fitted with overhead ties (art. nº 67401).

h) Software reference.

The theoretical calculation is based on the EURO-CODE 3, using the safety factors recommended within the F.E.M. standards. The reference standards for the materials are the followin -EN10204 - EN10142 - EN10147

i) Calculation. The calculation is executed with the ANSYS software and based on finite elements

I) Frame load capacity. The frame load bearing capacities stated in this brochure are calculated in compliance with the following criteria: the first shelf level must be fitted at no more than 700 mm from the ground and the following levels at intervals not exceeding 500 mm, with a minimum of 4 interconnecting bays. Frames are to be bolted to the floor slab.

m) Shelf load bearing capacity.

Data for shelf load bearing capacities shown in the brochure are to be understood as referring to uniformly distributed loadings with a deflection equal to 1/200° of the shelf length. The beam locking pins must always be fitted.

n) Custom-built applications.
The METALSISTEM Technical Department is at its customers' disposal for any specific calculation or

custom-built application.
METALSISTEM reserves the right to apply technical changes to the product. Data, characteristics and dimensions given in this document are merely indicative.



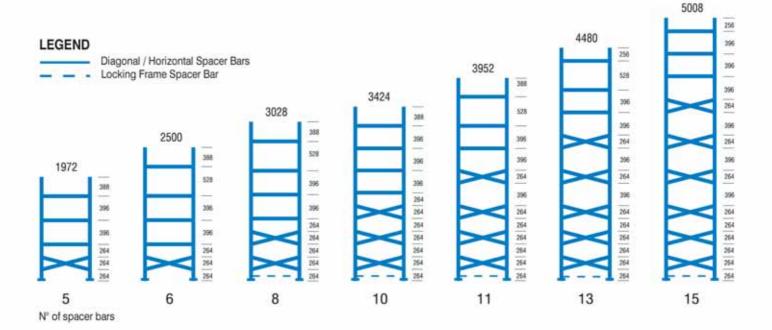




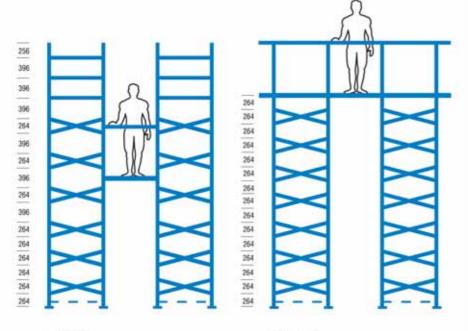


## DIAGRAM FOR ASSEMBLING BRACING FOR FRAMES

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







CASE "A" Two tier structure with suspended walkways

CASE "B" Platform with continuous floor

#### 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-tierstructure 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/m² and the maximum width of the walkways is 1200 mm. The maximum shelf bay length is 1500 mm.











## THE COMPANY TODAY

METALSISTEM products are now in use in a great many installations throughout the world, and after more than 30 years production, we value greatly the high level of trust that is placed in us by our customers and feel that it is proof of the quality of our products.

The shelving components are produced on fully automated production lines.

The folding and cold processing techniques developped by METALSISTEM are designed to obtain light and extremely strong components.

Lightness, strength and modular form, coupled with the ease of integrating and expanding already existing structures are but a few of the successful features of the METALSISTEM Industrial Storage Systems. Ideal storage solutions for a whole host of products supplied worldwide are created here thanks to a total commitment to research and development.

All METALSISTEM components are subjected to regular and rigorous technical tests. These cover both uniformly distributed and concentrated loadings.









## 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.

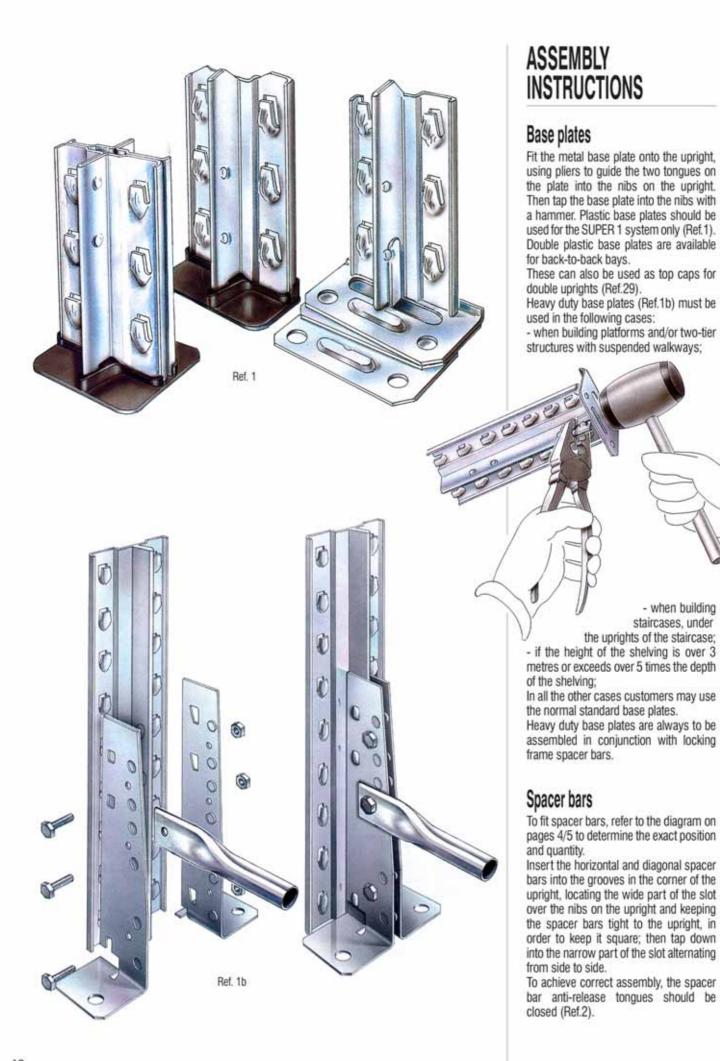
The design allows for high load bearing from light gauge materials. The use of high quality zinc coated steel ensures a high level of durability.

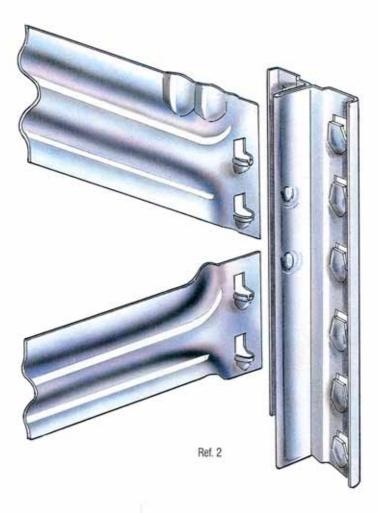
The structural components of the SUPER 1/2/3 systems are made from high tensile steel, certified according to EN 10204 3.1B.







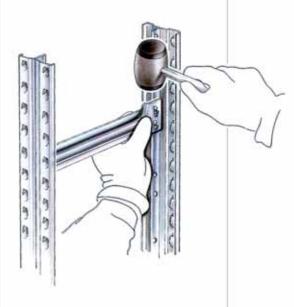




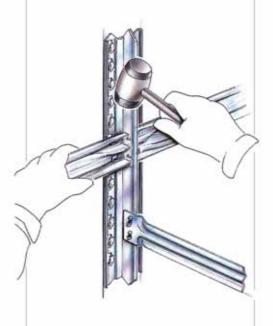


#### Beams

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,

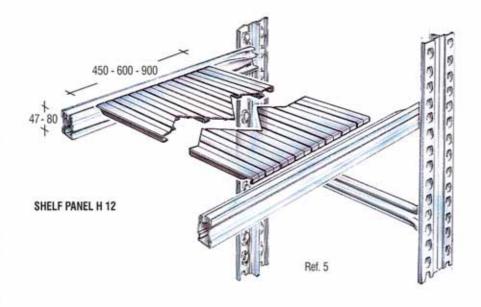


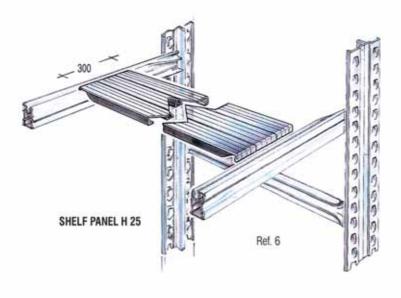
with a plastic-faced hammer to avoid damage to the beam (Ref. 3). The beams, once assembled, should be secured with the respective beam locking pins (see page 21, Ref. 22).

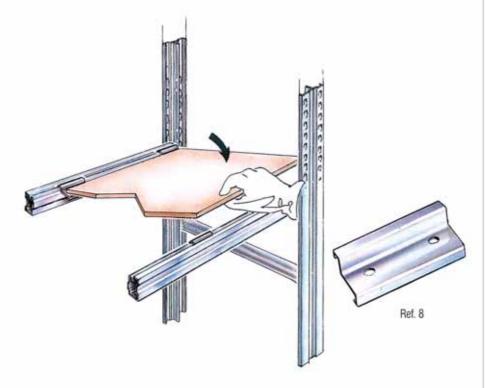


For the storage of tyres or round materials which are placed directly onto the beams, plastic strips are available to avoid damage to the products stored; these strips are fitted into the recess of the beams (see page 21, Ref. 21).





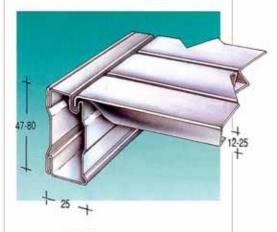




## Shelves

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).

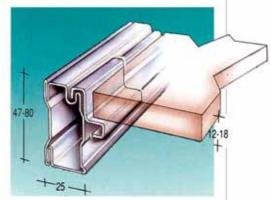


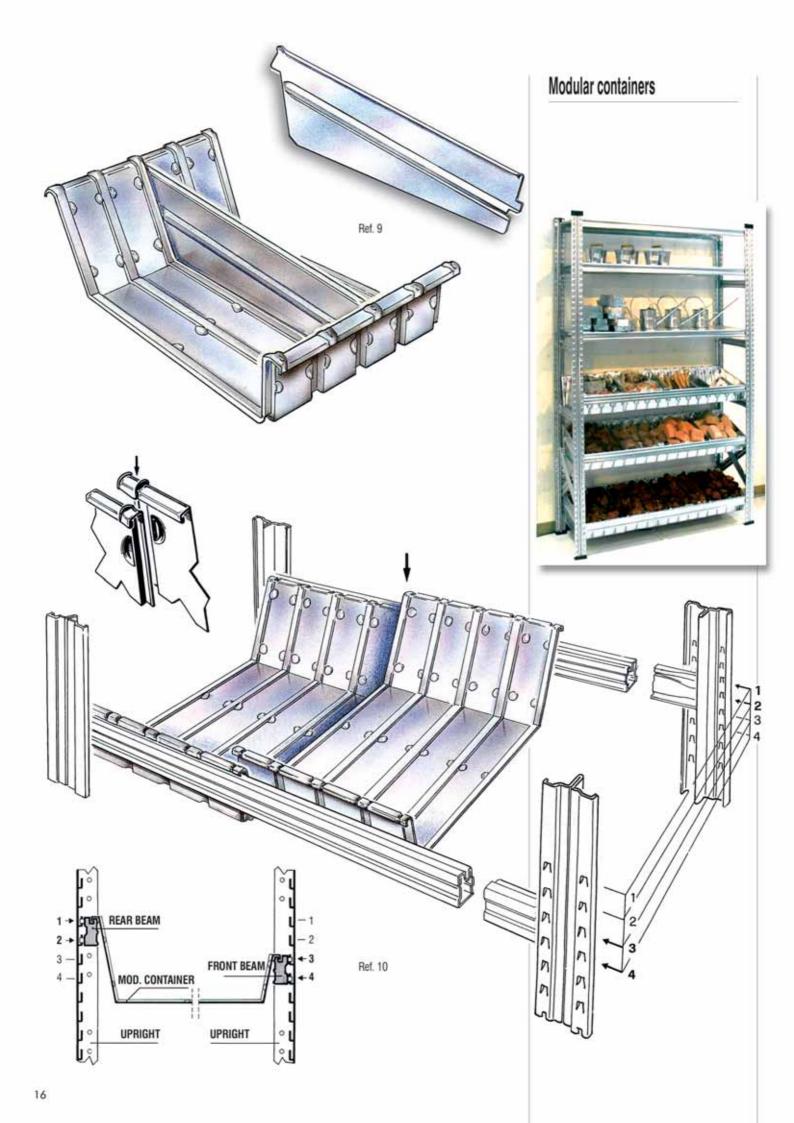
Ref. 6 bis



## Chipboard shelves

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





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).

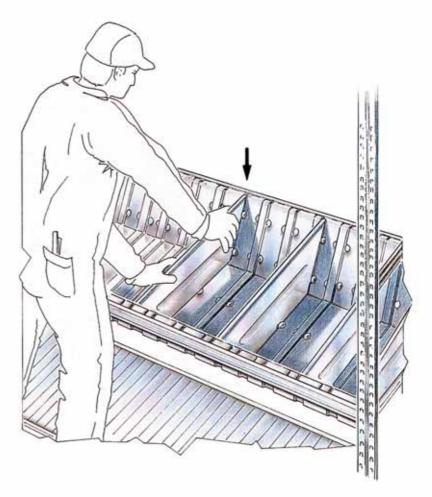
When exceeding the depth of 800 mm, it is advisable to use back-to-back bays, to increase stability.



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).

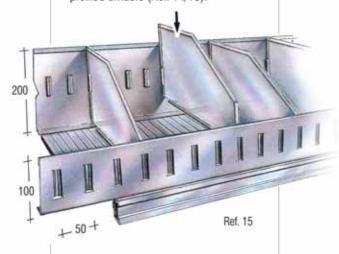
#### Chest of drawers

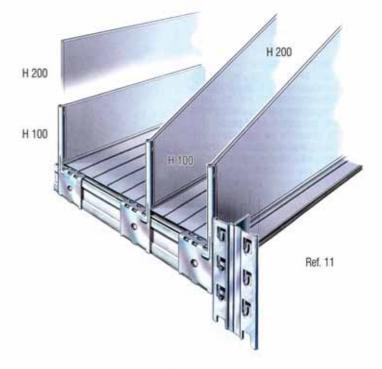
The modular drawers are fully integrated with the SUPER 1-2-3 series and are located directly on the frames.

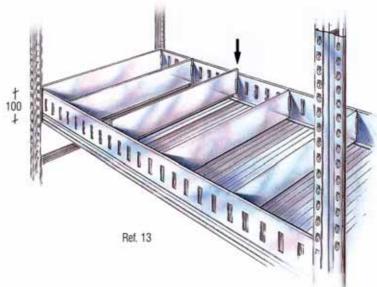
A cost effective solution for the storage of small items.

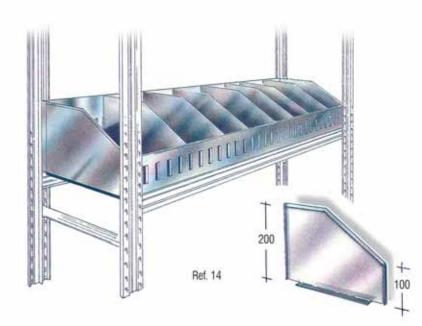


Bin front panels 100 mm high and rear panels 200 mm high are fitted with profiled dividers (Ref. 14/15).













## Plastic Bins "Bull Series"

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



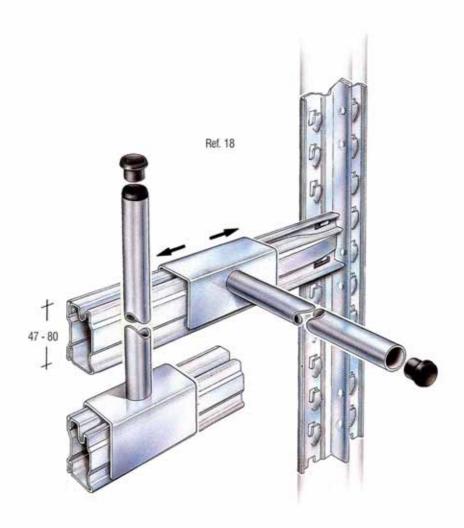
Fixed height dividers

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).







## 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.

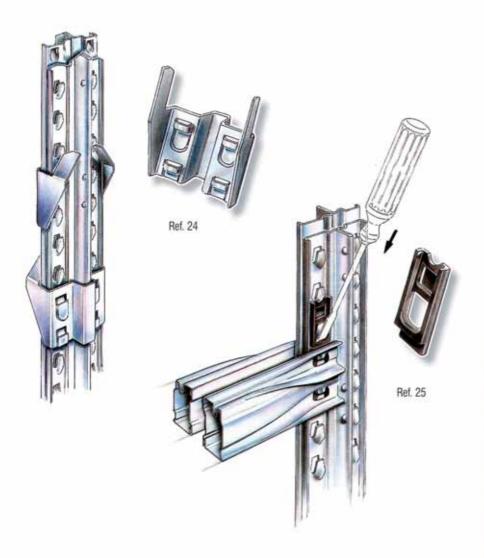
In order to prevent accidental lifting of the beams and shelves, the security pins should be used in all applications (Ref.22). Assembly instructions as per the sketch at right.

#### Label Holder

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

Dimensions 100x40 (Ref.23).





## 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 ad mid height (Ref. 24).

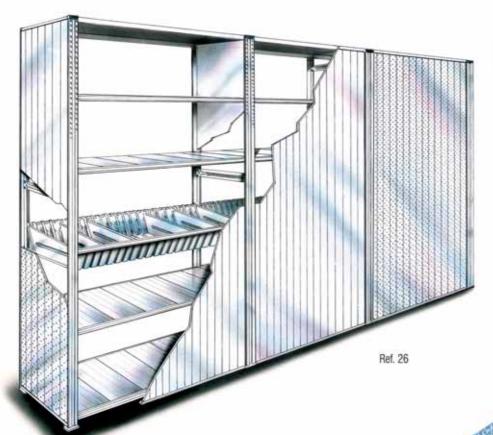
## Security pins for beams in back-to-back bays

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



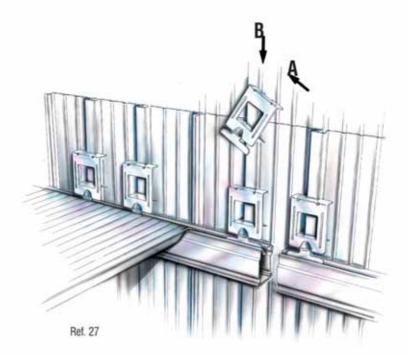
#### CLADDING BACK AND END PANELS H25

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).



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).



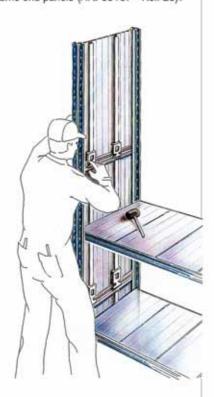


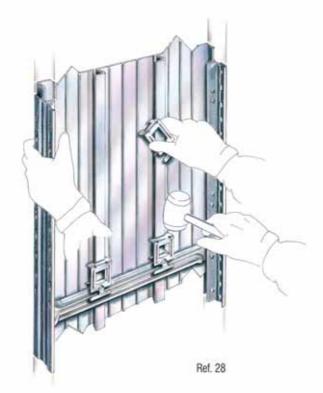


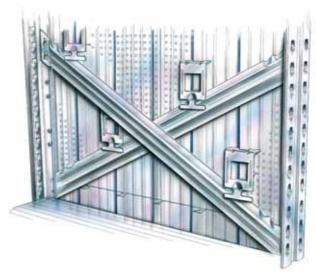
Punched hole back and end panels H25 (according to European Standard) are also available, similar to those described before, with 5 mm holes at 25 mm centres.

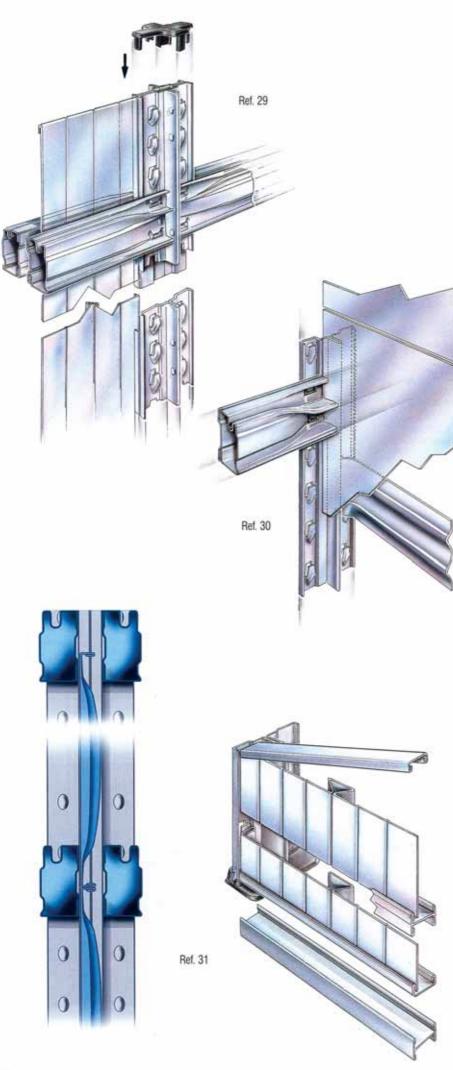
centres.

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











## 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

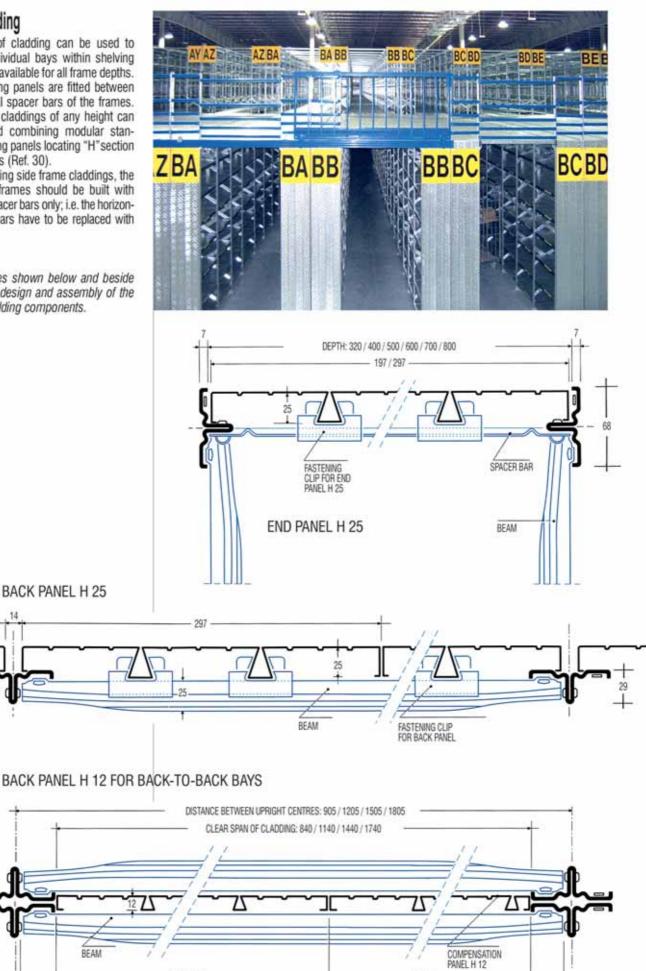
This type of cladding can be used to enclose individual bays within shelving runs and is available for all frame depths. Side cladding panels are fitted between the diagonal spacer bars of the frames. Side frame claddings of any height can be provided combining modular standard cladding panels locating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

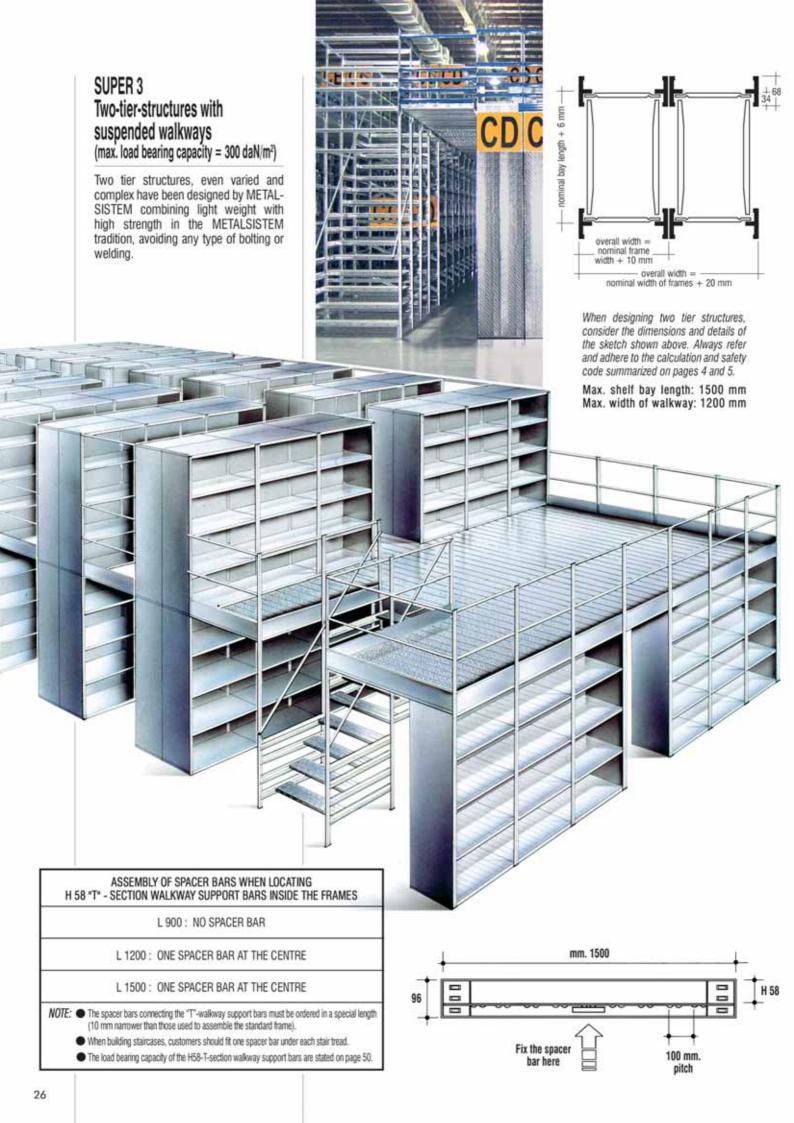
**BACK PANEL H 25** 

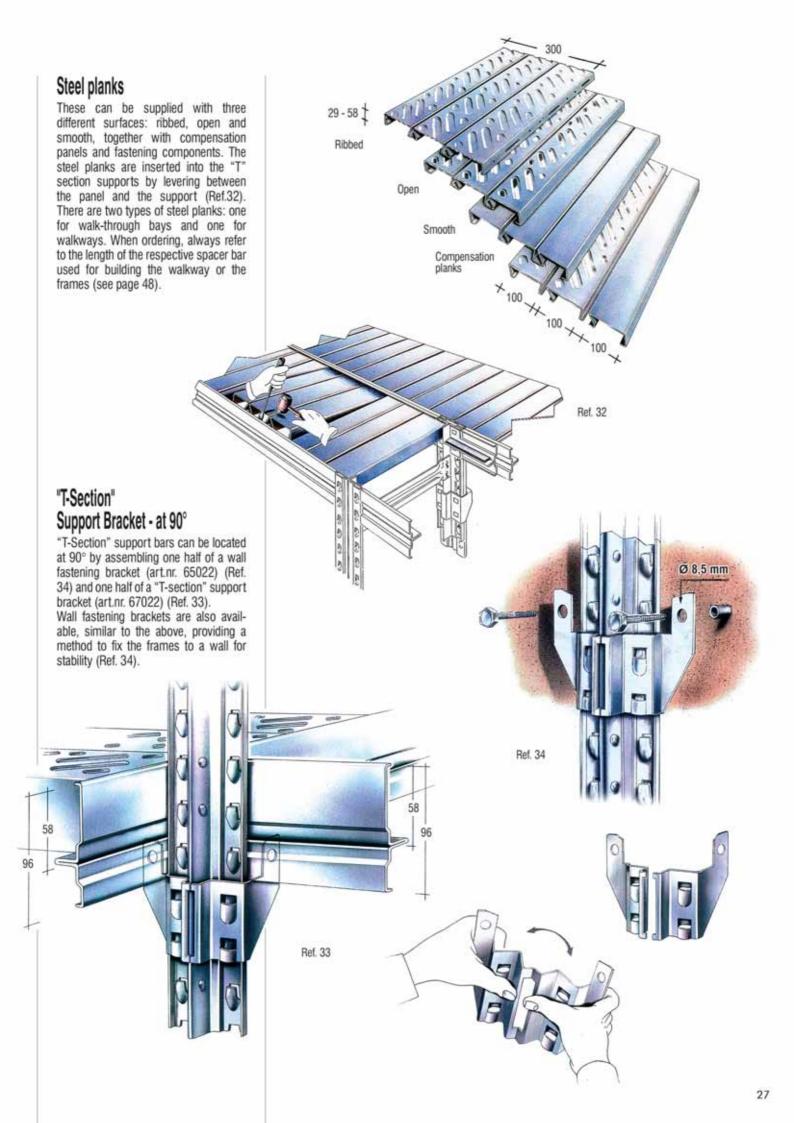
BEAM

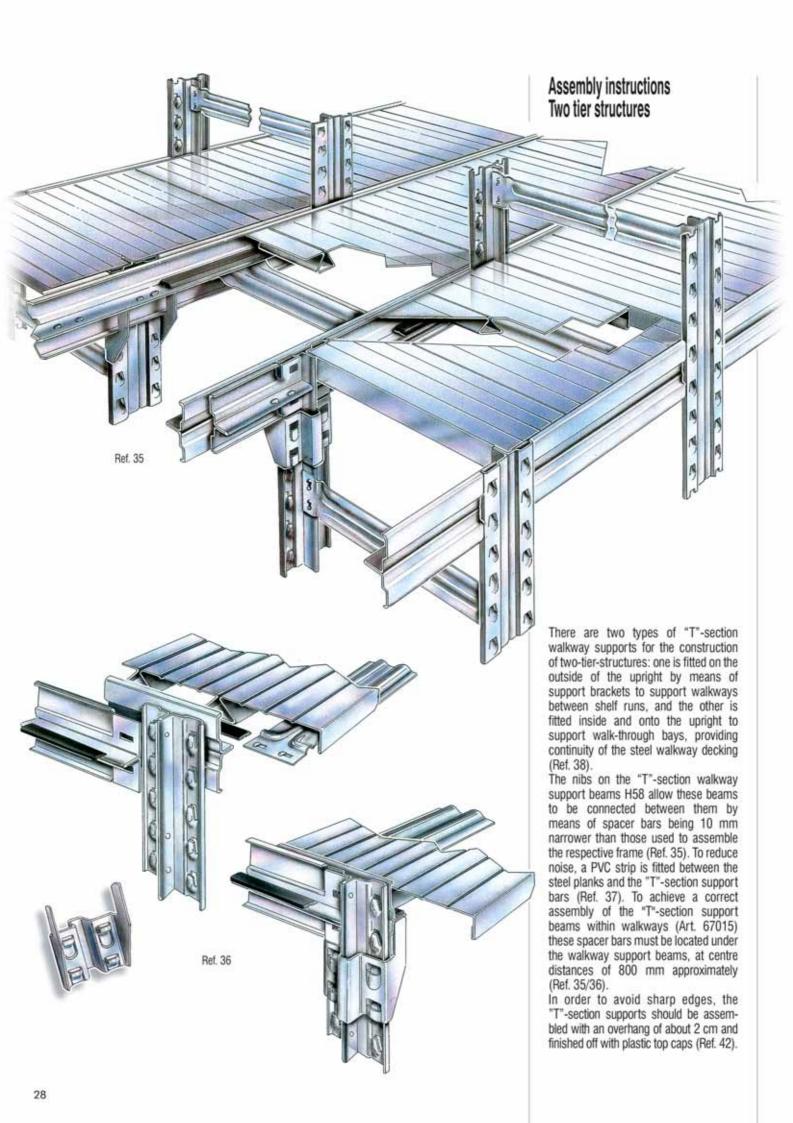


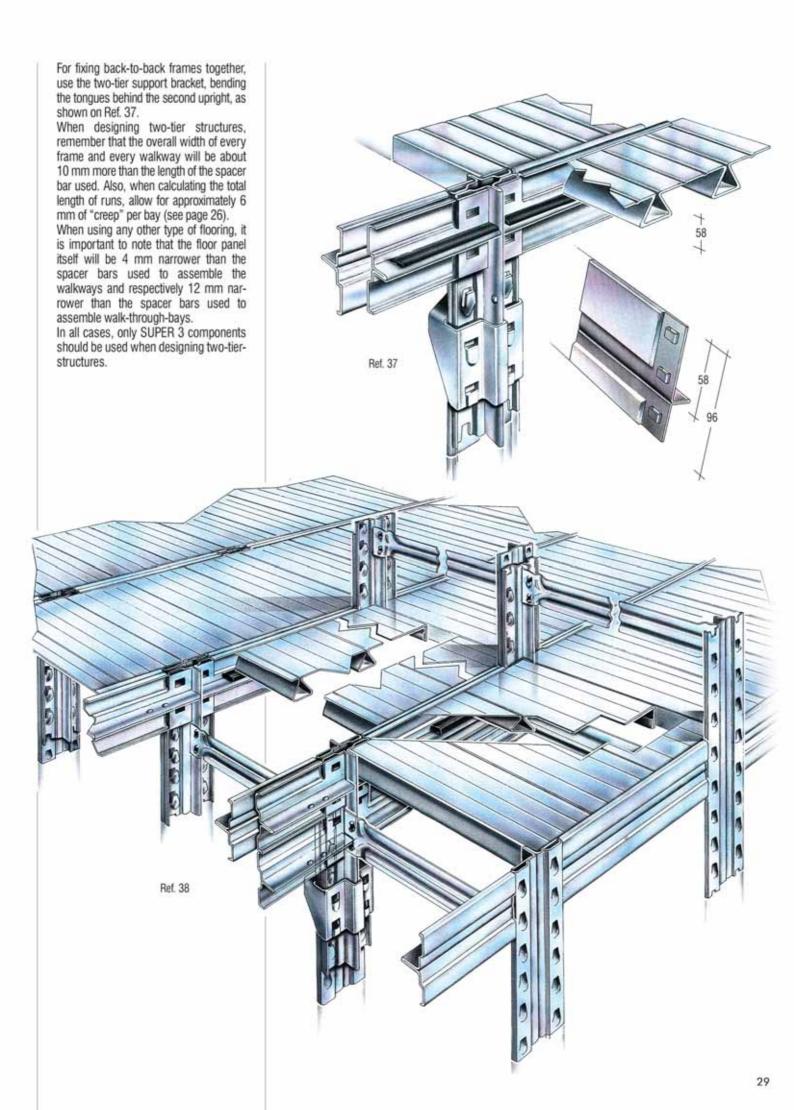
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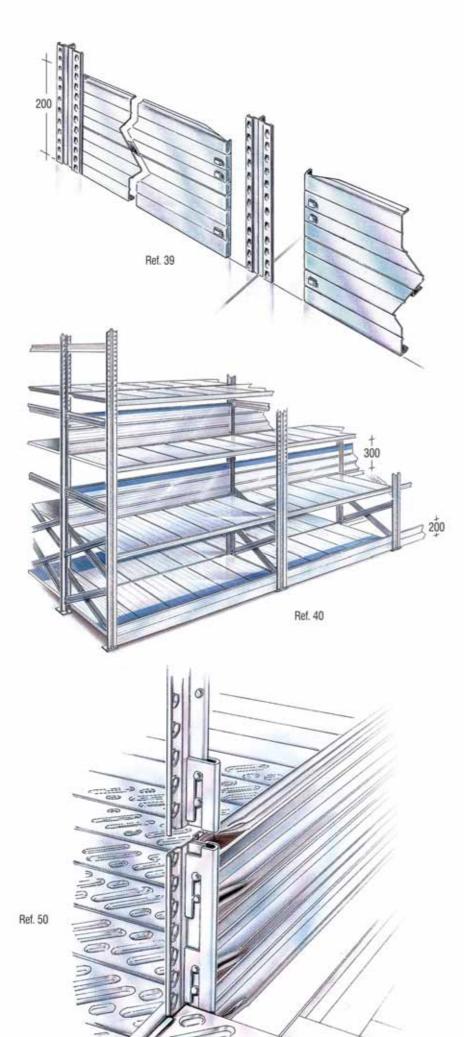
BEAM LENGTH: 900 / 1200 / 1500 / 1800











#### **Kickboards**

Three different types of kickboards are available: for use in the direction of the beams, at the end of a run within uprights, or for walkway ends.

Kickboards are made from two oval shaped tubes (the same items used to build the handrails) fixed to the uprights and finished off with a metal sheet element located onto the oval shaped tubes by self tapping screws. For correct ordering of these items and dimensions, please see instructions on page 48 of this brochure.

The use of beam retaining clips is mandatory.



In the direction of the beams, shelf boards are available in two different heights, 200 or 300 mm (article n° 64016-64040).

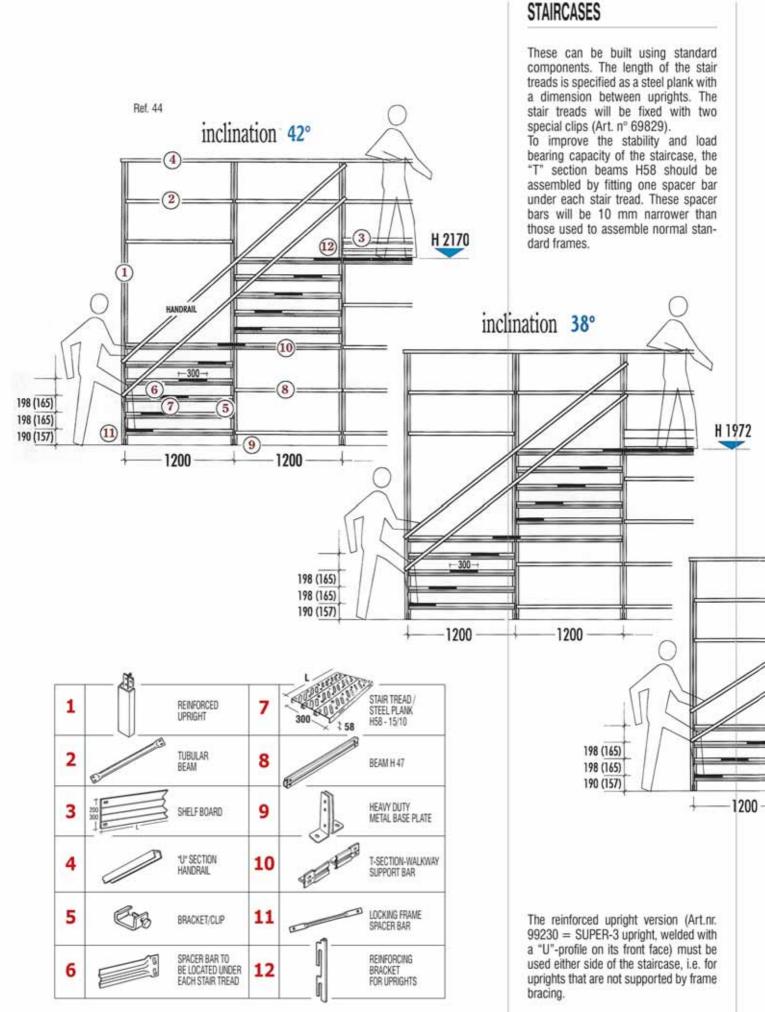
These items have flanged ends with slots to be located onto the uprights (Ref. 39).

## Upright reinforcement

Uprights that are used as newel posts for handrail should always be fitted with the reinforcing brackets shown (Ref.50).





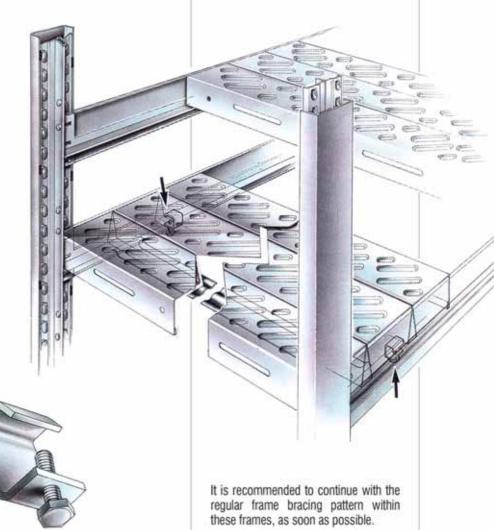














## Mobile Shelving

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).





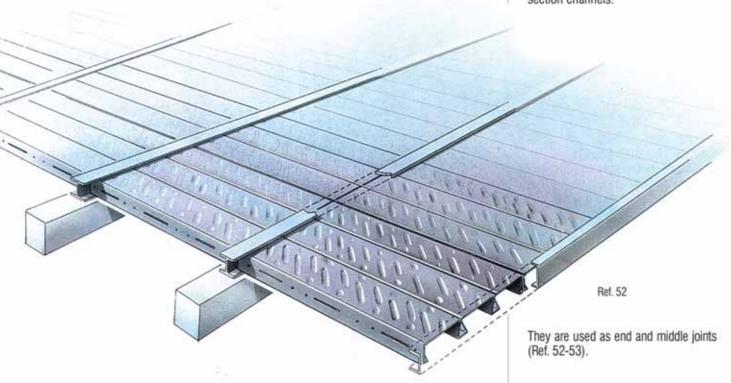




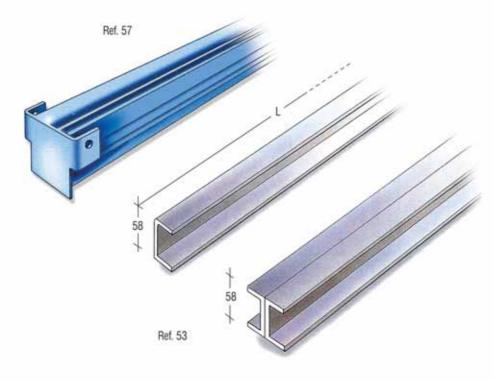




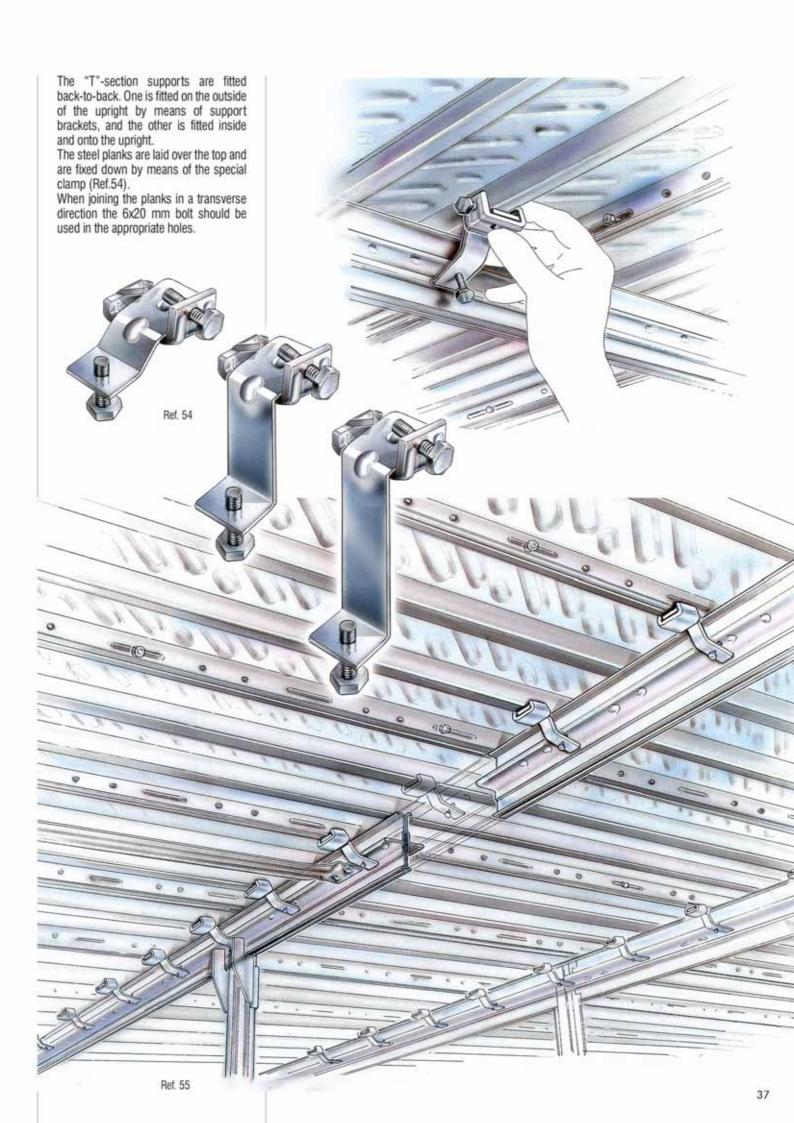
"T"-sections can be used as support beams for the steel planking (Ref.55). Floors of any dimension can be built in conjunction with "H" joints and "U" section channels.



The 70-mm-section walkway beam (art. 99253B) provides an alternative solution to the use of the "T"-section support bars. It enables the steel planks to be laid in length direction along the walkways (Ref. 57).

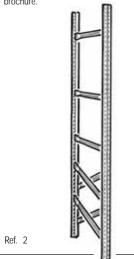




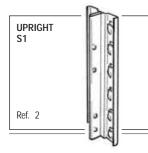


FRAMES COMPLETE WITH UPRIGHTS, HORIZONTAL AND DIAGONAL BRACING LOAD BEARING CAPACITY Kg. 1500 EACH

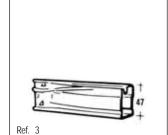
Regarding technical data, standard specifications and assembly diagram, please refer to pages 4/5 of the SUPER brochure.



component	height mm	depth mm	horizontal and diagonal spacer bars
70001	1972	320	5
70004	2500	320	6
70007	3028	320	8
70010	1972	400	5
70010	2500	400	 6
70013	3028	400	8
70010	3020	400	Ü
70019	1972	500	5
70022	2500	500	6
70025	3028	500	8
70028	1972	600	5
70031	2500	600	6
70034	3028	600	8
70037	1972	700	5
70037	2500	700	 6
70040	3028	700	8
70043	3020	700	Ü
70046	1972	800	5
70049	2500	800	6
70052	3028	800	8



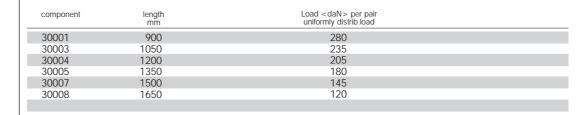
component	height mm		
	mm		
10001	1972		
10004	2500		
10007	2500 3028		



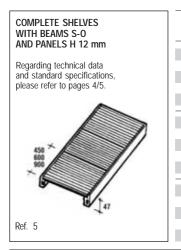
component	length mm	Load <dan> per pair uniformly distrib.load</dan>	
30001L	900	200	
30003L	1050	170	
30004L	1200	150	

The load bearing capacity of the beams is to be understood as referring to uniformly distributed loads, per pair of beams. The load bearing indication is valid and applicable for a use of the beams with modular shelves and/or modular containers only.

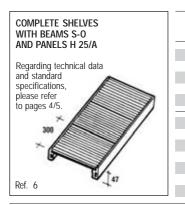
BEAM S-0



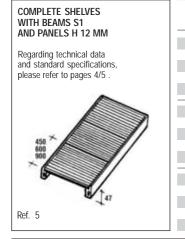




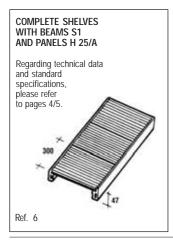
component	length	depth	Load capacity <dan> uniformly distrib.load</dan>
	mm	mm	uniformly distrib.load
80001	900	320	200
80004	900	400	200
80007	900	500	185
80010	900	600	150
80013	900	700	130
00013	900	700	130
00014	1050	320	170
80014	1050		
80015	1050	400	170
80016	1050	500	170
80017	1050	600	170
80018	1050	700	155
80019	1200	320	150
80022	1200	400	150
80025	1200	500	150
80028	1200	600	150
80031	1200	700	150
00001	1200	.00	



component	length mm	depth mm	Load capacity < daN> uniformly distrib.load
000044	000	400	200
80004A	900	400	200
80007A	900	500	200
80010A	900	600	200
80013A	900	700	200
80022A	1200	400	150
80025A	1200	500	150
80028A	1200	600	150
80031A	1200	700	150



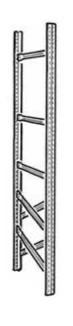
component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>
80501	900	320	280
80504	900	400	235
80507	900	500	185
80510	900	600	150
80513	900	700	130
80519	1200	320	205
80522	1200	400	205
80525	1200	500	205
80528	1200	600	205
80531	1200	700	180
80537	1500	320	145
80540	1500	400	145
80543	1500	500	145
80546	1500	600	145
80549	1500	700	145



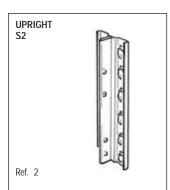
component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>	component	length mm	depth mm	Load capacity < daN> uniformly distrib.load
80504A	900	400	280	80540A	1500	400	145
80507A	900	500	280	80543A	1500	500	145
80510A	900	600	280	80546A	1500	600	145
80513A	900	700	280	80549A	1500	700	145
80516A	900	800	230	80552A	1500	800	130
80522A	1200	400	205				
80525A	1200	500	205				
80528A	1200	600	205				
80531A	1200	700	205				
80534A	1200	800	180				

FRAMES COMPLETE WITH UPRIGHTS, HORIZONTAL AND DIAGONAL BRACING LOAD BEARING CAPACITY Kg. 2000 EACH

Regarding technical data, standard specifications and assembly diagram, please refer to pages 4/5 of the SUPER brochure.

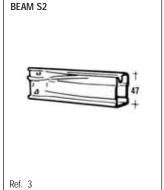


component	height mm	depth mm	horizontal and diagonal spacer bars
71001	1972	320	5
71004	2500	320	6
71007	3028	320	8
71010	3424	320	10
71016	1972	400	5
71019	2500	400	6
71022	3028	400	8
71025	3424	400	10
71031	1972	500	5
71034	2500	500	6
71037	3028	500	8
71040	3424	500	10
71046	1972	600	5
71049	2500	600	6
71052	3028	600	8
71055	3424	600	10
71061	1972	700	5
71064	2500	700	6
71067	3028	700	8
71070	3424	700	10
71076	1972	800	5
71079	2500	800	6
71082	3028	800	8
71085	3424	800	10
71000	0121	000	10



Ref. 2

component	height mm			
11001	1972			
11004	2500			
11007	3028			
11010	3424			



component	length mm	Load <dan> per pair uniformly distrib.joad</dan>	
31501	900	390	
31503	1050	335	
31504	1200	275	
31505	1350	220	
31507	1500	175	
31508	1650	145	

#### COMPLETE SHELVES WITH BEAMS S2 AND PANELS H 12

Regarding technical data and standard specifications, please refer to pages 4/5 of the SUPER brochure.



component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>	
81001	900	320	305	
81004	900	400	235	
81007	900	500	185	
81010	900	600	150	
81013	900	700	130	
81019	1200	320	275	
81022	1200	400	275	
81025	1200	500	260	
81028	1200	600	210	
81031	1200	700	180	
81037	1500	320	175	
81040	1500	400	175	
81043	1500	500	175	
81046	1500	600	175	
81049	1500	700	175	

#### COMPLETE SHELVES WITH BEAMS S2 AND PANELS H 25/A

Ref. 5

Regarding technical data and standard specifications, please refer to pages 4/5.

component	length	depth	Load capacity <dan></dan>	
	mm	mm	uniformly distrib.load	
81504A	900	400	390	
81507A	900	500	390	
81510A	900	600	345	
81513A	900	700	285	
81516A	900	800	230	
81522A	1200	400	275	
81525A	1200	500	275	
81528A	1200	600	275	
81531A	1200	700	275	
81534A	1200	800	250	
81540A	1500	400	175	
81543A	1500	500	175	
81546A	1500	600	175	
81549A	1500	700	175	
81552A	1500	800	160	



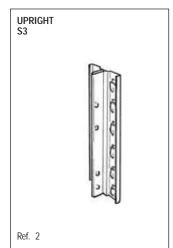
Ref. 6

FRAMES COMPLETE WITH UPRIGHTS, HORIZONTAL AND DIAGONAL BRACING LOAD BEARING CAPACITY Kg. 3600 EACH

Regarding technical data, standard specifications and assembly diagram, please refer to pages 4/5 of the SUPER brochure.

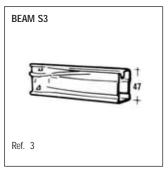


component	height mm	depth mm	horizontal and diagonal spacer bars	component	height mm	depth mm	horizontal and diagonal spacer bars
72001	1972	320	5	72085	1972	700	5
72004	2500	320	6	72088	2500	700	6
72007	3028	320	8	72091	3028	700	8
72010	3424	320	10	72094	3424	700	10
72013	3952	320	11	72097	3952	700	11
72016	4480	320	13	72100	4480	700	13
72019	5008	320	15	72103	5008	700	15
72022	1972	400	5	72106	1972	800	5
72025	2500	400	6	72109	2500	800	6
72028	3028	400	8	72112	3028	800	8
72031	3424	400	10	72115	3424	800	10
72034	3952	400	11	72118	3952	800	11
72037	4480	400	13	72121	4480	800	13
72040	5008	400	15	72124	5008	800	15
72043	1972	500	5				
72043	2500	500					
72046	3028	500	6 8				
72049	3424	500	10				
72055	3952	500	11				
72058	4480	500	13				
72061	5008	500	15				
72001	3000	300	13				
72064	1972	600	5				
72067	2500	600	6				
72070	3028	600	8				
72073	3424	600	10				
72076	3952	600	11				
72079	4480	600	13				
72082	5008	600	15				
	2230						



Ref. 2

component	height mm	
12001	1972	
12004	2500	
12007	3028	
12010	3424	
12013	3952	
12016	4480	
12019	5008	

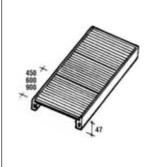


component	length mm	load capacity kg per pair, u.d.l	
32501	900	450	
32503	1050	385	
32504	1200	320	
32505	1350	255	
32507	1500	205	
32508	1650	170	
32510	1800	140	

#### COMPLETE SHELVES WITH BEAMS S3 AND PANELS H 12

component

Regarding technical data and standard specifications, please refer to pages 4/5.



1200 180 600 

Load capacity <daN> uniformly distrib.load

### COMPLETE SHELVES

Ref. 5

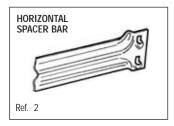
WITH BEAMS S3 AND PANELS H 25/A

Regarding technical data and standard specifications, please refer to pages 4/5.

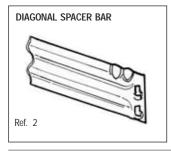
component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>	
82504A	900	400	450	
82507A	900	500	420	
82510A	900	600	345	
82513A	900	700	285	
82516A	900	800	230	
82522A	1200	400	320	
82525A	1200	500	320	
82528A	1200	600	320	
82531A	1200	700	320	
82534A	1200	800	290	
0233471	1200	000	270	
82540A	1500	400	205	
82543A	1500	500	205	
82546A	1500	600	205	
82549A	1500	700	205	
82552A	1500	800	180	
82564A	1800	400	140	
82567A	1800	500	140	
82570A	1800	600	140	
82573A	1800	700	140	
02373A	1000	700	170	



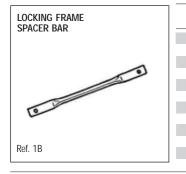
Ref. 6



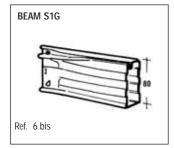
component	depth mm	
41001	320	
41004	400	
41007	500	
41010	600	
41013	700	
41016	800	



component	depth mm
43001	320
43004	400
43007	500
43010	600
43013	700
43016	800

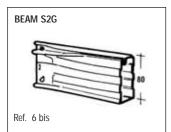


component	depth mm			
67031	320			
67032	400			
67033	500			
67034	600			
67035	700			
67036	800			



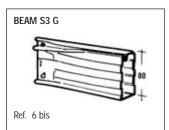
32604 1500 350 32607 1800 310	component	length mm	Load <dan> per pair uniformly distrib.load</dan>	
32607 1800 310	32604	1500	350	
	32607	1800	310	

The load bearing capacity of the beams is to be understood as referring to uniformly distributed loads, per pair of beams. The load bearing indication is valid and applicable for a use of the beams with modular shelves and/or modular containers only.

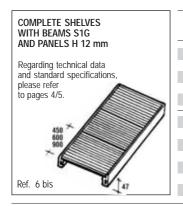


component	length mm	Load <dan> per pair uniformly distrib.load</dan>	
34004	1500	520	
34007	1800	430	

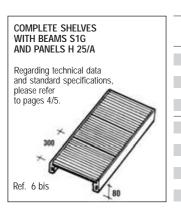
The load bearing capacity of the beams is to be understood as referring to uniformly distributed loads, per pair of beams. The load bearing indication is valid and applicable for a use of the beams with modular shelves and/or modular containers only.



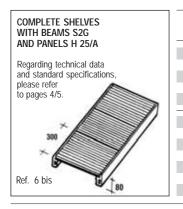
component	length mm	Load <dan> per pair uniformly distrib.load</dan>	
35004	1500	640	
35007	1800	530	



component	length	depth	Load capacity <dan> uniformly distrib.load</dan>
	mm	mm	uniformly distrib.load
83116	1500	320	350
83119	1500	400	350
83122	1500	500	315
83125	1500	600	260
83128	1500	700	220
83131	1800	320	310
83134	1800	400	310
83137	1800	500	310
83140	1800	600	305
83143	1800	700	260



component	length mm	depth mm	Load capacity < daN > uniformly distrib.load
83340A	1500	400	350
83343A	1500	500	350
83346A	1500	600	350
83349A	1500	700	350
83352A	1500	800	350
83364A	1800	400	310
83367A	1800	500	310
83370A	1800	600	310
83373A	1800	700	310
03373A	1000	700	310



component	length mm	depth mm	Load capacity < daN > uniformly distrib.load
83540A	1500	400	520
83543A	1500	500	520
83546A	1500	600	520
83549A	1500	700	520
83552A	1500	800	425
83564A	1800	400	430
83567A	1800	500	430
83570A	1800	600	430
83573A	1800	700	430

#### COMPLETE SHELVES WITH BEAMS S3G AND PANELS H 25/A

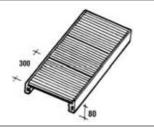
84570A

84573A

Regarding technical data and standard specifications, please refer to pages 4/5.

1800

1800



Ref. 6 bis				180
component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>	
84540A	1500	400	640	
84543A 84546A	1500 1500	500 600	640 640	
84549A 84552A	1500 1500	700 800	475 425	
84564A	1800	400	530	
84567A	1800	500	530	

530

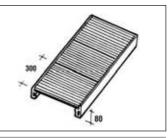
530

600

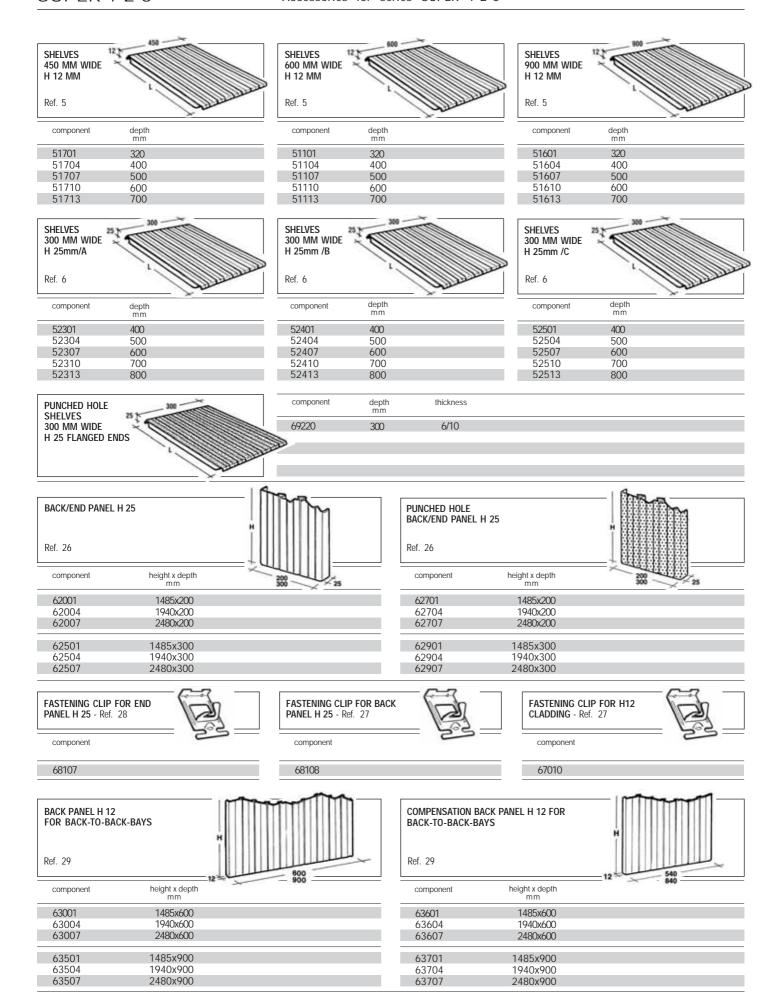
#### COMPLETE SHELVES WITH BEAMS S3G AND PANELS H 25/B

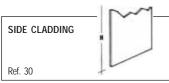
Regarding technical data and standard specifications, please refer to pages 4/5.

Ref. 6 bis



component	length mm	depth mm	Load capacity <dan> uniformly distrib.load</dan>	
84540B	1500	400	640	
84543B	1500	500	640	
84546B	1500	600	640	
84549B	1500	700	550	
84552B	1500	800	475	
84564B	1800	400	530	
84567B	1800	500	530	
84570B	1800	600	530	
84573B	1800	700	530	





Noi. 30	3	
component	height x depth mm	
67501	1485 x 320	
67504	1940 x 320	
67507	2480 x 320	
67510	1485 x 400	
67513	1940 x 400	
67516	2480 x 400	
67519	1485 x 500	
67522	1940 x 500	
67525	2480 x 500	
67528	1485 x 600	
67531	1940 x 600	
67534	2480 x 600	
67537	1485 x 700	
67540	1940 x 700	
67543	2480 x 700	
67546	1485 x 800	
67549	1940 x 800	
67552	2480 x 800	
		_



component	length
69825	6 x 20



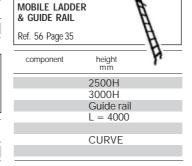
component

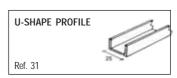


	[4]
component	length
08005	8 x 50



component	length x height mm	
68201	900x2000H	
68204	1200x2000H	
68207	1500x2000H	
68210	900x2500H	
68213	1200x2500H	
68216	1500x2500H	





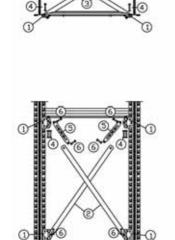
	component	length mm
for H25	69800	4000
for H29	69801	4000
for H58	69807	4000
for H68	69808	4000

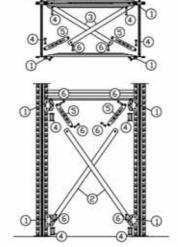


	component	length mm
for H25	69803	4000
for H29	69804	4000
for H58	69810	4000

#### CROSS BRACING SUPER 1/2/3 SHELVING

Regarding design, calculation, assembly instructions and ordering, please refer to the technical manual "ISQ03\_04/C-012 - CROSS BRACINGS FOR LIGHT DUTY SHELVING"





#### CROSS BRACING SUPER 1/2/3 SERIES

Cross bracings (horizontal and vertical ones) have to be used in SUPER 1/2/3 shelving structures with frame heights exceeding 3000 mm. The sketches shown above explain the make up and assembly of the cross bracing concept referring to a 3000 mm high frame within a single and double sided shelving row.

## **MACROCODE 67023** for single sided shelving. The macrocode 67023 comprises all components shown

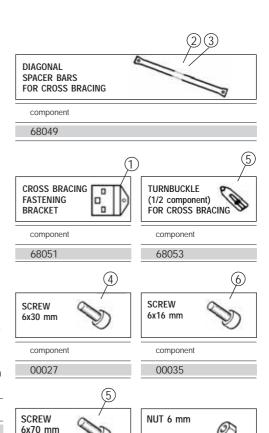
The macrocode 67023 comprises all components shown in the sketch, except items 2-3

item	Macrocode 67023 q.ty	
68051	6	
68053	8	
00020	28	
00027	16	
00035	8	
00036	4	

## MACROCODE 67024 for double sided shelving. The macrocode 67024 comprises all components shown in the sketch, except items 2-3

item	Macrocode 67024 q.ty	
68051	8	
68053	12	
00020	40	
00027	24	
00035	10	
00036	6	

# CROSS BRACING SUPER 1/2/3 SERIES

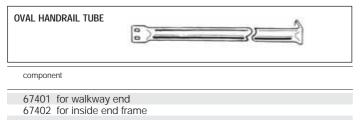


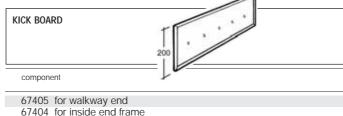
component

00020

component

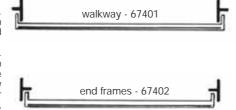
00036





For walkway ends, order art. n° 67401, specifying the length of the spacer bars used to build the walkway.

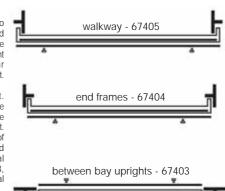
In the case of end frames, order art n° 67402, specifying the length of the spacer bar used to build the frame. For handrails between bay uprights order the oval tubular beam in material gauge 10/10 mm, article numbers 36501 - 36510 (see below).



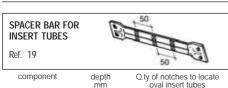
The kick boards are made from two oval tubular beams (the same used to create the handrails) fixed to the uprights and a sheet metal element fastened to the oval tubular beams with self tapping screws (art. n° VITAUFOR). For walkway ends, order art.

67403 between bay uprights

n° 67405, specifying the length of the spacer bars used to build the walkway. For end frames, order art. n° 67404, specifying the length of the spacer bars used to build the frames. As for longitudinal kick boards, order art. n° 67403, specifying the length of the oval tubular beam.



between bay uprights



component	depth mm	Q.ty of notches to locate oval insert tubes
67821	320	3
67822	400	5
67823	500	7
67824	600	9
67825	700	11
67826	800	13



Ref. 19

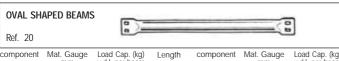
compo	nent	length mm		
6742	1	900		
6742	4	1200		
6742	7	1500		
67430	)	1800		

Att.: regarding design and load bearing capacity please refer to "METALSISTEM INFORMA" n° 296.



clear span

67400



component	Mat. Gauge mm	Load Cap. (kg) u.d.l. per beam	Length mm	component	Mat. Gauge mm	Load Cap. (kg) u.d.l. per beam
36501	10/10	175	900	36801	18/10	295
36504	10/10	120	1200	36804	18/10	200
36507	10/10	75	1500	36807	18/10	130
36510	10/10	52	1800	36810	18/10	90
Regardir	ng design ai	nd load bearin	g capacity	y please refe	er to "METAI	LSISTEM
INFORM	IA" n° 292.					

In the case that the oval shaped beams are used for tyre storage, please refer to "METALSISTEM INFORMA" n° 353 regarding correct design, application and load bearing capacities.

#### PLASTIC BASE PLATE

Ref. 1

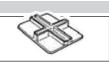
component

67004



PLASTIC BASE PLATE / TOP CAP FOR DOUBLE UPRIGHTS

component



67005

## METAL BASE PLATE Ref 1

component

CLIP Ref. 22 component

**BEAM RETAINING** 



BEAM RETAINING CLIP FOR BACK-TO-BACK BAYS Ref. 25

component

67017



67001 0 SPECIAL METAL **BASE PLATE** Ref. 1 component 0

67016 METAL BASE

PLATE SHIMS Ref. 1 component 67000

PVC TOP CAP FOR SINGLE UPRIGHTS Ref. 20

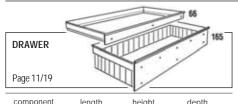


component

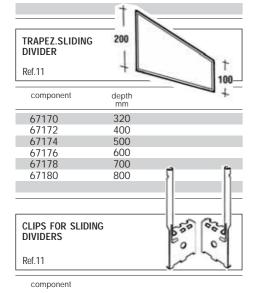
68055

67006

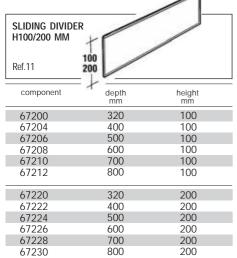
#### Accessories for series SUPER 1-2-3

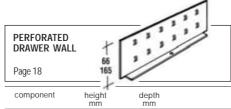


		-v	
component	length mm	height mm	depth mm
67830	900	66	400
67831	900	66	500
67832	900	66	600
67833	1200	66	400
67834	1200	66	500
67835	1200	66	600
67836	900	165	400
67837	900	165	500
67838	900	165	600
67839	1200	165	400
67840	1200	165	500
67841	1200	165	600

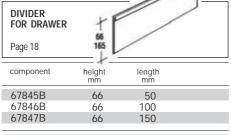


68112 at right 68113 at left

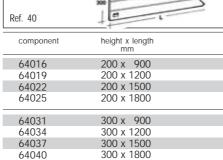




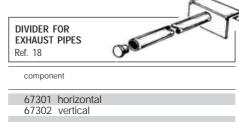
rage 10		<b>/</b>	
component	height mm	depth mm	
67842B	66	400	
67843B	66	500	
67844B	66	600	
67842A	165	400	
67843A	165	500	
67844A	165	600	9



			- 7.44
	. 50	.00	
67850A	165	400	
67849A	165	300	
67848A	165	200	
67847A	165	150	
67846A	165	100	
67845A	165	50	
07030B	00	400	
67850B	66	400	
67849B	66	300	
67848B	66	200	
67847B	66	150	
67846B	66	100	



SHELF BOARD



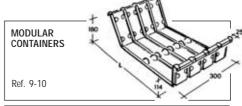
TELESCOPIC Tinner and oute	UBE DIVIDERS of	
component	height mm	
67290	280 inner	
67293	280 outer	

560 inner

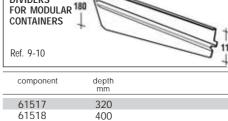
560 outer

67296

67299



component	depth mm	load capacity kg
61017	320	90
61018	400	90
61019	500	70
61020	600	65
61021	700	60
61022	800	60

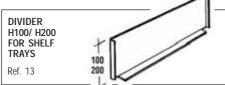


DIVIDERS

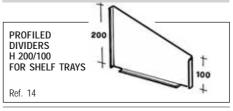
depth mm	component
320	61517
400	61518
500	61519
600	61520
700	61521
800	61522

BIN FRONT OR REAR + FOR SHELF TRAYS	1	1 1	11	113
Ref. 13				

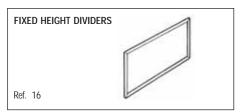
component	height x length mm	
64101	100 x 900	
64104	100 x 1000	
64107	100 x 1200	
64110	100 x 1500	
64113	200 x 900	
64116	200 x 1000	
64119	200 x 1200	
64122	200 x 1500	



component	depth mm	height mm	component	depth mm	height mm
67151	320	100	67152	320	200
67154	400	100	67153	400	200
67157	500	100	67155	500	200
67160	600	100	67156	600	200
67162	700	100	67158	700	200
67164	800	100	67159	800	200



component	depth mm	component	depth mm
67181	320	67190	600
67184	400	67192	700
		0,1,2	
67187	500	67194	800



component	depth mm	height mm	
67720	320	244	
67722	400	244	
67724	500	244	
67726	600	244	
67728	700	244	
67730	800	244	

67740	320	344	
67742	400	344	
67744	500	344	
67746	600	344	
67748	700	344	
67750	800	344	

67760	320	444	
67762	400	444	
67764	500	444	
67766	600	444	
67768	700	444	
67770	800	444	

**CLIPS FOR FIXED** HEIGHT DIVIDERS Ref. 16

component



double-sided 68110 68111 single-sided

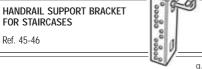
PLASTIC LABEL HOLDER Ref. 23



component

67008

HANDRAIL SUPPORT BRACKET FOR STAIRCASES



macrocode	65000	1
composed of:		
handrail support	65002	1
runner support	65004	1
m 10 nut	00059	2
3,5x13mm self tapping screw	00017	2
M6x20 hex bolt 8,8 DIN933 Zp	00005	2
M6 nut DIN934 Zp	00020	2
handrail bracket angle	65003	2

PVC PLUG FOR HANDRAIL Ref. 45	
component	



FRAME BACK-TO-BACK **CLAMPS** Ref. 24



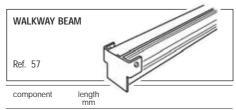
component

67022

WALKWAY SUPPORT T-SECTION BEAM - H58 (inner frame)

Ref. 36-37

component	length mm	load capacity kg - per pair unif. distr. load
67320	900	1000
67322	1200	750
67324	1500	600



99253B for correct use, assembly and load bearing capacity indication please refer to the document "ISTM-025"

WALKWAY SUPPORT T-SECTION H58 FOR WALKWAYS LENGTH = 6200 MM

component

67015

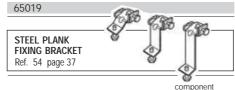
TOP CAP FOR T-SECTION SUPPORT BAR H58 Ref. 38

component

67026

HANDRAIL TUBE Ø 32 MM LENGTH = 6000 MM

Ref. 45



steel plank clamp	69829	
m8x16 bolt	69824	
bracket up to 20 mm +m8x20 bolt	69861	
bracket up to 40 mm +m8x20 bolt	69862	
bracket up to 60 mm +m8x20 bolt	69863	

PLASTIC STRIP FOR TYRES  $\mathsf{LENGTH} = 3000 \; \mathsf{MM}$ Ref 21

67020

NOISE DAMPENING ADHESIVE STRIP LENGTH = 10 METERS Ref. 35

component

67021

CHIPBOARD CLIP

Ref. 8

67025

component

REINFORCING UPRIGHT S3 FOR STAIRCASES/TWO-TIER-STRUCTURES Ref. 44

component

99230

REINFORCING BRACKET FOR UPRIGHTS Ref. 50

component

65023

WALL FASTENING BRACKET

Ref. 34

component

65022

**PVC HANDRAIL JOINT - 65 MM** 

Ref. 48

component

69840

PVC JOINT FOR HANDRAIL INTERSECTION AT RIGHT

Ref. 48

component

69837

**PVC JOINT FOR HANDRAIL** INTERSECTION AT LEFT



component





65016

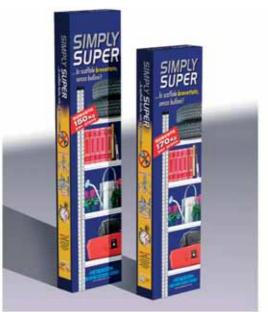
#### SIMPLY SUPER - DO-IT-YOURSELF - PATENTED BOLTLESS SHELVING KITS

"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.



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

Package of 100 pcs.



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

Package of 48 pcs.



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

Package of 38 pcs.



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

Package of 24 pcs.



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

Package of 12 pcs.



L. 406 x D. 345/270 x H. 164 can be equipped with 1, 2 or 3 mobile dividers Package of 8 pcs.



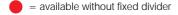
L. 372 x D. 600/460 x H. 250

Package of 4 pcs.



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

Package of 4 pcs.







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

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FEM section X





בוכולטר בוכוולטר תצוגה ואיחסון בע"מ איזור תעשיה הר טוב ת.ד.11049 בית שמש, 2000 פל 2-9916596 בית שמש, 2000 פל 2-9916596 פל 2-9916596 במפון E-mail: info@rbuchwalter.com www.rbuchwalter.com

METALSISTEN® O 6

