# **SUPER 1/2/3**

#### PATENTED BOLTLESS SHELVING



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#### 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 retail sales 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 as well as its environmental management system ISO14001 are certified by RINA.

With an annual turnover of exceeding 260 Million Euro, the METALSISTEM Group premises occupy a total area of 230.000 m<sup>2</sup>, 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.



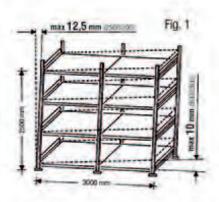


#### STANDARD SPECIFICATIONS **CALCULATION AND SAFETY STANDARDS**

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. N°:	SUPER 2
	System:	2010
l	Year of Construction:	Ach 000
	Frame Load Capacity (U.D.L.):	And doll
	Shelf Load Capacity (U.D.L.):	10 daN
	Weight of Load Unit:	
	Distance between ground and first beam level:	7 <b>00</b> mm

METALSISTEM declines all responsibility 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 m<sup>2</sup> (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 leaded 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 ties 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 responsibility 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.  $n^{\circ}$  67006), securely bolted to the floor slab. Staircases must be adequately reinforced and built with the reinforced SUPER 3 uprights only (art. 99230), either side of the staircase. The correct use of all safely components mentioned in this brochure is mandatory. The maximum load bearing capacity of walkways/decking within two-tier-structures and platforms is 300 kg/m, the maximum width of walkways is 1200 mm, 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 following: EN 10204 -EN 10346.

#### 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.

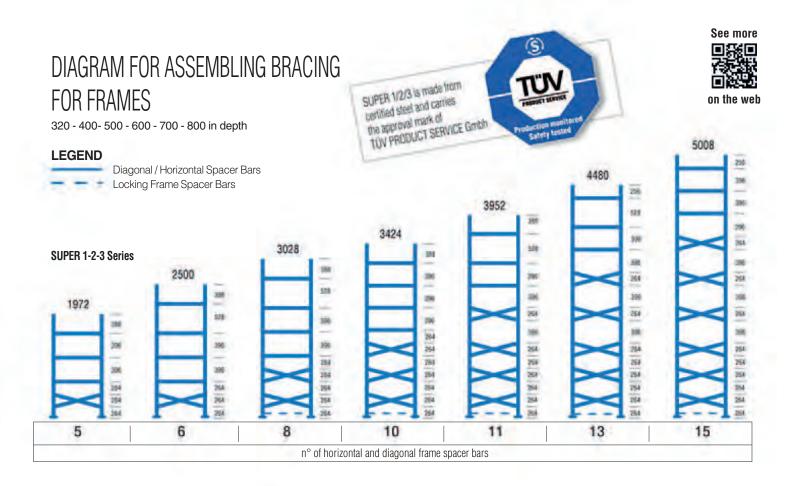
#### m) Shelf load bearing capacity

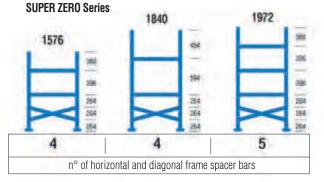
Data for shelf load bearing capacities shown in the brochure are to be understood as referring to uniformly distributed loadings with a deflection equal to 1/200 of the shelf length The beam locking pins must always be fitted.

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

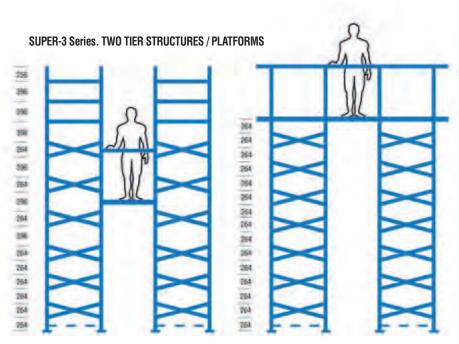
METALSISTEM reserves the right to apply technical changes to the product. Data, characteristics and dimensions given in this document are merely indicative







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



CASE "A" Two tier structure with suspended walkways CASE "B" Platform with continuous floor

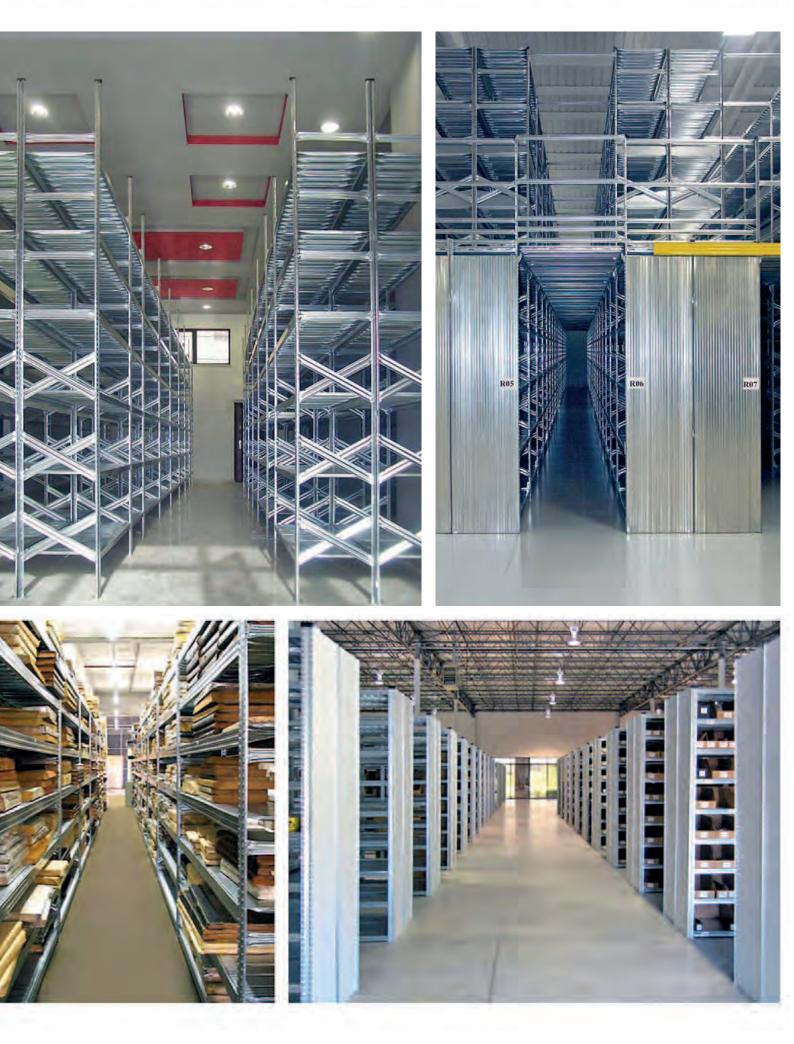
# TWO TIER STRUCTURES PLATFORMS

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).

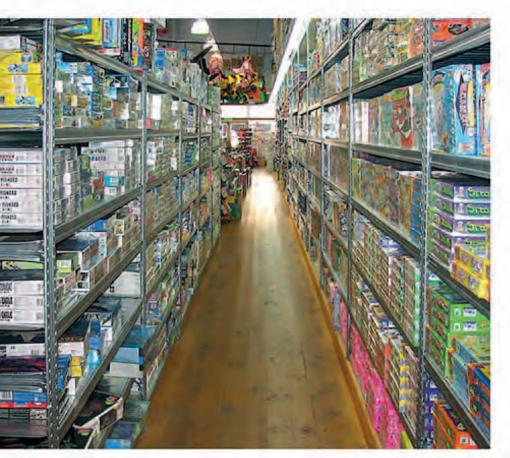
In both cases the frames must be securely bolted to the floor slab using the heavy duty base plates (art.  $n^\circ$  67006.95) and the locking frame spacer bars.

Staircases made from standard components and integrated into the twotier-structure have to be reinforced in an appropriate way, using the reinforced SUPER 3-upright (art. n° 99230.95) 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 40 years production, we value greatly the high level of trust that is placed in us by our cus-tomers 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 tech-niques developed 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 in the result technical system. 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 as-sembly, 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 3.1.







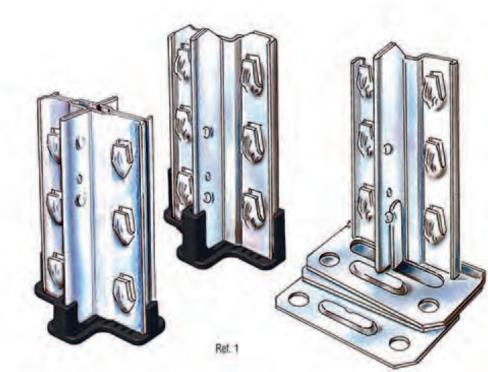




The safety and the quality of the product has always been a primary aim of METALSISTEM and is recognised by TÜV PRODUCT SERVICE in Munich, one of the most rigorous E.C. commissions in the field of quality and safety certification. The product meets the requirements of the Equipment Safety Law.

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

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Ref. 1b

#### **ASSEMBLY INSTRUCTIONS**

#### **Base plates**

Fit the steel base plate onto the upright, using pliers to guide the two tongues on the plate into the nibs on the upright. Then tap the base plate into the nibs with

a hammer (see sketch below). Plastic base plates (Ref. 1) should be used for the SUPER-0 and SUPER-1 series only. They may be used as well for applications in domestic environments, with modest load bearing capacities. Double plastic base plates are available for back-to-back bays. Both items (single and double base plates) are also used as top caps for uprights (Ref. 20/29). Heavy duty base plates (Ref. 1b) must be used in the following cases:

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

- when building staircases, under the uprights of the staircase;
- metres or exceeds over 5 times the depth of the shelving.

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

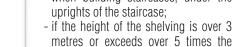
In all other cases customers may use the standard steel base plate (Ref. 1). Shims in 1 and 2 mm gauge are available for steel base plates.

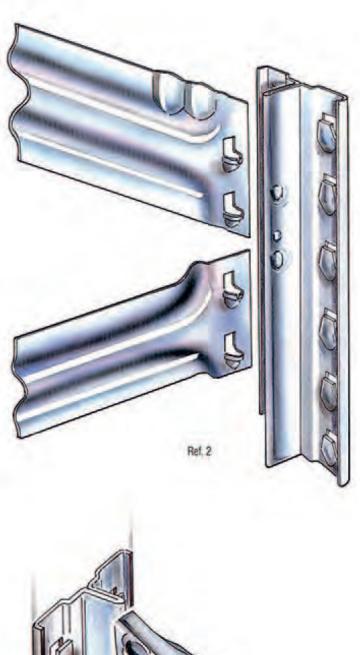
#### **Spacer bars**

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 nibs 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).





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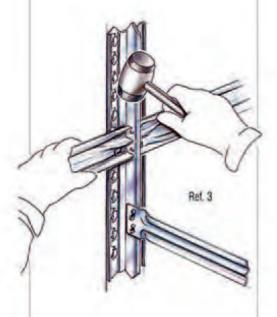
#### Beams

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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).

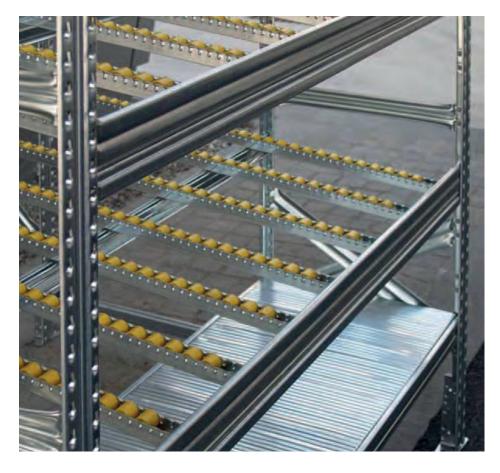
The beams, once assembled, should be secured with the respective beam locking pins (see page 21, Ref. 22).



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).







#### **Roller Shelves**

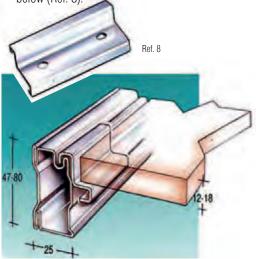
Roller shelf units consist of one or more inclined runways equipped with specially designed roller tracks. Merchandise is loaded in the rear of each runway and moves toward the picking station. As an item is removed from the front, the item directly behind it slides forward in place of the previous and rolls to the front, thus allowing merchandise to remain better organized and easier to find/pick.

METALSISTEM's carton flow is an economic, modular and functional solution based on standard components alone, allowing flow track beds to be created up to depths of 4 metres. The flow track profiles are made from certified, galvanised, high tensile steel and are manufactured in lengths ranging from 359 to 4022 mm at a cut pitch of 33 mm. Yellow rollers made from polypropylene are inserted into the tracks at varying pitches of either 33, 49.5, 66, 82.5 or 99 mm, according to the application requirements. The track profiles are inserted into sceenstrips that are fastened with clamps/ screws (art. 69829.95/00056.20) at centre distances of approx. 1000 mm.

The support for the roller shelves is provided by frames placed at fixed intervals set by oval tubes, (the same standard components used for walkway parapet elements) thus ensuring that the beams will be aligned at a constant inclination of approximately 8% from the rear to the front side of the system. However, the most suitable degree of inclination depends on the type of packaging and weight of the load unit and the overall length of the roller track. A "T"-section support bar placed at the picking side of the run provides both support for the flow tracks and an end stop for the cartons. For more information please refer to page 44 of this brochure.

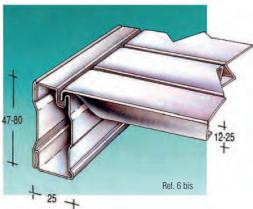
#### **Chipboard shelves**

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



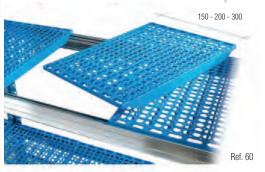
#### Shelves H12 and H25

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).



#### **Perforated Plastic Shelf Panels**

The standard range of perforated plastic shelf panels in 150-200-300 mm width is made from high quality polypropylene, suitable for use within the food sector, perforated at >50% of the shelf surface area. Available in four different colours: white, yellow, light blue and blue, for frame depths 320-400-500 mm (Ref. 60).

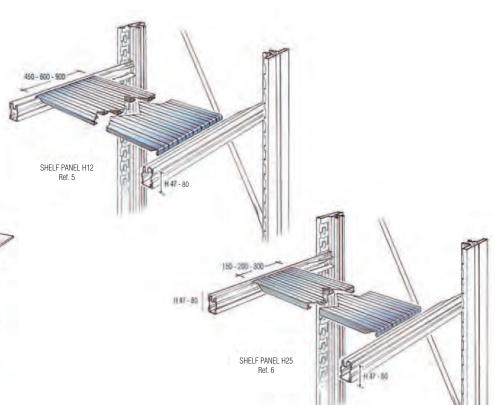


Specific FROST panels in light green colour are available for use within cooling rooms. ECO shelf panels in black colour, made from recycled polypropylene, feature utmost cost efficiency. ECO shelf panels are not compatible with the food sector.

For correct ordering and load bearing capacities, please refer to page 41 of this brochure.

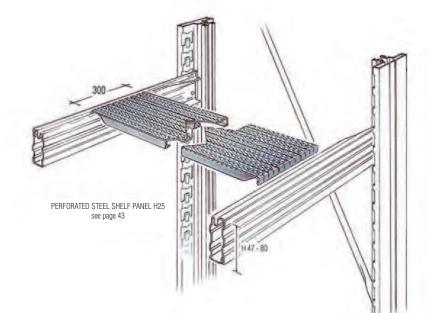
#### **Perforated Steel Shelf Panels**

Perforated steel shelves of profile 25 mm in 300 mm width, perforated at 50%. For installations equipped with sprinkler systems. Hole diameter 6.5 mm. For correct ordering and load bearing capacities, please refer to page 43 of this brochure.









# 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. Ref. 9 3 Ó HEAR BEAM 1 2 3 MODULAR FRONT BEAM Ref 10 4 UPRIGHT UPRIGHT 0 ¢

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).



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 (H=200/100 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).

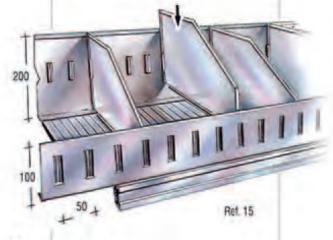
#### Chest of drawers

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

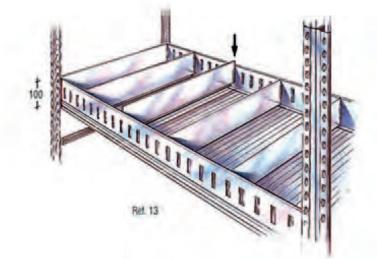


A cost effective solution for the storage of small items.

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













#### **Plastic Bins**

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

#### Fixed height dividers

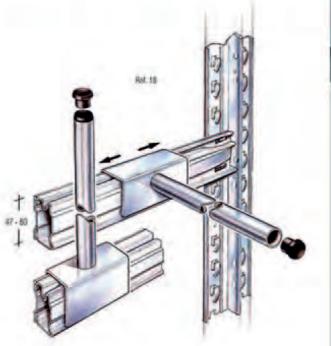
Available in three different heights: 244-344-444 mm They can be inserted in any position on the shelf by means of spring clips located on the beams H47 (Ref. 16).



Ref. 16







#### **Telescopic Tube Dividers**

Used for the separation of cylindrical components or materials difficult to store (windscreens and panels, etc.).

(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

(8mm). 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).

#### **Label Holder**

It can be located in any position on both H47 and H80 beams. Dimensions 100x40 mm (Ref. 23).

#### ACCESSORIES

#### **PVC 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 identity correct use and appropriate load capacities.

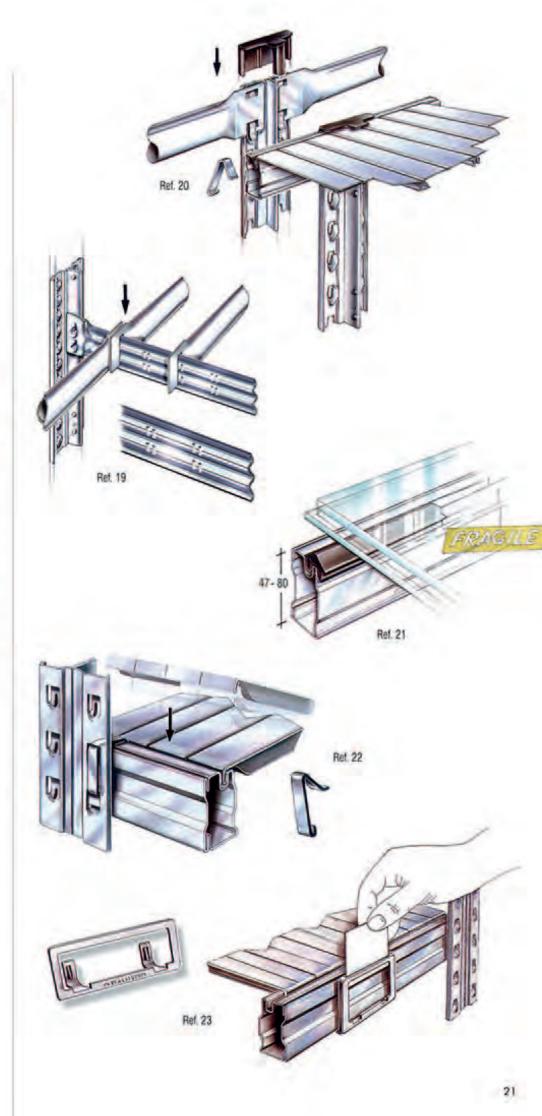
In the case that the tyres will be stored on H47 mm beams, it is obligatory to use the SUPER-3 version only and exclusively, both for the beams and the frames. Maximum allowed bay length: 1200 mm. Maximum allowed frame depth: 400 mm, to ensure safe storage and to prevent torsional deflection of the beams.

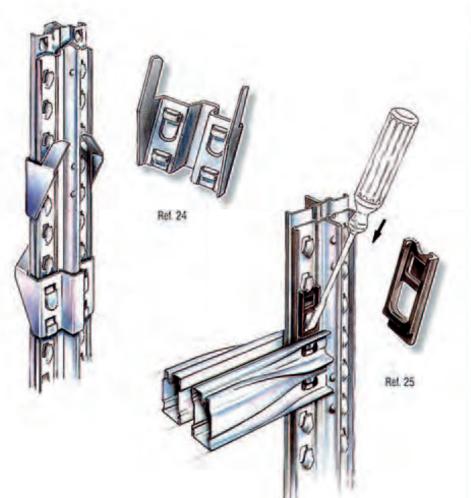
#### Plastic strip for glass shelves

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.







#### 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 End Panels H25

End panels are manufactured in two standard sizes (200/300 mm wide x 25 mm) and in standard heights of 1485-1940-2480 mm (Ref. 26). End and middle joints are also available to build multiple cladding heights and/or to finish off the panels at their upper end (Ref. 31).



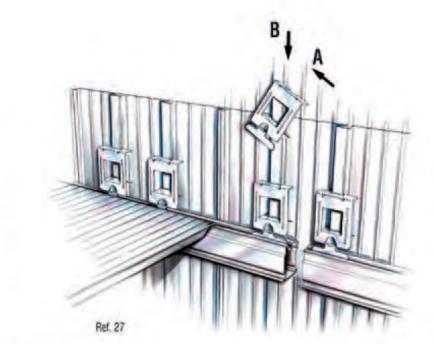
In case of the panels being lower then the respective frame, "H"-section profiles may be used at the bottom of the panels, to achieve equal height (Ref. 31).

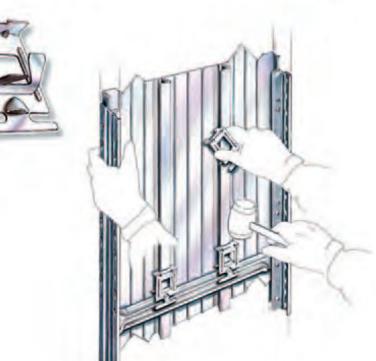




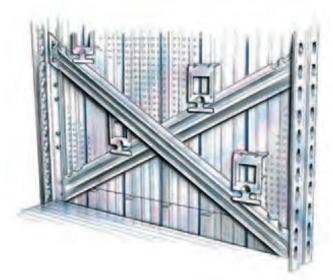
Punched hole panels H25 are also available, according to European Standards (i.e. hole diameter of 5 mm, at 25 mm centre distance). Special clips are used to fasten the cladding panels. For end panels it is the clip art. code n° 68107.95 (Ref. 28), for back panels H29 mm it is the clip art. code n° 68108.95 and for back panels H12 mm the clip 67010.95 (Ref. 27).

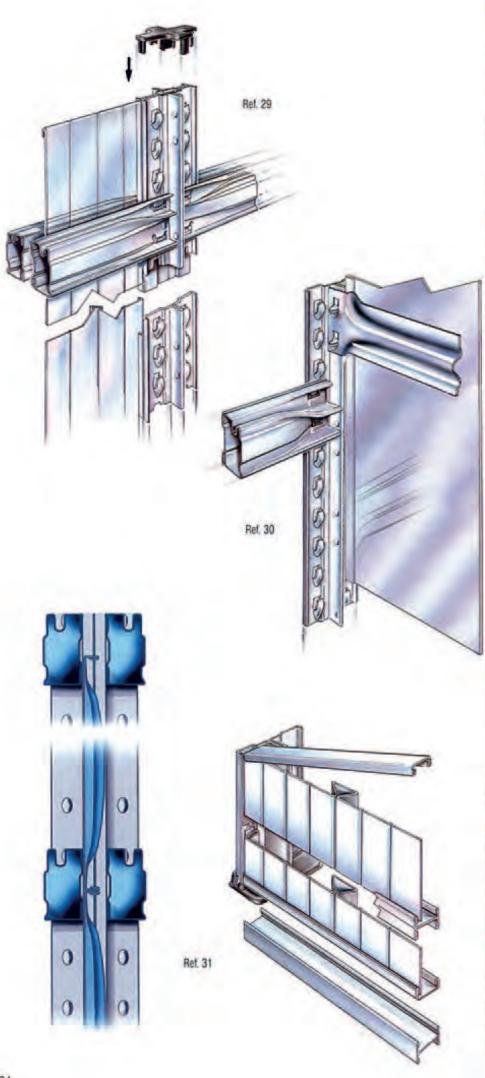






Ref. 28







#### Side cladding

**Sille Gauling** This type of cladding may be used to enclose individual bays within shelving runs. Available for frame depths up to 600 mm. Side cladding panels are fitted between the diagonal spacer bars of the frames. When ordering side frame claddings, the respective frames are to be built with diagonal spacer bars only, i.e. the horizontal spacer bars have to be replaced with diagonals (Ref. 30).



#### MODULAR SLIDING GATE

The modular METALSISTEM sliding gates are supplied preassembled, in kit form. Two different models are available: with guide rail assembled on the ground or with external, suspended guide rails, made from a USP-upright profile supplied in standard lengths of 4500 mm which has to be cut to size on site according to individual needs. For available dimensions and ordering, please refer to page 48 of this brochure.

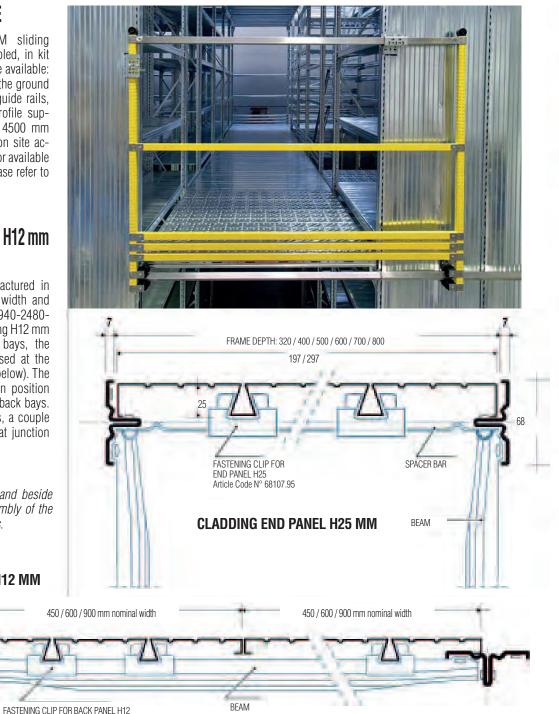
### CLADDING BACK PANELS H12 mm for back-to-back bays

Back panels H12 are manufactured in 450-600-900 mm standard width and in standard heights of 1485-1940-2480-2980 mm (Ref. 29). When using H12 mm panels within back-to-back bays, the single modules are superposed at the center of the bay (see sketch below). The cladding modules are kept in position by the beams of the back-to-back bays. For multiple cladding heights, a couple of beams has to be located at junction points (Ref. 31).

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

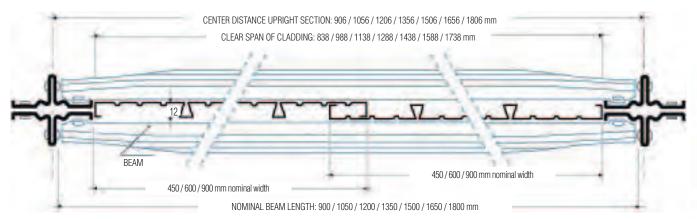


18 mm



#### CLADDING PANELS H-12-MM - FOR BACK TO BACK BAYS

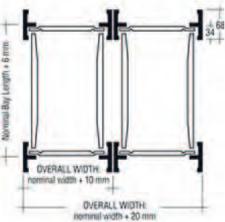
Article Code N° 67010.95



#### 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

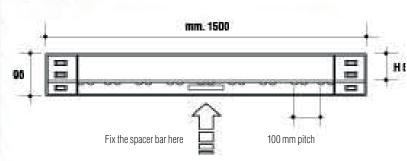
ASSEMBLY OF SPACER BARS WHEN LOCATING H 58 "T" - SECTION WALKWAY SUPPORT BARS INSIDE THE FRAMES

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 stairtread.



#### **Steel planks**

These can be supplied with three different surfaces: ribbed, open and smooth, together with compensation panels and fastening components. The steel planks are inserted into the "T"-section supports by levering between the panel and the support (Ref. 32). There are two types of steel planks: one for walk-through bays and one for walkways. When ordering, always refer to the length of the respective spacer bar used for building the walkway or the frames (see page 48).



"T"-Section support bars can be located at 90° by assembling one half of a wall fastening bracket (art. n° 65022.95 - Ref. 34) and one half of a "T"-section support bracket (art. n° 67022.95 - Ref. 33). Wall fastening brackets are also available, similar to the above, providing a method to fix the frames to a wall for stability (Ref. 34).

58

29 - 58 1 Ribbed Open Smoot Compensation × 100 ++ 100 ++ 100 + planks Ref. 32 DIAMETER Ø 8,5 mm Ref. 34 58 96 Ref. 33

Assembly Instructions SUPER-3 Two tier structures

There are two types of "T"-section walkway supports for the construction of two-tier-structures: one is fitted on the outside of the upright by means of support brackets to support walkways between shelf runs, and the other is fitted inside and onto the upright to support walk-through bays, providing continuity of the steel walkway decking (Ref. 38)

The nibs on the "T"-section walkway support beams H58 allow these beams to be connected between them by means of spacer bars being 10 mm narrower than those used to assemble the respective frame (Ref. 35). To reduce noise, a PVC strip is fitted between the steel planks and the "T"-section support bars (Ref. 37). To achieve a correct assembly of the "T"-section support beams within walkways (art. n° 67015.95) these spacer bars must be located under the walkway support beams, at centre distances of 800 mm approximately (Ref. 35/36).

In order to avoid sharp edges, the "T"-section supports should be assembled with an overhang of about 2 cm and finished off with plastic top caps (Ref. 42).

For fixing back-to-back frames together use the two-tier support bracket, bending the tongues behind the second upright, as shown on Ref. 37.

Ref. 35

Ref. 36

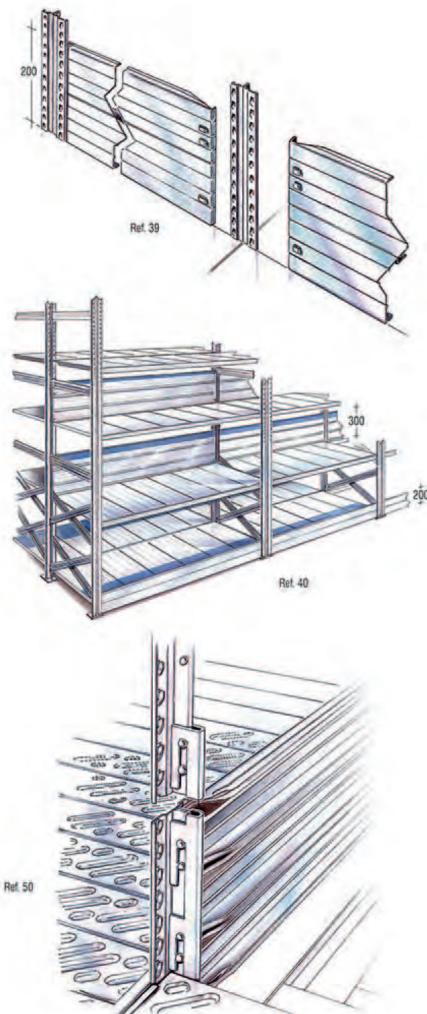
When designing two-tier structures, remember that the overall width of every frame and every walkway will be about 10 mm more than the length of the spacer bar used. Also, when calculating the total length of runs, allow tor approximately 6 mm of "creep" per bay (see page 26). When using any other type of flooring, it is important to note that the floor panel itself will be 4 mm narrower than the spacer bars used to assemble the walkways and respectively 12 mm narrower than the spacer bars used to assemble walk-through-bays. In all cases, only SUPER 3 components should be used when designing two-tierstructures.

E

D

Ref. 37

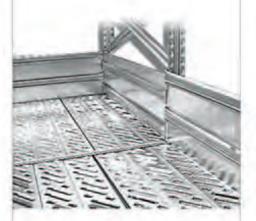
Ref. 38



#### **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 oft 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 (art. n° 64016.95 - 64040.95).

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).



#### Staircase handrails

The handrail tube is a square profile in  $\not\bowtie$  32x32 mm section, available in both stainless steel and zinc coated version. The fastening of the handrail onto the uprights is made by nylon components and brackets, as shown in the picture below (Ref. 45).

The necessary components have been included into a macro code, for easy ordering. Please refer to page 50 of this brochure.



#### Hand rails

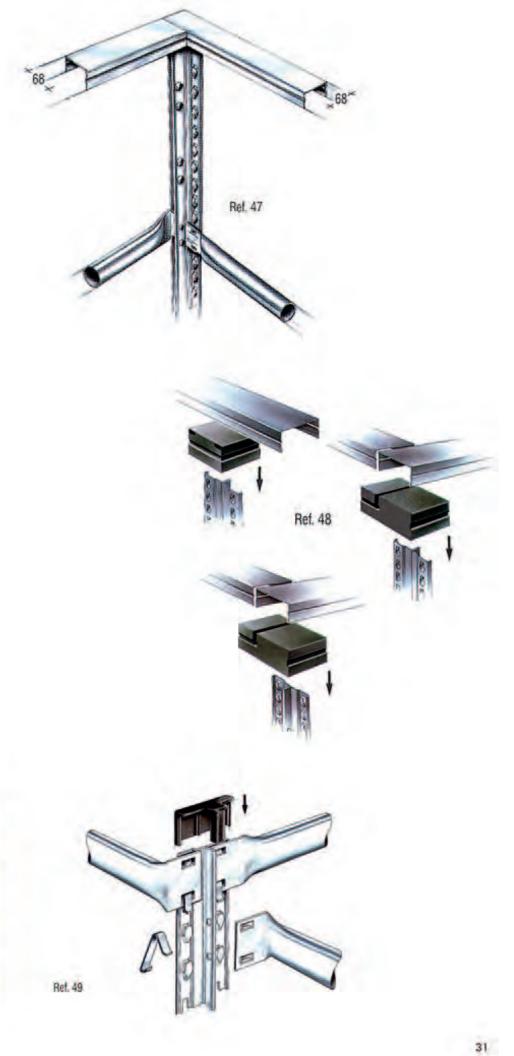
Hand rails and knee rails are made from oval shaped beams (Ref. 49). For correct ordering of these items, please see instructions on page 48 of this brochure.

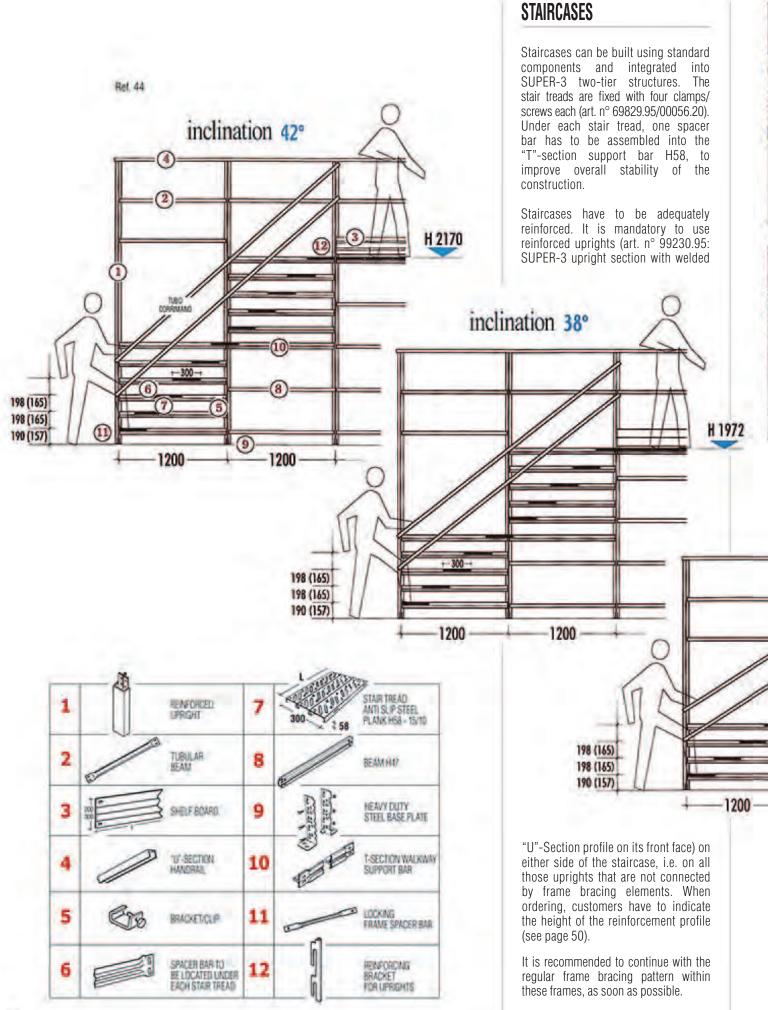
The use of beam retaining clips and upright tops caps is mandatory.

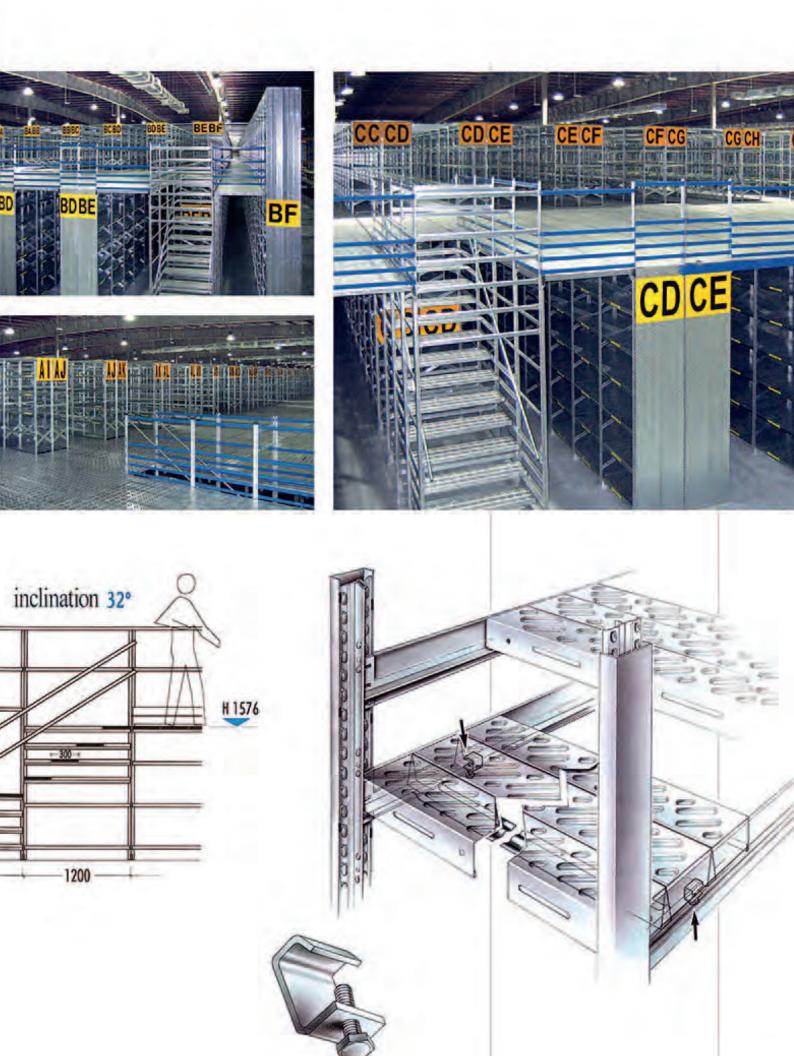
Handrails on two-tier structures may also be built with "U"-Section profiles assembled in conjunction with special PVC supports (Ref. 47-48).

These supports can also be used to finish off the handrails at their ends.





























#### SUPER 1-2-3 shelving system integrated with EUROSCACCO shelf panels

The SUPER 1-2-3 shelving series can be integrated with EUROSCACCO shelf panels. This combination provides specific advantages for shopfitting applications, such as an enhanced choice among various display solutions.

EUROSCACCO shelf panels can be equipped and customised with a huge array of accessory items, such as wire dividers and front risers. This system is available for frames of the SUPER-1 series with a maximum height of 2500 mm.

EUROSCACCO shelves are available in smooth and perforated version, in 1000-1250-1333 mm length, to suit frame depths ranging from 300 to 700 mm, providing a load bearing capacity of 70 daN per shelf, for uniformly distributed loads. SUPER 1 frames, when integrated with EUROSCACCO shelf panels, require vertical bracing - please refer to page 39.

#### **Shopfitting accessories**

A wide range of hooks, wire rods, and bars with pegs are available for supply. These items fit onto the oval beams in 10/10 and 18/10 mm gauge (art.  $n^{\circ}$  36051.95-36810.95 - see pages 38 and 48 of this brochure).

## Trendy Shopfitting and Display Solutions

Achieved with the modular SUPER 1-2-3 shelving series. See pictures at left.

#### **Sliding Doors**

Sliding Doors are ideal for areas with limited corridor width and can be used to create closed spaces or cupboards. Sliding doors are supplied preassembled and are available in the standard METALSISTEM colour range. A lock is supplied as a standard accessory with every door. Sliding doors are available for 900-1200-1500 mm bay lengths, in two different heights: 2000 and 2500 mm.

The sliding rails are made to match the height of the shelving beams on top and at the bottom of the shelving bay. In case of MOBIBASIC mobile shelving installations, the rails are fixed directly to the MOBIBASIC chassis and to the shelving beam on top of the bay, to ensure a dust proof connection. For more information and ordering, please refer to page 42.

#### **Mobile Shelving**

Thanks to its attractive high-tech design, SUPER 1-2-3 is also a highly suitable and cost effective system to achieve mobile shelving applications. For the design and ordering of mobile shelving installations, please refer to the MOBIBASIC Technical Manual <Doc: MT16>.



#### **Modular Steel Cabinets**

Made from our shelving series and cladded with EUROSCACCO steel panels, these cabinets are equipped with lockable sliding doors and are highly performing in terms of load bearing capacity. Available in zinc coated or powder coated version (Ref. 62). The standard configuration has been conceived with four modular, adjustable steel shelves made from SUPER-1beams and H-12-shelf panels; other configurations can be easily achieved thanks to the modular design. Customers may use shelving components from their stock to build the framework and just order the cladding set to build the cabinet. Compared to similar products available on the market, METALSISTEM steel cabinets distinguish themselves by higher load capacities, utmost cost efficiency and solidity. Available as well in a width of 1500 mm: a feature that is not common for this product category. For ordering, see page 42.

#### **Mobile Ladders**

Mobile ladders are available in 2000-2500-3000 mm height (in 5-7-9-step version) and can be supplied with guide rail and curves to adapt them to any environment (Ref. 56). For ordering please refer to page 47.



#### Steel planking

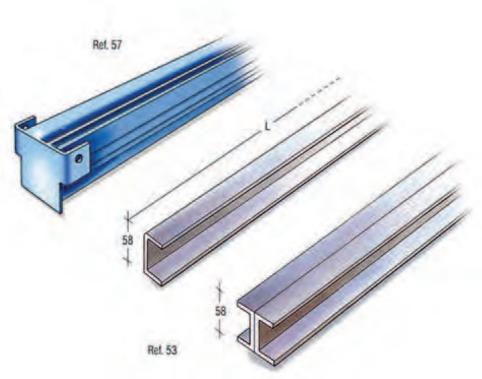
"T"-sections can be used as support beams for the steel planking (Ref. 55). Floors of any dimension can be built in conjunction with "H" joints and "U" section channels.

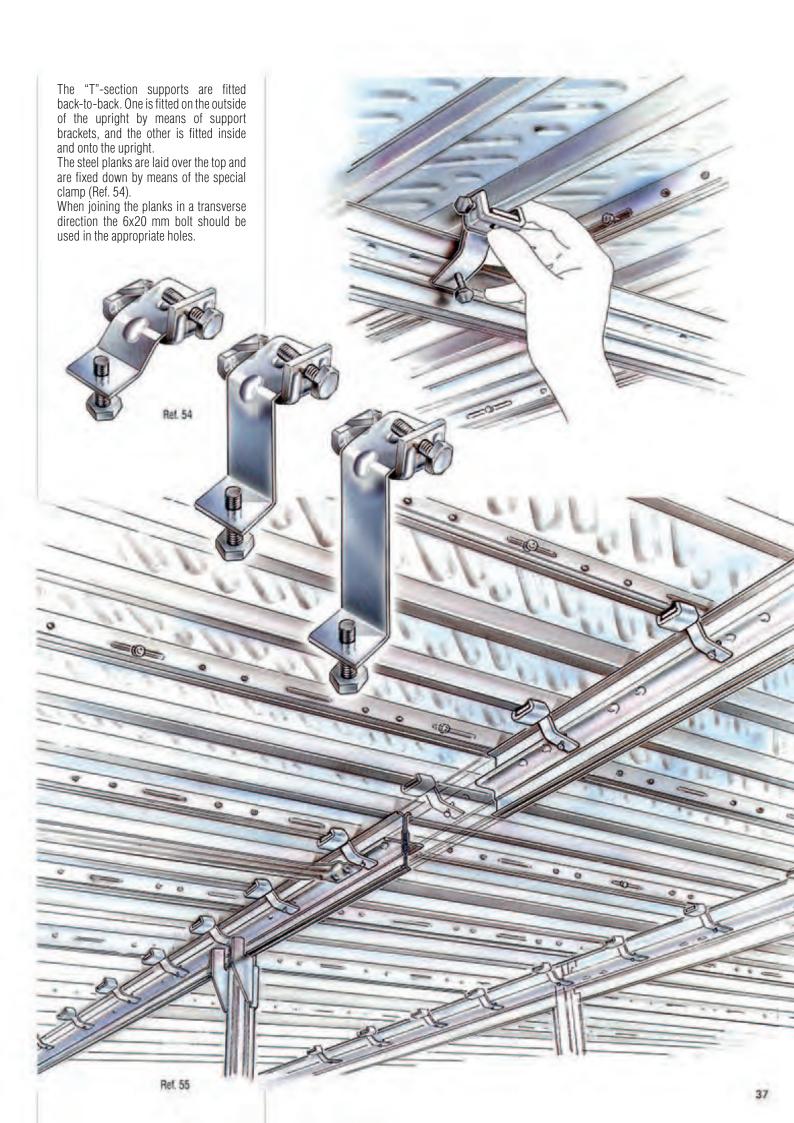
Ref. 52

They are used as end and middle joints (Ref. 52-53).

The 70 mm-section walkway beam (art. 99253B.B1) 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).







### **SUPER ZERO**

**COMPLETE SHELVES** WITH BEAMS SUPER-ZERO AND PANELS H 12 mm Regarding technical data and standard specifications, please refer to pages 4/5 of this brochure.

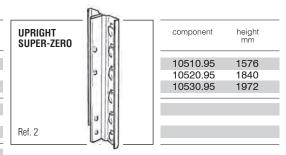
450 600 900

Ref. 5

47

### PATENTED BOLTFREE SHELVING SYSTEM

FRAMES COMPLETE WITH Uprights, horizontal and	component	height mm	depth mm	horizontal and diagonal spacer bars
DIAGONAL SPACER BARS				
LOAD BEARING CAPACITY	70100.95	1576	320	4
daN 1100 EACH	70103.95	1840	320	4
	70106.95	1972	320	5
Regarding technical data, standard				
specifications and assembly diagram,	70109.95	1576	400	4
please refer to pages 4/5 of this brochure.	70112.95	1840	400	4
brochure.	70115.95	1972	400	5
	70115.35	1912	400	5
	70118.95	1576	500	4
	70118.95	1840	500	4
3				
	70124.95	1972	500	5
B 13				-
	70127.95	1576	600	4
	70130.95	1840	600	4
	70133.95	1972	600	5
8 8				
	70136.95	1576	700	4
	70139.95	1840	700	4
	70142.95	1972	700	5
IS. III				<u> </u>
	70145.95	1576	800	4
	70148.95	1840	800	4
	70151.95	1972	800	5
	70101.80	1312	000	5
Ref. 2				



SUPER-ZERO uprights and frames are to be used with SUPER-ZERO

beams and shelves, only. Consequently, the max. bay length for shelving made with the SUPER-ZERO series is 900 / 1050 / 1200 mm only, with a max. load capacity of 200 daN/shelf, uniformly distributed loads.

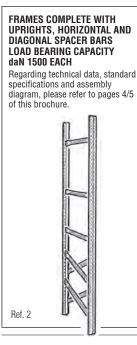
BEAM SUPER-ZERO	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	SHO Acc
	30001L.95	900	200	Chro
	30003L.95	1050	170	
	30004L.95	1200	150	~
47				<
5 ( 0	The load bearing capa	city of the bean	ns is to be understood as referring to uniformly . The load bearing indication is valid and ap-	
Ref. 3	plicable for a use of the	beams with m	odular shelves and/or modular containers only.	1

component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>
80001.05	000	320	200
			200
			185
			150
80013.95	900	700	130
80014.95	1050	320	170
80015.95	1050	400	170
80016.95	1050	500	170
80017.95	1050	600	170
80018.95	1050	700	155
000/0.05	1000	000	1=0
			150
			150
			150
			150
80031.95	1200	700	150
	80001.95 80004.95 80007.95 80010.95 80013.95 80015.95 80015.95 80016.95 80017.95 80018.95 80019.95 80022.95 80022.95 80022.95	mm 80001.95 900 80004.95 900 8007.95 900 80010.95 900 80013.95 900 80015.95 1050 80015.95 1050 80016.95 1050 80017.95 1050 80018.95 1050 80019.95 1200 80022.95 1200 80025.95 1200	mm         mm           80001.95         900         320           80004.95         900         400           80007.95         900         500           80010.95         900         600           80013.95         900         700           80014.95         1050         320           80013.95         900         700           80015.95         1050         400           80016.95         1050         500           80018.95         1050         700           80019.95         1200         320           80022.95         1200         320           80025.95         1200         500           80028.95         1200         600

COMPLETE SHELVES WITH BEAMS SUPER-ZERO	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>
AND PANELS H 25/A				
Regarding technical data	80004A.95	900	400	200
and standard specifications,	80007A.95	900	500	200
please refer to pages 4/5	80010A.95	900	600	200
of this brochure.	80013A.95	900	700	200
	80016A.95	900	800	200
	80022A.95	1200	400	150
	80025A.95	1200	500	150
300	80028A.95	1200	600	150
-	80031A.95	1200	700	150
	80034A.95	1200	800	150
Ref. 6				

SHOPFITTING Accessories	component	depth mm	
Chrome-plated he	ooks, bars and wire roc	S	
	031.006.21 031.005.21	350 400	
$\rightarrow$			
	031.028.21 031.031.21 031.030.21	350 400 500	
	031.025.21	350	
	031.086.21 031.091.21	200 400	
	207.004.21 207.006.21	350 450	
	207.014.21 207.016.21	350 450	
	207.024.21 207.026.21	350 450	

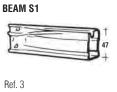
### PATENTED BOLTFREE SHELVING SYSTEM



	component	height mm	depth mm	horizontal & diagonal spacer bars
	70001.95	1972	320	5
	70004.95	2500	320	6
	70007.95	3028	320	8
•	70010.95 70013.95	1972 2500	400 400	5
	70016.95	3028	400	8
	70019.95	1972	500	5
	70022.95	2500	500	6
	70025.95	3028 1972	500 600	8
	70031.95	2500	600	6
	70034.95	3028	600	8
	70037.95	1972	700	5
	70040.95	2500	700	6
	70043.95	3028	700	8
	70046.95	1972	800	5
	70049.95	2500	800	6
	70052.95	3028	800	8



component	height mm		
10001.95 10004.95 10007.95	1972 2500 3028		
component	length	Load <dan></dan>	_



component	length mm	Load <dan> per pair - u.d.l.</dan>
30001.95	900	280
30003.95	1050	235
30004.95	1200	205
30005.95	1350	180
30007.95	1500	145
30008.95	1650	120

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.

I

#### Load capacity <daN> u.d.l. **COMPLETE SHELVES** component length mm depth mm COMPLETE SHELVES component length mm depth Load capacity <daN> u.d.l. mm WITH BEAMS S1 WITH BEAMS S1 AND PANELS H 12 mm AND PANELS H 25/A 80501.95 900 320 280 400 80504A.95 280 900 Regarding technical data 80504.95 900 400 235 Regarding technical data 80507A.95 80510A.95 900 500 280 and standard specifications. 80507.95 900 500 185 and standard specifications, 900 600 280 please refer to pages 4/5 80510.95 900 600 150 please refer to pages 4/5 80513A.95 900 700 280 of this brochure. of this brochure. 80513.95 900 700 130 80516A.95 900 800 230 320 205 80519.95 1200 400 205 80522A.95 1200 80522.95 1200 400 205 80525A.95 1200 500 205 80525.95 1200 500 205 80528A.95 1200 600 205 80528.95 1200 600 205 80531A.95 1200 700 205 80531.95 1200 700 180 80534A.95 1200 800 180 300 80537.95 1500 320 145 80540A.95 1500 400 145 400 80540.95 1500 145 80543A.95 1500 500 145 80543.95 500 145 1500 80546A.95 1500 600 145 47 80546.95 1500 600 145 80549A.95 1500 700 145 Ref. 5 Ref. 6 80549.95 700 145 1500 80552A.95 1500 800 130

## **SUPER 1**

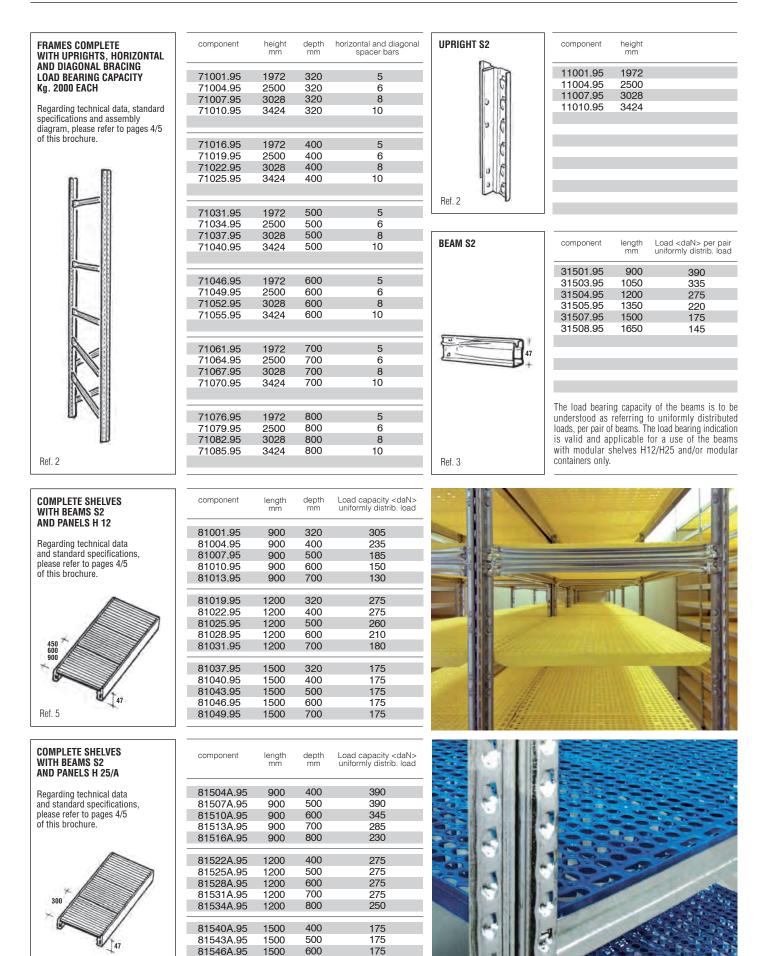
### SHELVING INTEGRATED WITH EUROSCACCO SHELF PANELS

EUROSCACCO SHELF PANEL powder coated, white	length mm	depth mm	article code n° smooth shelf	article code n° perforated shelf	BRACING KIT	for nominal bay lengths	L=1000 mm	L=1250 mm	L=1330 mm
the second second	1000	300 400	636.002.01 636.012.01	626.002.01 626.012.01		macro-code composed of	67027	67028	67029
smooth version	1000 1000 1000	500 600 700	636.022.01 636.032.01 636.042.01	626.022.01 626.032.01 626.042.01		68051.95 00020.20 00027.20 00035.20	n° 4 n° 12 n° 8 n° 4	n° 4 n° 12 n° 8 n° 4	n° 4 n° 12 n° 8 n° 4
sion	1250 1250 1250	300 400 500	636.007.01 636.017.01 636.027.01	626.007.01 626.017.01 626.027.01	Pag. 34	bracing diagonal length of diagona	2x 68046	n° 4 2x 68047 1511 mm	11 4 2x 68048 1572 mm
perforated version	1250 1250	600 700	636.037.01 636.047.01	626.037.01 626.047.01	FRAME SPACER BAR FOR EUROSCACCO SHELF	component	depth mm		
And the second s	1330 1330 1330	300 400 500	636.004.01 636.014.01 636.024.01	626.004.01 626.014.01 626.024.01	PANELS	41701.95 41704.95	300 400		
Pag. 34	1330 1330	600 700	636.034.01 636.044.01	626.034.01 626.044.01	Pag. 34	41707.95 41710.95 41713.95	500 600 700		

### **TECHNICAL NOTES:**

Suitable for SUPER-1 frames with a maximum height of 2500 mm. Each shelving row needs at least one vertical bracing kit each 5 bays. The load bearing capacity per shelf is 70daN for uniformly distributed loads. Each shelving bay has to be built with at least 3 shelf levels in height. The ratio between depth and height should be max. 1:5, alternatively the structure needs to be fastened to the wall.

### PATENTED BOLTFREE SHELVING SYSTEM



Ref. 6

81549A.95

81552A.95

1500

1500

700

800

175

160

# SUPER 1-2-3 SERIES

### PERFORATED PLASTIC SHELF PANELS

he p	erforation is $> 50\%$ of the s	helf surface area		f "FROST"	For use within a t of -30°C		For use within a te of O°C up		
his i nd a	panels is lower when used w s due to the fact that the "FR dditives to achieve a higher g vithin cold temperatures (see	OST" shelf pane grade of supplen	els are made from spe less and thus ensure s	cific materials	uniformly distributed load		uniformly distributed load	somn	-in
		Colour	Component	Dimension L x D - mm	Load Capacity per Shelf - u.d.l.	Impact Load	Load Capacity per Shelf - u.d.l.	Impact Load	Compatibility for us within the food sector
		light green	PL30x32D1.98 PL30x40D1.98 PL30x50D1.98	300x400	50 daN	1,2 joule	30 daN	3,0 joule	YES
		white	PL30x32C1.98 PL30x40C1.98 PL30x50C1.98	300x400					
STANDARD		yellow	PL30x32A1.98 PL30x40A1.98 PL30x50A1.98	300x320 300x400 300x500		aliaabla	67 461	1 0 ioulo	VEO
		light blue	PL30x32B1.98 PL30x40B1.98 PL30x50B1.98	300x400	not ap	plicable	67 daN	1,2 joule	YES
		blue	PL30x32B2.98 PL30x40B2.98 PL30x50B2.98	300x400					
		black	PL30x32N1.98 PL30x40N1.98	300x400	not ap	pplicable	67 daN	1,2 joule	NO
he lo 50/2 50/2	tionally to the perforated plas oad bearing capacities for th 200 mm compensation shelf 200 mm compensation shelf 200 mm compensation shelf	ese compensat f panel of the ST f panel of the FR	ion shelf panels are in ANDARD/ECO range: OST series, within a t	mpensation par Idicated below a 40daN/shelf pa emperature ran	nd refer to uniformly nel ge of -30°C up to 0°(	/ distributed loads: C: 30daN/shelf par	iel	y lengths of 1050/*	  350/1650 mm.
ddit ne lo 50/2 50/2	oad bearing capacities for th 200 mm compensation shell 200 mm compensation shell	ese compensat f panel of the ST f panel of the FR f panel of the FR	in 300 mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within at	mpensation par Idicated below a 40daN/shelf pa emperature ran	IND refer to uniformly nel ge of -30°C up to 0°C ge of 0°C up to 30°C	/ distributed loads: C: 30daN/shelf par	iel	Comper	
ddit he lo 50/2 50/2 C	oad bearing capacities for th 200 mm compensation shell 200 mm compensation shell 200 mm compensation shell Compensation Shelf Pan	ese compensat f panel of the ST f panel of the FR f panel of the FR	in 300 mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within at	mpensation par Idicated below a 40daN/shelf pa emperature ran	nd refer to uniformly nel ge of -30°C up to 0°(	/ distributed loads: C: 30daN/shelf par	iel	Comper	nsation Shelf Panel 50mm width
1dit 1e lo i0/2 i0/2 i0/2 co Co PL PL	oad bearing capacities for th 200 mm compensation shell 200 mm compensation shell 200 mm compensation shell 200 mm compensation Shelf Pan 200mm width	ese compensat f panel of the ST f panel of the FR real of the FR L × D	in 300mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within a t OST series, within a t	mpensation par Idicated below a 40daN/shelf pa emperature ran	nd refer to uniformly nel ge of -30°C up to 0°C ge of 0°C up to 30°C	/ distributed loads: C: 30daN/shelf par	iel 9	Comper 1	nsation Shelf Panel 50mm width nt Dimension L× mm D1.98 150x320 D1.98 150x400
	oad bearing capacities for th 200 mm compensation shell 200 mm compensation shell 200 mm compensation shell 200 mm compensation shelf 200 mm width 200 mm width 200 mm Dimension mm 200x32D1.98 200x32 20x40D1.98 200x40	ese compensat f panel of the ST i panel of the FR real L x D 20 20 20 20 20 20 20 20 20 20	in 300mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within a t OST series, within a t	mpensation par dicated below a 40daN/shelf pa emperature ran emperature ran	Ind refer to uniformly nel ge of -30°C up to 0°C ge of 0°C up to 30°C	y distributed loads: C: 30daN/shelf pare : 20daN/shelf pane	iel 9	Comper 1: Componer PL15x32 PL15x40	nsation Shelf Panel 50mm width nt Dimension L> mm D1.98 150x320 D1.98 150x400 D1.98 150x500 C1.98 150x320 C1.98 150x400
	oad bearing capacities for th 200 mm compensation shelf 200 mm compensation shelf 200 mm compensation shelf 200 mm compensation shelf 200 mm compensation shelf Pan 200mm width 200x32D1.98 200x32 20x40D1.98 200x32 20x32C1.98 200x32 20x40C1.98 200x40	ese compensat f panel of the ST panel of the FR real L x D 20 20 20 20 20 20 20 20 20 20	in 300mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within a t OST series, within a t	Impensation par Idicated below a 40daN/shelf pa emperature ran emperature ran	Ind refer to uniformly nel ge of -30°C up to 0°C ge of 0°C up to 30°C up to 3	y distributed loads: 2: 30daN/shelf par 2: 20daN/shelf pane	iel 9	Comper 1: Componer PL15x32 PL15x40 PL15x50 PL15x32 PL15x32 PL15x40	Instition Shelf Panel           50mm width           Int         Dimension L >           D1.98         150x320           D1.98         150x400           D1.98         150x320           C1.98         150x320
	oad bearing capacities for th 200 mm compensation shell 200 mm compensation shell 200 mm compensation shell 200 mm compensation shell Compensation Shelf Pan 200mm width 200x32D1.98 200x32 20x40D1.98 200x32 20x40D1.98 200x32 20x40C1.98 200x32 20x40C1.98 200x32 20x50C1.98 200x32 20x32A1.98 200x32 20x40A1.98 200x40	ese compensat f panel of the ST panel of the FR real L x D 20 20 20 20 20 20 20 20 20 20	in 300mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within a t OST series, within a t	mpensation par dicated below a 40daN/shelf pa emperature ran emperature ran	Ind refer to uniformly nel ge of -30°C up to 0°C ge of 0°C up to 30°C	y distributed loads: 2: 30daN/shelf pare 2: 20daN/shelf pare light green white	iel 9	Comper 1: Componer PL15x32 PL15x40 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32	Issation Shelf Panel 50mm width It Dimension L mm Dimension L mm D1.98 150x320 D1.98 150x320 D1.98 150x320 C1.98 150x320 C1.98 150x320 A1.98 150x320 A1.98 150x320 B1.98 150x320 B1.98 150x400
dditite loo 00/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/	oad bearing capacities for th           200 mm compensation shelf           200 mm compensation shelf           200 mm compensation shelf           200 mm compensation shelf           Compensation Shelf Pan           200mm width           Dimension           20x32D1.98         200x32           20x32D1.98         200x32           20x32D1.98         200x32           20x32D1.98         200x32           20x32C1.98         200x32           20x32C1.98         200x32           20x32C1.98         200x32           20x32C1.98         200x32           20x32A1.98         200x32           20x32A1.98         200x32           20x32A1.98         200x32           20x32A1.98         200x32           20x32B1.98         200x32           20x40B1.98         200x40	ese compensat f panel of the ST i panel of the FR rel L x D 20 20 20 20 20 20 20 20 20 20	in 300mm width, co ion shelf panels are in ANDARD/ECO range: OST series, within a t OST series, within a t	mpensation par dicated below a 40daN/shelf pa emperature ran emperature ran light green white yellow	INDARD AR	y distributed loads: 2: 30daN/shelf pare 2: 20daN/shelf pare light green white yellow	iel 9	Comper 1: Componer PL15x32 PL15x40 PL15x32 PL15x40 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32 PL15x32	Issation Shelf Panel 50mm width It Dimension L D1.98 150x320 D1.98 150x400 D1.98 150x400 C1.98 150x320 C1.98 150x320 A1.98 150x320 A1.98 150x320 B1.98 150x320 B2.98 150x320

### PATENTED BOLTFREE SHELVING SYSTEM

RAMES COMPLETE Nith Uprights. Horizontal	component	height mm	depth mm	horizontal and diagonal spacer bars	UPRIGHT S3	component		eight mm
AND DIAGONAL BRACING	70001.05	1070		-	PD	(000) 05		
OAD BEARING CAPACITY	72001.95	1972	320	5	C	12001.95		972
(g. 3600 EACH	72004.95	2500	320	6	5 6	12004.95		500
Deserving technical data standard	72007.95	3028	320	8	<b>3</b>	12007.95		028
Regarding technical data, standard specifications and assembly diagram.	72010.95	3424	320	10	0 6	12010.95		124
blease refer to pages 4/5 of this	72013.95	3952	320	11		12013.95		952
prochure.	72016.95	4480	320	13	Ć	12016.95		180
	72019.95	5008	320	15	E E	12019.95	50	800
	72022.95	1972	400	5				
	72025.95	2500	400	6	Def 0			
-	72028.95	3028	400	8	Ref. 2			
m	72031.95	3424	400	10				
	72034.95	3952	400	11				
	72037.95	4480	400	13				
	72040.95	5008	400	15	BEAM S3	component	length mm	Load <dan> per pair - u.d.l.</dan>
81 88	72043.95	1972	500	5				
8 8	72046.95	2500	500	6		32501.95	900	450
8 88	72049.95	3028	500	8		32503.95	1050	385
	72052.95	3424	500	10		32504.95	1200	320
	72055.95	3952	500	11	E ST	32505.95	1350	255
	72058.95	4480	500	13	47	32507.95	1500	205
	72061.95	5008	500	15		32508.95	1650	170
						32510.95	1800	140
	72064.95	1972	600	5		The load bearing of	anacity of t	he hearns is to
	72067.95	2500	600	6		understood as refe		
	72070.95	3028	600	8		loads, per pair of	beams. The	load bearing i
	72073.95	3424	600	10	Ref. 3	dication is valid ar	nd applicabl	le for a use of t
	72076.95	3952	600	11		beams with modu	lar shelves	and/or modul
	72079.95	4480	600	13		containers only.		
	72082.95	5008	600	15				
	72085.95	1972	700	5				
	72088.95	2500	700	6				
	72091.95	3028	700	8				
	72094.95	3424	700	10				
E	72097.95	3952	700	11				
	72100.95	4480	700	13				
	72103.95	5008	700	15				
	72106.95	1972	800	5				
	72109.95	2500	800	6				
	72112.95	3028	800	8				
	72115.95	3424	800	10				
	72118.95	3952	800	11				
Ref. 2	72121.95	4480	800	13				

### **SUPER 1-2-3**

### LOCKABLE DOOR, Standard Finish: Grey RAL 7001 component length x height mm 68201.98 900x2000H 68204.98 1200x2000H 68207.98 1500x2000H 900x2500H 68210.98 68213.98 1200x2500H 68216.98 1500x2500H



LxDxH overall dimension <mm> 1025/1325/1625x595x1975

### LOCKABLE SLIDING DOOR

ACCESSORIES / COMPONENTS FOR SUPER 1-2-3 SERIES

- available in zinc coated version or powder coated.
   standard colour blue, RAL 5010 other colours available upon request
   see also METALSISTEM INFORMA n° 583
   Bef 63
  - Ref. 63

bay length x height mm	zinc coated version component	powder coated version component	
900x2000H	68220.95	68220.B1	
1200x2000H	68222.95	68222.B1	
1500x2000H	68224.95	68224.B1	
900x2500H	68230.95	68230.B1	
1200x2500H	68232.95	68232.B1	
1500x2500H	68234.95	68234.B1	



#### STEEL CABINET WITH 4 MODULAR SHELF PANELS made from **CLADDING SET** made from Ref. 62 SUPER-1-beams and H-12-mm panels and lockable sliding doors. side/back/top (\*) cladding panels. Cabinet available in zinc coated version or with powder coated cladding. Standard colours: red RAL 3000, blue RAL 5010, yellow RAL 1004. (\*) top cladding panel standard zinc coated Cladding Set includes fastening accessories Ref. 62 bay length x depth x height nominal dimension mm zinc coated version component powder coated version component zinc coated version component powder coated component MS210004.B1 MS210005.B1 900x500x2000 MS210001.95 MS210001.B1 MS210004.95 1200x500x2000 MS210002.95 MS210002.B1 MS210005.95 MS210003.B1 MS210006.B1 1500x500x2000 MS210003.95 MS210006.95

Pag. 15

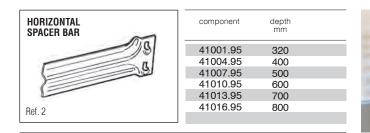
### PATENTED BOLTFREE SHELVING SYSTEM

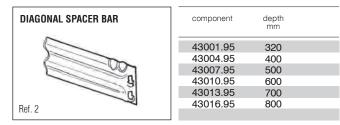
MPLETE SHELVES TH BEAMS S3	component	length mm	depth mm	Load ca uniform	apacity <dan> Iy distrib. load</dan>	
D PANELS H 12	82001.95	900	320		305	
arding technical data	82004.95	900	400			
standard specifications,	82007.95	900	500		235 185	
se refer to pages 4/5	82010.95	900	600		150	
is brochure.	82013.95	900	700		130	
	02010.33	300	700		150	
	82019.95	1200	320		320	
	82022.95	1200	400		320	
	82025.95	1200	500		260	
450 *	82028.95	1200	600		210	
600	82031.95	1200	700		180	
300						
	82037.95	1500	320		205	
	82040.95	1500	400		205	
47	82043.95	1500	500		205	
	82046.95	1500	600		205	
	82049.95	1500	700		205	
	80055 OF	1000	200		140	
	82055.95	1800	320		140	
	82058.95 82061.95	1800 1800	400 500		140	
_	82064.95	1800	500 600		140 140	
5	82067.95	1800	700		140	
	02007.85	1000	100			
]						
NPLETE SHELVES H BEAMS S3 Danel S H 25/A	component	length mm	depth mm	Load ca uniform	apacity <dan> Iy distrib. load</dan>	
PANELS H 25/A	82504A.95	900	400		450	
arding technical data	82507A.95	900	500		420	
standard specifications,	82510A.95	900	600		345	
se refer to pages 4/5	82513A.95	900	700		285	
is brochure.	82516A.95	900	800		230	
F	82522A.95	1200	400		320	
	82525A.95	1200	500		320	
	82528A.95	1200	600		320	
	82531A.95	1200	700		320	
300	82534A.95	1200	800		290	
	82540A.95	1500	400		205	
47	82543A.95	1500	500		205	
*	82546A.95	1500	600		205	
	82549A.95	1500	700		205	
	82552A.95	1500	800		180	
	82564A.95	1800	400		140	
	82567A.95	1800	500		140	
	82570A.95	1800	600		140	
6	82573A.95	1800	700		140	
6	62373A.93	1800	700		140	
FORATED SHELF PANEL mm wide - H25 - with flanged ends diameter 6.5 mm	component H25/C	load capacity <dan> uniformly distrib. load</dan>	depth mm	component H25/D	load capacity <dan> uniformly distrib. load</dan>	
pration 50% of the shelf surface	52521.95	150	400	52541.95	180	-
	52524.95	150	500	52544.95	180	Salara Stationer
arding technical data standard specifications,	52527.95	120	600	52547.95	150	TESTING CONTRACTOR
standard specifications, se refer to pages 4/5	52530.95	95	700	52550.95	120	And the second s
is brochure and to ALSISTEM INFORMA n° 577.	52533.95	70	800	52553.95	85	

The load bearing capacity of a complete shelf will be given by the smallest value between the load bearing capacity per pair of beams against the sum of load bearing capacities of the number of shelf panels in the bay. If the load capacity per pair of beams is lower compared to the sum of shelf panels, then the lower data will apply.

We recommend care when using containers with steel runners or steel foot plates or other items introducing point loads: due to the perforated shelf surface, the shelf panels are not suited to accept point loads. See also METALSISTEM INFORMA n° 577.

### PATENTED BOLTFREE SHELVING SYSTEM





### ITEM:

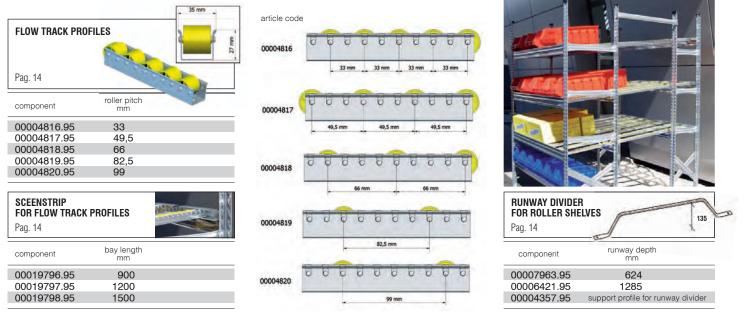
Single Sided Plastic Bin Trolley component 00005598.98 dimension <LxDxH> mm 720 x 390 x 1210 load levels: 6 single sided levels

Double Sided Plastic Bin Trolley 00005179.98 1120 x 500 x 1240 7 double sided levels

Description: trolley on four rubber rimmed swivelling castors, two with brakes. Designed to accommodate BULL plastic bin series on 6 or 7 levels in height, respectively. Suited for BULL-1 to BULL-3 plastic bin series.

The trolleys are supplied preassembled in kit from; the kit does not contain the modular plastic bins, these need to be ordered separately.

#### LIGHT DUTY DYNAMIC STORAGE SOLUTIONS - CARTON FLOW **SUPER 1-2-3**



LOAD BEARII	NG CAPACITY	( <dan> OF</dan>	SINGLE FLO	W TRACK PR	OFILES
distance between supports - mm	00004816 33 mm	00004817 49,5 mm	00004818 66 mm	00004819 82,5 mm	00004820 99 mm
200	18	12	9	7	6
300	27	18	14	11	9
400	36	24	18	15	12
500	36	30	23	18	15
600	31	31	27	22	18
700	27	27	27	25	21
800	20	20	20	20	20
900	16	16	16	16	16
1000	13	13	13	13	13
1100	11	11	11	11	11
1200	9	9	9	9	9
1300	8	8	8	8	8
1400	7	7	7	7	7
1500	6	6	6	6	6
1600	5	5	5	5	5
1700	5	5	5	5	5
1800	4	4	4	4	4
1900	4	4	4	4	4
2000	3	3	3	3	3

FLOW TR	ACK CUT PI	TCHES mm					
359	821	1283	1745	2207	2669	3131	3593
392	854	1316	1778	2240	2702	3164	3626
425	887	1349	1811	2273	2735	3197	3659
458	920	1382	1844	2306	2768	3230	3692
491	953	1415	1877	2339	2801	3263	3725
524	986	1448	1910	2372	2834	3296	3758
557	1019	1481	1943	2405	2867	3329	3791
590	1052	1514	1976	2438	2900	3362	3824
623	1085	1547	2009	2471	2933	3395	3857
656	1118	1580	2042	2504	2966	3428	3890
689	1151	1613	2075	2537	2999	3461	3923
722	1184	1646	2108	2570	3032	3494	3956
755	1217	1679	2141	2603	3065	3527	3989
788	1250	1712	2174	2636	3098	3560	4022

Notes: the flow track profiles are made from galvanised, high tensile steel. The yellow polypropylene plastic rollers are inserted into the tracks at varying pitches of either 33, 49.5, 66, 82,5 or 99 mm. The load bearing capacity of the flow track profile has been calculated on the basis of the application of a uniformly distributed load respecting both tensile strength and a deflection of < L/500. ("L" is the distance between supports, ranging from 200 to 2000 mm). The maximum load bearing capacity of a single roller is 3 daN.

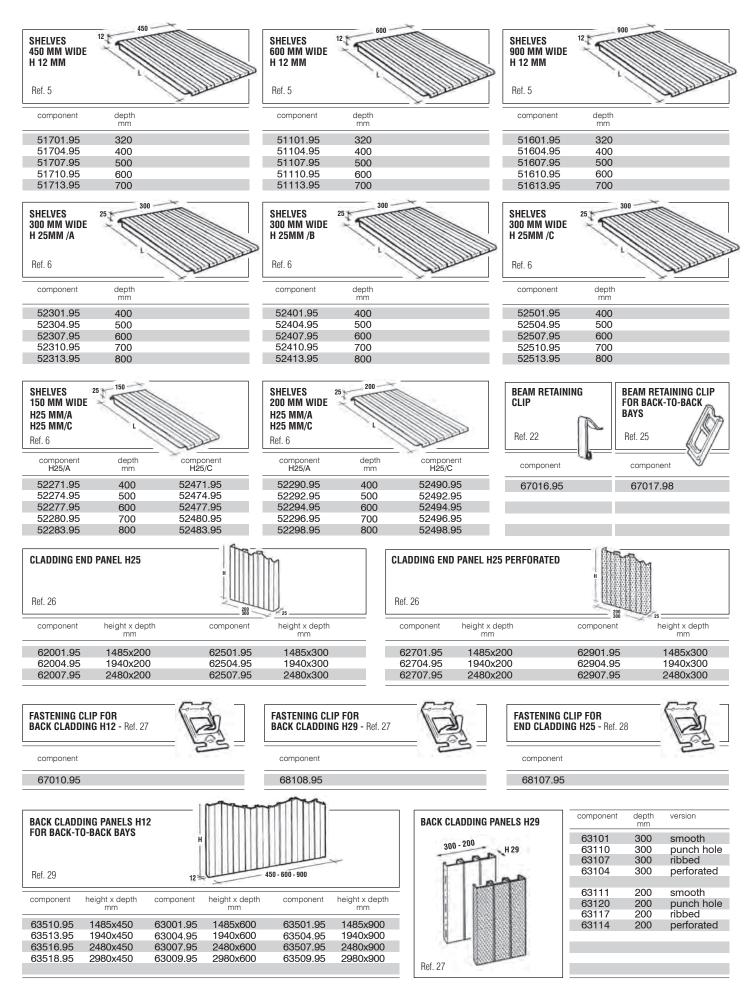
### PATENTED BOLTFREE SHELVING SYSTEM

BEAM S1G	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	COMPLETE SHELVES WITH BEAMS S1G	component	length mm	depth mm	Load capacity <dan> u.d.l.</dan>
	32604.95	1500	350	AND PANELS H 12	83116.95	1500	320	350
	32607.95	1800	310	Regarding technical data	83119.95	1500	400	350
				and standard specifications,	83122.95	1500	500	315
Ja				please refer to pages 4/5	83125.95	1500	600	260
P				of this brochure.	83128.95	1500	700	220
6	0				83131.95	1800	320	310
	8			450	83134.95	1800	400	310
				900	83137.95	1800	500	310
	The load bearing	capacity of th	he beams is to be understood	- 6- 1/	83140.95	1800	600	305
	as referring to u	initormly di: bearing indi	stributed loads, per pair of cation is valid and applicable		83143.95	1800	700	260
Ref. 6 bis	for a use of the bea	ams with mo	dular shelves and/or modular	Ref. 6 bis				

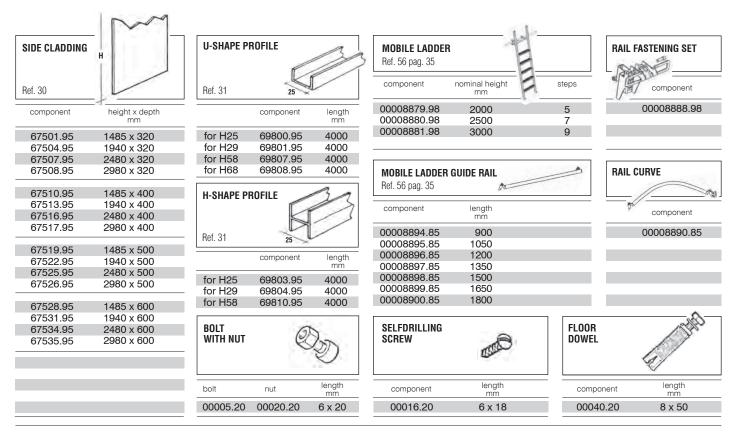
BEAM S2G	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	COMPLETE SHELVES WITH BEAMS S1G	component	length mm	depth mm	Load capacity <dan> u.d.l.</dan>
	34004.95	1500	520	AND PANELS H 25/A	83340A.95	1500	400	350
	34007.95	1800	430	Regarding technical data	83343A.95	1500	500	350
				and standard specifications,	83346A.95	1500	600	350
				please refer to pages 4/5	83349A.95	1500	700	350
				of this brochure.	83352A.95	1500	800	350
				+	83364A.95 83367A.95	1800 1800	400 500	310 310
				300	83370A.95	1800	600	310
	as referring to u beams. The load	uniformÍy d bearing indi	he beams is to be understood istributed loads, per pair of cation is valid and applicable		83373A.95	1800	700	310
Ref. 6 bis	for a use of the be containers only.	eams with mo	odular shelves and/or modular	Ref. 6 bis				

BEAM S3G	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	COMPLETE SHELVES WITH BEAMS \$2G	component	length mm	depth mm	Load capacity <dan> u.d.l.</dan>
	35004.95	1500	640	AND PANELS H 25/A	83540A.95	1500	400	520
	35007.95	1800	530	Regarding technical data	83543A.95	1500	500	520
				and standard specifications,	83546A.95	1500	600	520
18				please refer to pages 4/5	83549A.95	1500	700	520
				of this brochure.	83552A.95	1500	800	425
80					83564A.95	1800	400	430
				+	83567A.95	1800	500	430
				300	83570A.95	1800	600	430
	The load bearing	g capacity of	he beams is to be understood istributed loads, per pair of ication is valid and applicable		83573A.95	1800	700	430
	as referring to	Uniformly d	istributed loads, per pair of					
Ref. 6 bis	for a use of the be containers only.	eams with m	odular shelves and/or modular	Ref. 6 bis				

COMPLETE SHELV With Beams S3G And Panels H 25				COMPLETE SHELVI WITH BEAMS S3G AND PANELS H 25/			
Regarding technical standard specificatio please refer to pages of this brochure.	ons,	3		Regarding technical standard specificatio please refer to pages of this brochure.	ns,		300
Ref. 6 bis			80	Ref. 6 bis			80
component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>
84540A.95	1500	400	640	84540B.95	1500	400	640
84543A.95	1500	500	640	84543B.95	1500	500	640
84546A.95	1500	600	640	84546B.95	1500	600	640
84549A.95	1500	700	475	84549B.95	1500	700	550
84552A.95	1500	800	425	84552B.95	1500	800	475
84564A.95	1800	400	530	84564B.95	1800	400	530
0.000 // 1000	1800	500	530	84567B.95	1800	500	530
84567A.95							
	1800 1800	600 700	530 530	84570B.95 84573B.95	1800 1800	600 700	530 530



### ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES



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### **CROSS BRACING SUPER 1-2-3 SHELVING**

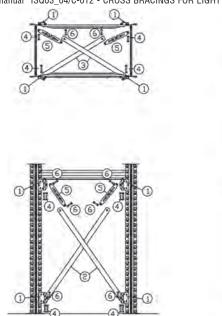
Regarding design, calculation, assembly instructions and ordering, please refer to the technical manual "ISO03\_04/C-012 - CROSS BRACINGS FOR LIGHT DUTY SHELVING"

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(1)

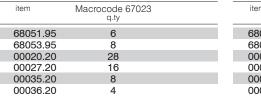
(1)



### **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 in the sketch, except items 2-3

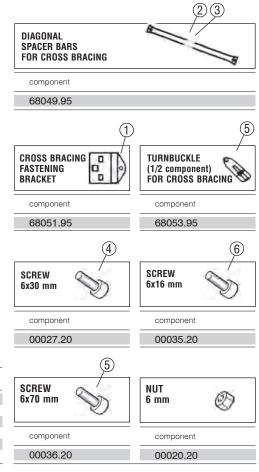


**MACROCODE 67024** for double sided shelving. The macrocode 67024 comprises all components shown in the sketch, except items 2-3

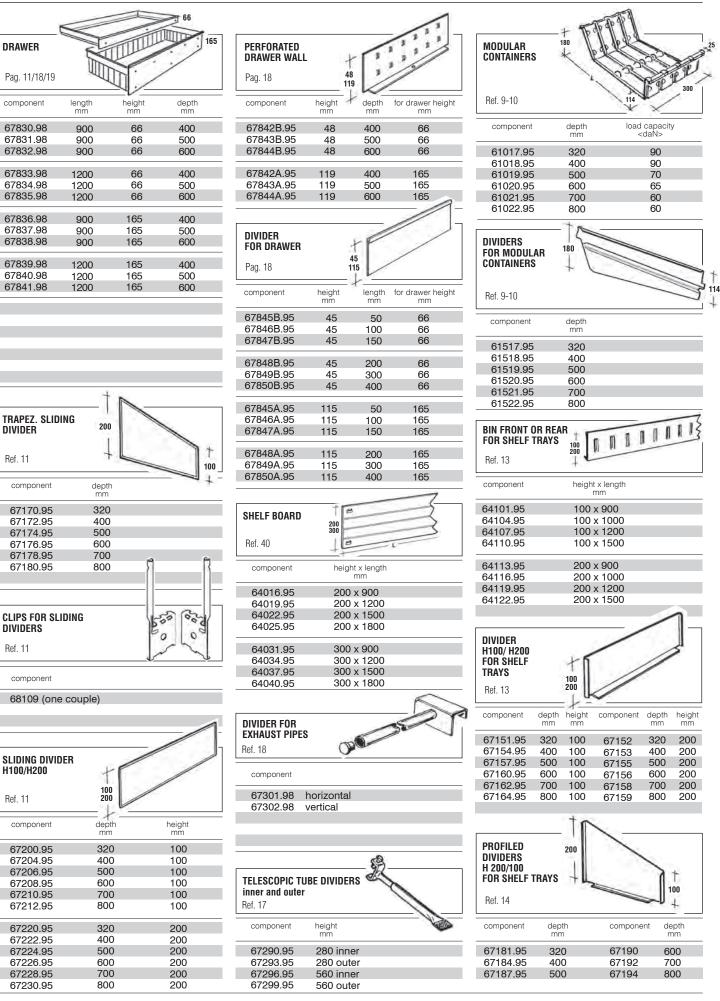
item	Macrocode 67024 q.ty	
68051.95	8	
68053.95	12	
00020.20	40	
00027.20	24	
00035.20	10	
00036.20	6	

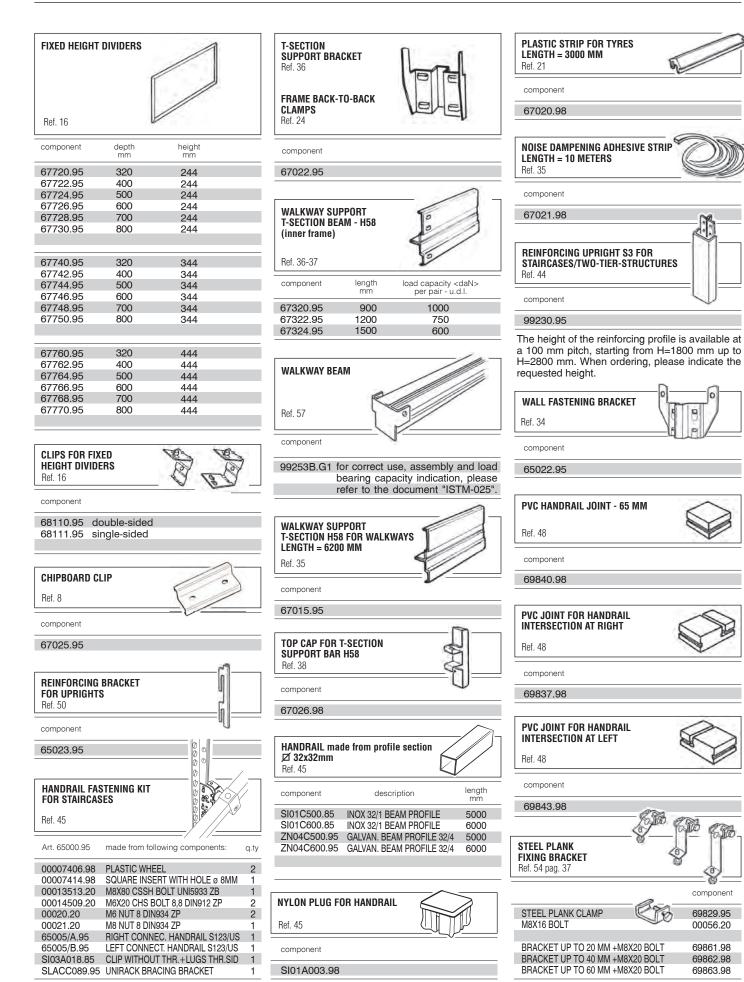
66

## CROSS BRACING SUPER 1-2-3 SERIES



OVAL HANDRAIL TUBE	К	CK BOARD	200
component			
67401.95 for walkway end 67402.95 for inside end frame		component	
310-			ay end end frame pay uprights
For walkway ends, order article n° 67401.95, specifying the length of the spacer bars used to build the walkway. In the case of end frames, order art. n° 67402.95, 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 36501.95 - 36510.95 (see below). between bay u	Additional and the frame spect space	kick boards are made from oval tubular beams (the same d to create the handrails) fixed e uprights and a sheet metal nent fastened to the oval lar beams with self tapping ws (art. n° 00017.20). walkway ends, order art. 37405.95, specifying the th of the spacer bars used uild the walkway. For end les, order art. n° 67404.95, cifying the length of the cer bars used to build frames. As for longitudinal boards, order art. n° 67403.95, cifying the length of the oval lar beam.	walkway - 67405.95 end frames - 67404.95 between bay uprights - 67403.95
Ref. 19 50 FOI	AL INSERT TUBES R SPACER BARS . 19		ROW SPACER TIE BAR (clear span) Ref. 49
mm oval insert tubes	nponent length mm		component depth mm
67822.95         400         5         67           67823.95         500         7         67	TEM INFORMA" n° 296.	DULAR SLIDING GATE 25 of this brochure ALSISTEM INFORMA n° 547/6° omponent operation with	
OVAL SHAPED BEAMS Ref. 20	000	10780.G1 suspended 10781.G1 suspended	l guide rail 2000 1118
		19650.G1 guide rail o 19651.G1 guide rail o	
36501.95         10/10         175         900         36801.95         14           36504.95         10/10         120         1200         36804.95         14           36507.95         10/10         75         1500         36807.95         14	B/10         295           B/10         200           B/10         130           B/10         90           TEM INFORMA" n° 292.         C           efer to "METALSISTEM         C	RENG FRAME SPACER BAR	component         depth mm           67031.95         320           67032.95         400           67033.95         500           67034.95         600           67035.95         700           67036.95         800
TO	ASTIC BASE PLATE AND P CAP FOR SINGLE UPRIGHTS 1 / Ref. 20	s FT	PLASTIC BASE PLATE AND TOP CAP FOR DOUBLE UPRIGHTS Ref. 1
component c	omponent		component
HEAVY DUTY BASE PLATE	MS FOR         component           Itel BASE         66999.95           67000.95	5 1 mm	67005.98 PLASTIC LABEL HOLDER Ref. 23 component
67006.95	$\sim$		67008.98





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

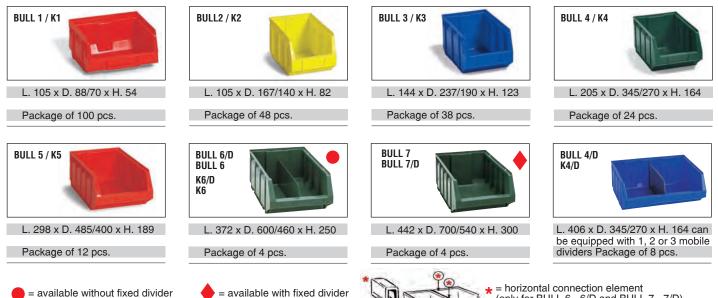


"SIMPLY SUPER" are DO-IT-YOURSELF shelving kits, conceived for easy use within the domestic environment. SIMPLY SUPER is available in two different heights - 1840 and 1576 mm - with 5 or 4 shelf levels in height, respectively. Two shelf options are available: plastic panels or steel shelf panels. Starter 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 guality high tensile steel, certified according to EN 10204 3.1.

component	shelving kit to build a:	nominal bay dimensions L x D x H - mm	shelf panel type & qty.	component	description	bo
75000.98 75000C.98	starter unit add-on-unit	1000 x 400 x 1576	4 steel shelves	<b>75105/E.98</b> see Ref. A above:	Packaging set composed of cardboard be	<b>1</b> : ox + stick
75001.98 75001C.98	starter unit add-on-unit	1000 x 400 x 1840	5 steel shelves	<b>75107/E.98</b> see Ref. A above:	Packaging set composed of cardboard b	<b>1</b> x + sticł
75002.98 75002C.98	starter unit add-on-unit	1000 x 400 x 1576	4 plastic shelves, yellow	751001.98 see Ref. B above	Screen Print Box	1
75003.98 75003C.98	starter unit add-on-unit	1000 x 400 x 1576	4 plastic shelves, light blue	751011.98 see Ref. B above	Screen Print Box	18

#### **PLASTIC LINE** (Page 19)

Open fronted bins with very strong structure. Easily to be placed one upon another. Large front label holder. Made from high density polyethylene. 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.



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

See more on the web

Our dedication METALSISTE ZERO emission METALSISTE

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Our dedication to making a difference: creating MORE VALUE with LESS IMPACT METALSISTEM is proud to adopt ECO-EFFICIENCY concepts in its business model. ZERO emission and ZERO ecological impact thanks to a UNIQUE MANUFACTURING PROCESS METALSISTEM has achieved energy self-sufficiency through the use of renewable resources.

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more information here

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METALSISTEM S.p.A. 38068 Rovereto (Tn) - Viale dell'Industria, 2 - Italy Tel. +39 0464 303030 - Fax +39 0464 303031 info@metalsistem.com - www.metalsistem.com