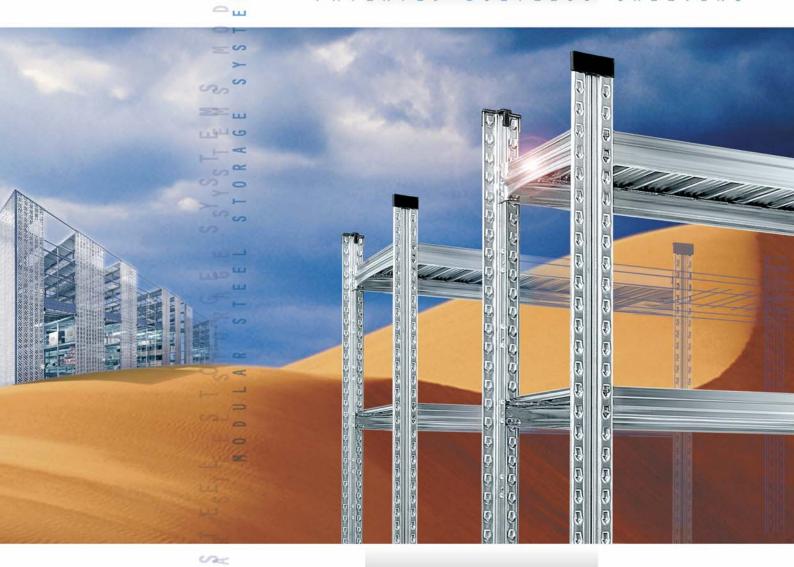


See more on the web

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 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 raw 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., UNICMI - 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 and the health and safety BS OHSAS 18001, are certified by RINA.

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, 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.



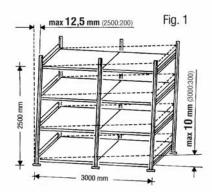


STANDARD SPECIFICATIONS **CALCULATION AND SAFETY STANDARDS**

The correct use of a product, distinguishes both the Customer and the Manufacturer. METALSISTEM recommends that Customers make use of their product in strict conformity with the design characteristics given and standards of best

practice. The design and assembly of the racking systems must be carried out by qualified personnel METAISISTEN FRAME LOAD CAPACITY (U.D.L.) daN 200 daN: SHELF LOAD CAPACITY (U.D.L.) DISTANCE BETWEEN GROUND AND FIRST BEAM LEVEL: 700 mm: : 10 daN WEIGHT OF LOAD UNIT: 10 N° LEVELS d 🖗 🍪

> 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 m² (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. 67006.95) 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 walkways or fitted with wall ties or equivalent. The use of cross bracing (vertical and horizontal cross bracing) is necessary in the case of rack runs with frame heights over 3 metres, with less than there are the tight of th 4 bays or with distances of more than 700mm in height between the load levels. In such cases it is necessary to provide vertical and horizontal cross bracing in intervals of at least one bay each 8 bays in a row. The frames must be securely bolted to the floor slab using the heavy duty base plates (art. 67006.95) and the locking frame spacer bars. As an alternative solution to the use of cross bracing 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 1-2-3 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 (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° 67006.95), securely bolted to the locatable for the plate of the security bolted to the floor slab. Staircases must be adequately reinforced and built with the reinforced Super 3 uprights only (art. 99230--.95), 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 daN/m², the maximum width of walkways is 1200 mm, and the maximum shelf bay length is 1500 mm. Two tierstructures and platforms have to be equipped with appropriate vertical and horizontal cross bracing. The frames must be fitted with overhead ties (art. no 67400.95)

h) Software reference

The structural calculation reference standards are: UNI EN 15512:2009; UNI EN 15620:2009;

UNI EN 1993-1-3:2007 Eurocode 3. Material reference standards are:

- UNI EN 10346:2009; UNI EN 10149-1:1997; UNI EN 10149-2:1997; UNI EN 10204:2005. Other reference standards:
- UNI EN 15635:2009; ACAI-CISI Testo Unico dated 11.05.2004 and 26.02.2004.

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 bro-chure are calculated in compliance with the follow-ing 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. Super 1-2-3 shelving series has been designed for hand loaded use only, and calculated without considering any significant horizontal loads.





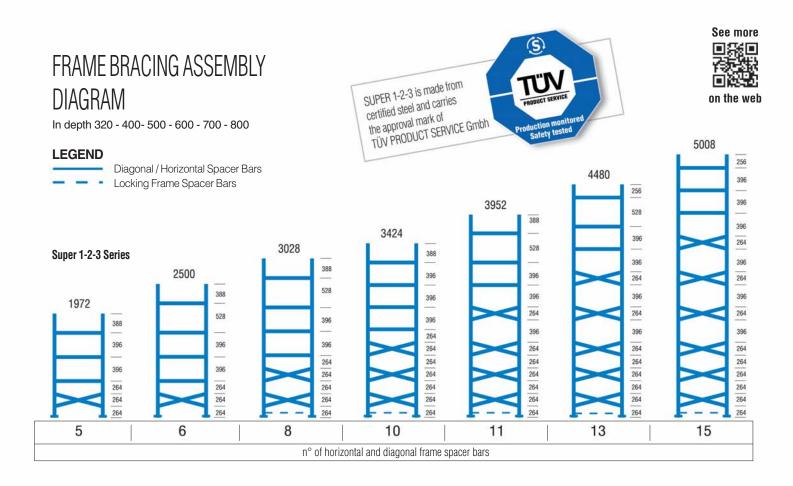


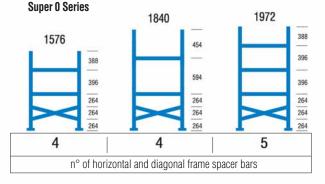
m) Shelf load bearing capacity

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

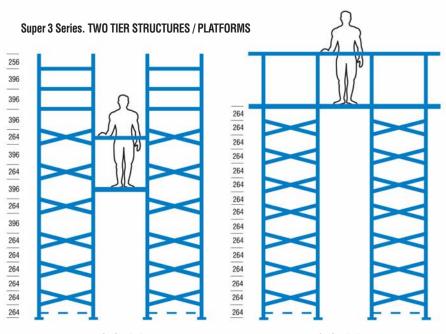
n) Custom-built applications The METALSISTEM Technical Department is at its customers' disposal for any specific calculation or custom-built application.

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





Super 0 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° 67006.95) and the locking frame spacer bars.

Staircases made from standard components and integrated into the two-tier-structure have to be reinforced in an appropriate way, using the reinforced Super 3 upright (art. n° 99230--.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 45 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 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 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 METALSISTEM to offer innovative products of the highest quality, highly com-petitively priced, and to produce a highly technical solution to the most important shelving problems, such as rapid as-



sembly, stability, low cost and load bear-

ing 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 EU 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.

ronments as well. See examples at left as well as on page 34, 35 and overleaf.

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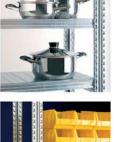




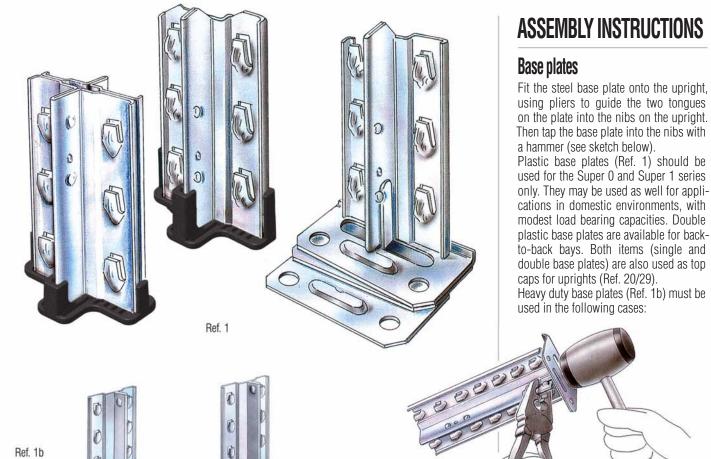












- when building platforms or two-tier structures with suspended walkways;
- when building staircases, under the uprights of the staircase;
- if the height of the shelving is over 3 metres or exceeds over 5 times the depth of the shelving.

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 and 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).

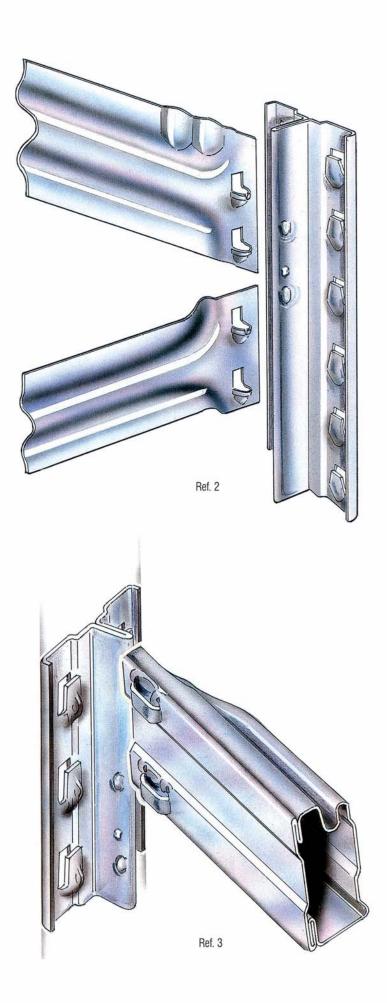


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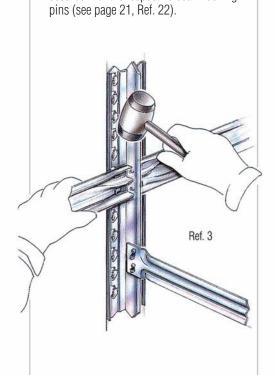
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Beams

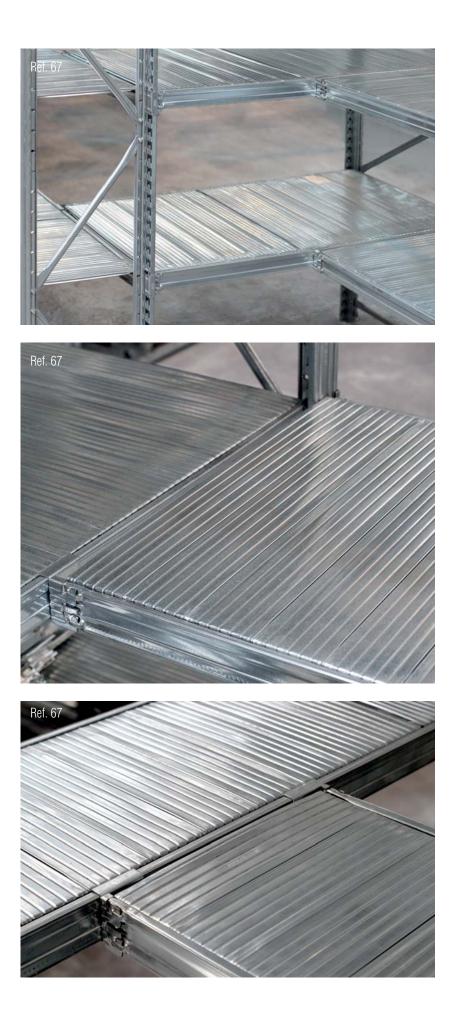
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Take the frames, assembled with bracing and base plates: keep them as perpendicularly as possible and fit the beam by tapping it down onto the tongues, close to the upright, with a plastic-faced hammer to avoid damage to the beam (Ref. 3).



The beams, once assembled, should be secured with the respective beam locking

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).



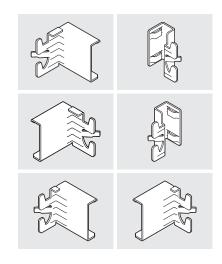
Corner Solutions

Corner solutions allow for the best possible use of available storage space, especially within small and awkward rooms.

By means of 4 dedicated brackets, both left and right sided corners can be created without the need of inserting additional frames which would hinder full access to the shelving levels.

"T"-shaped peninsular configurations may also be created by coupling left and right sided beam connection brackets. With appropriate consideration, this application may also be used to close off end corridors of 2-tier-installations. Applications are limitless!

For a correct layout, load bearing capacities and technical specifications referring to corner solutions, please refer to page 53 of this brochure (Ref. 67).





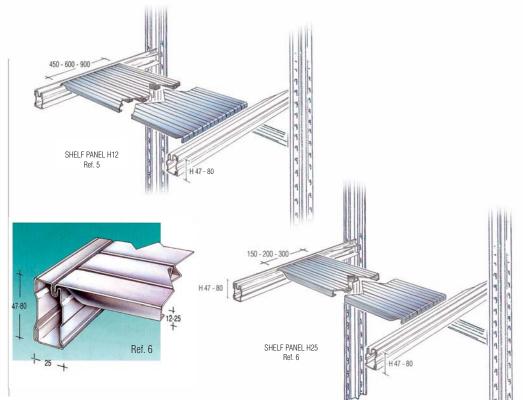
Shelves H12 and H25

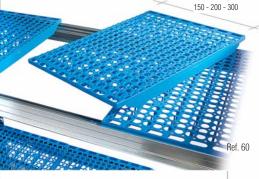
Shelves of profile 12 mm, 450-600-900 mm wide, are produced in depths varying from 320 to 700 mm. Shelves of profile 25 mm and 300 mm wide are supplied in depths varying from 400 to 800 mm (Ref. 5-6).

Perforated Plastic Shelf Panels

The standard range of perforated plastic shelf panels in 150-200-300 mm width is made from high quality polypropylene according to the RoHS directive, suitable for use within the food sector and RoHS compliant. The shelf panels are perforated at >50% of their surface.

Available in six different colours: white, yellow, light blue, blue, dark green and black, for frame depths 320-400-500-600 mm.





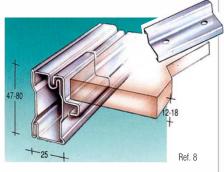
Specific FROST shelf panels in light green colour are also available for use within cooling rooms. For correct ordering and load bearing capacities, please refer to page 46 and 47 of this brochure.

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 44 of this brochure.

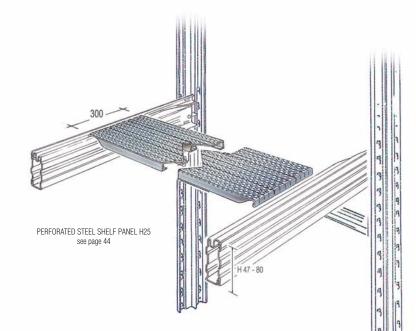
Chipboard Shelves

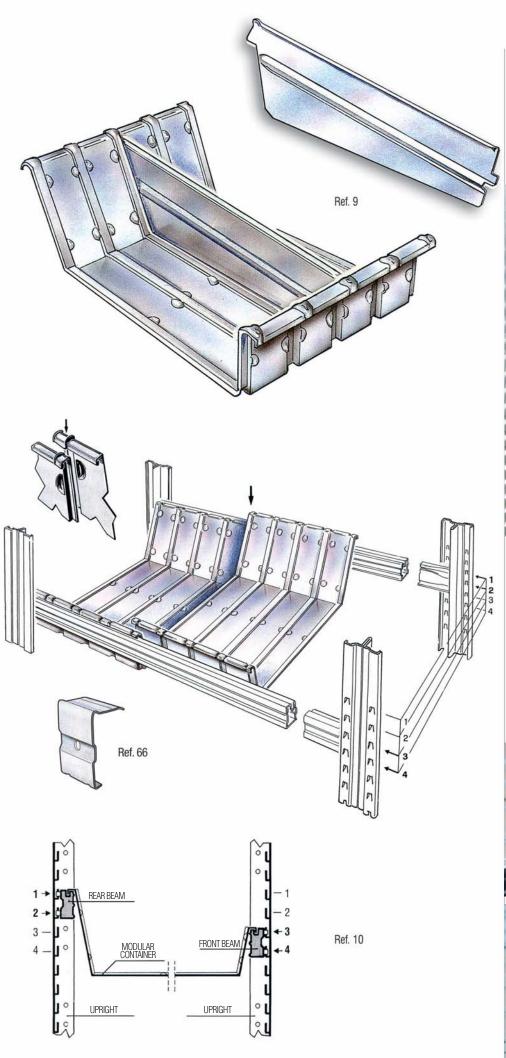
Chipboard shelves of thickness 12 or 18 mm can be fitted using the clips shown below (Ref. 8).











Modular Containers

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



Fastening Clip for Modular Containers

This clip prevents the modular containers from being accidentally unseated from their position (Ref. 66). Skip the first container to the left of the bay and fix each of the following modular containers using a pair of clips positioned on the second rib at the front and at the back of the container.



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).

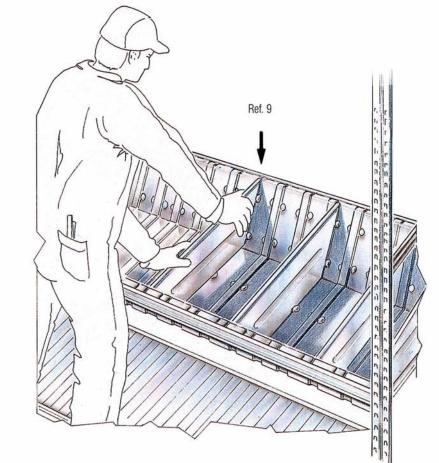


The capacity of the containers can be increased by fitting bin front and rear panels 200 or 300 mm high.









DIVIDERS

A large range of dividers is available.

Vertical Sliding Dividers

These have been designed to separate boxed items (Ref. 11). The concept of these dividers is based on the following components: a pair of clips, left and right, and vertical dividers, available for all frame depths and in two different heights (H100 mm / H200 mm), as well as in trapezoidal version (H200/100 mm).

Shelf Trays

These comprise of a bin front and rear panel 100 mm high placed on a normal shelf with adjustable dividers from 320 to 800 mm in depth (Ref. 13).

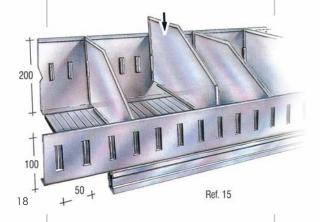
Modular Drawers

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

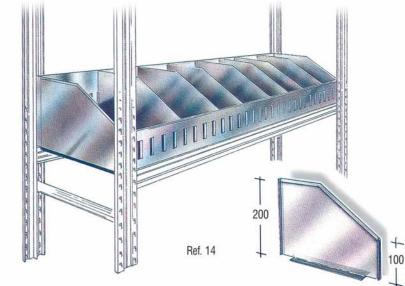


The drawers provide a cost effective solution for the storage of small items and may be fitted with a key lock.

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











Plastic Line

Open fronted plastic bins are also available for the storage of loose items. More information on page 55.

bins are also availloose items. More 5.

Fixed Height Dividers

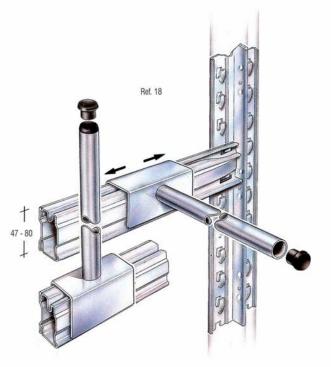
Available in three different heights: 244-344-444 mm.

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 (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. Dividers for ex-haust pipes are supplied for both vertical and horizontal divisions fitted directly to the beam (not to be loaded) (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 hooks 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.

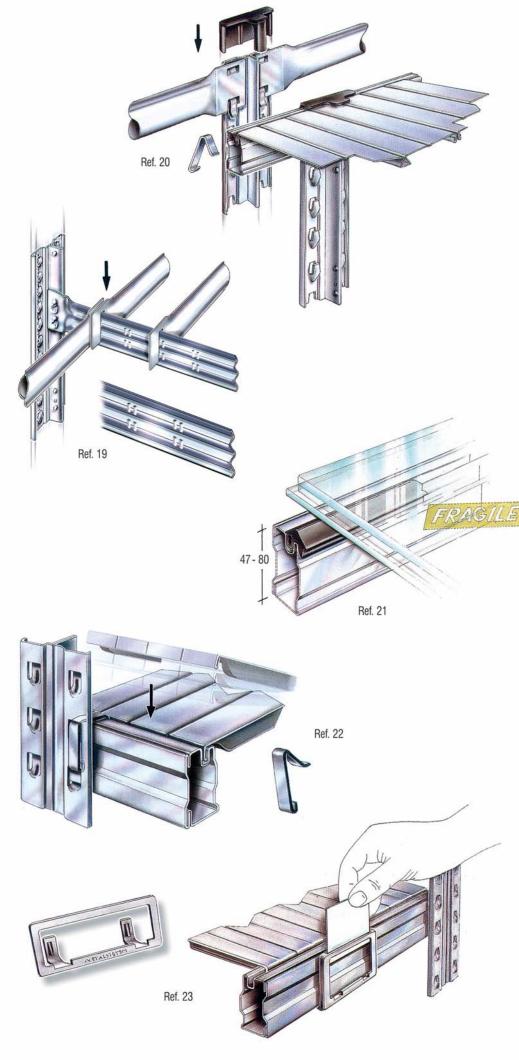
In the case that the tyres will be stored on H47 mm beams, it is obligatory to use the Super 3 version only and exclusively, both for the beams and the frames. Maximum allowed bay length: 1200 mm. Maximum allowed frame depth: 400 mm, to ensure safe storage and to prevent torsional deflection of the beams.

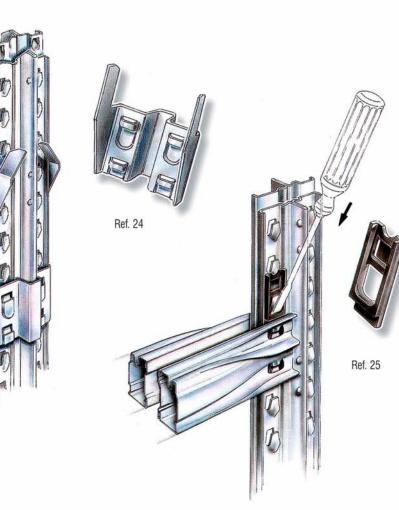
Plastic Strip for Glass Shelves

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

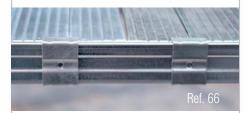
They are used to fix the frames together when building back-to-back bays to improve stability. They are located at mid height (Ref. 24).

Security Pins for Beams in back-to-back Bays

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

Fastening Clips for Shelf Panels

These fastening clips are an optional accessory, used to prevent shelf panels from being accidentally unseated from their position. They may also be used as a locking mechanism for the shelf panels to be firmly kept at a given position or at a distance to achieve 50% opening of the surface or alike. The clips press the shelf panels against the beams providing the added benefit of stiffening the entire system. They are assembled by hand and can easily be disassembled with the aid of a flat-bladed screwdriver as shown in the pictures (Ref. 66). Please refer to METALSISTEM Informa nº 672 for additional information.



CLADDING END PANELS H25

End panels H25 are manufactured in two standard sizes (200-300 mm wide) and in standard heights of 14485-1940-2480-2980 mm (Ref. 26). End and middle joints are also available to build multiple cladding heights and/or to finish off the cladding panels at their upper end (Ref. 31). In case of the cladding panels being lower than the respective frame, "H"-section profiles may be used at the bottom of the cladding panels, to achieve equal height (Ref. 31).



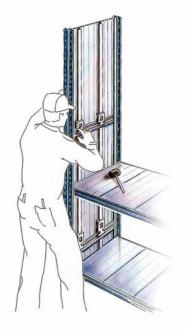
In case of the panels being lower then the respective frame, "H"-section profiles may be used at the bottom of the panels, to achieve equal height (Ref. 31).

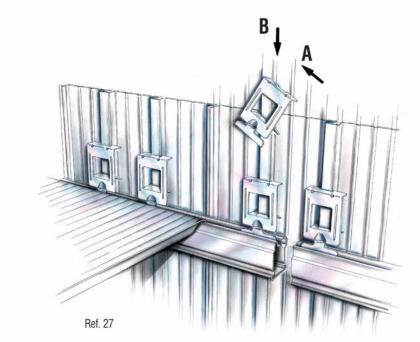


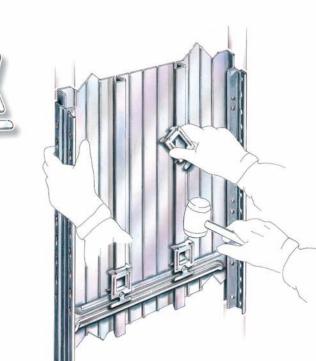


Punched hole panels H25 are also available, according to European Standards (i.e. hole diameter of 5 mm, at 25 mm centre distance).

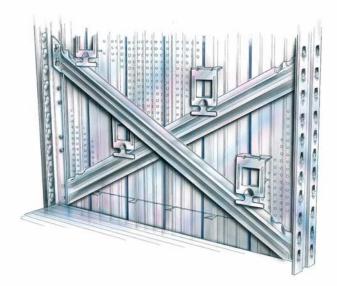
Special clips are used to fasten the cladding panels. For end panels it is the clip art. code n° 68107.95 (Ref. 28), for back panels H29 mm it is the clip art. code n° 68108.95 and for back panels H12 mm the clip 67010.95 (Ref. 27).

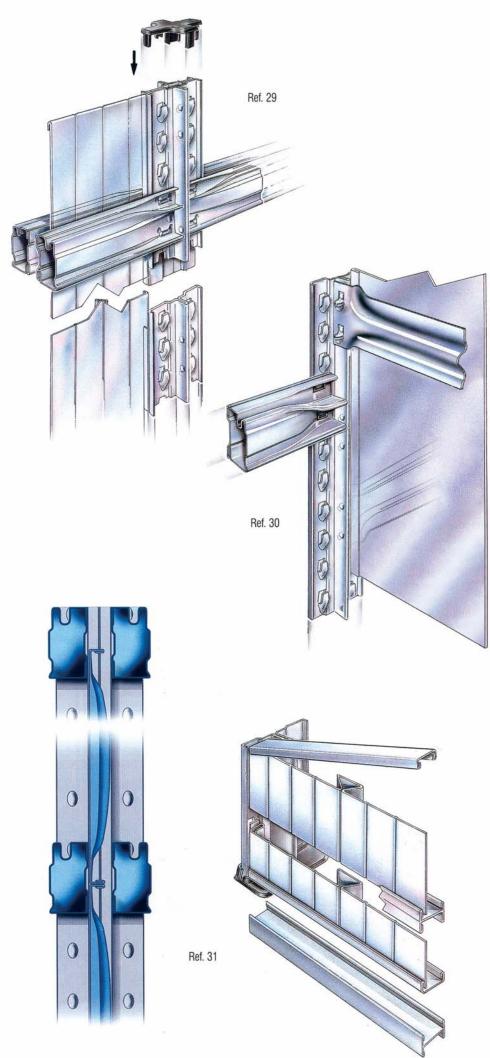






Ref. 28







Side Cladding

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

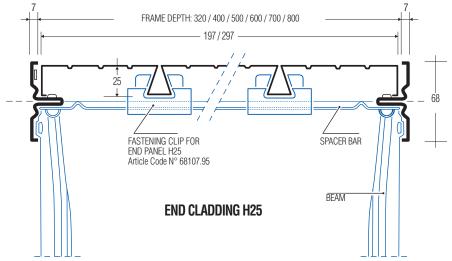
The modular METALSISTEM sliding gates are supplied preassembled, in kit form. Two different models are available: with guide rail assembled on the ground or with external, suspended guide rails, made from a USP upright profile supplied in standard lengths of 4500 mm which has to be cut to size on site according to individual needs. For available dimensions and ordering, please refer to page 50 of this brochure.

Cladding BACK PANELS H12 mm for back-to-back Bays

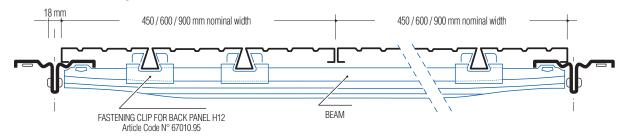
Back panels H12 are manufactured in 450-600-900 mm standard width and in standard heights of 1485-1940-2480-2980 mm (Ref. 29). When using H12 mm panels within back-to-back bays, the single modules are superposed at the center of the bay (see sketch below). The cladding modules are kept in position by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

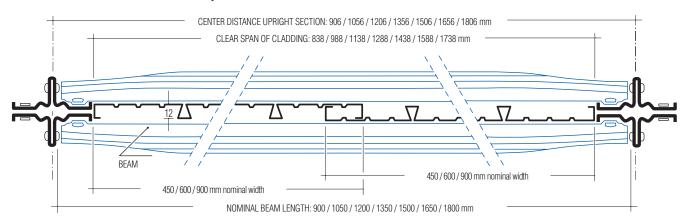




BACK CLADDING H12 for single sided rows



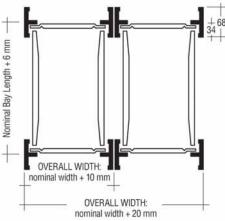
BACK CLADDING H12 for back to back bays



Super 3 Two-Tier-Structures with suspended walkways (max. load bearing capacity = 300 daN/m²)

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





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

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

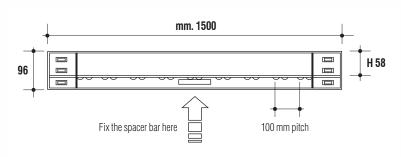
ASSEMBLY OF SPACER BARS WHEN LOCATING H 58 "T" - SECTION WALKWAY SUPPORT BARS INSIDE THE FRAMES

L 900 : NO SPACER BAR

L 1200 : ONE SPACER BAR AT THE CENTRE

L 1500 : ONE SPACER BAR AT THE CENTRE

NOTE: The spacer bars connecting the "T"-walkway support bars must be ordered in a special length (10 mm narrower than those used to assemble the standard frame).
 When building staircases, customers should fit one spacer bar under each stair tread.



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 bet-ween 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 Bracket - at 90°

"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).

Ref. 33

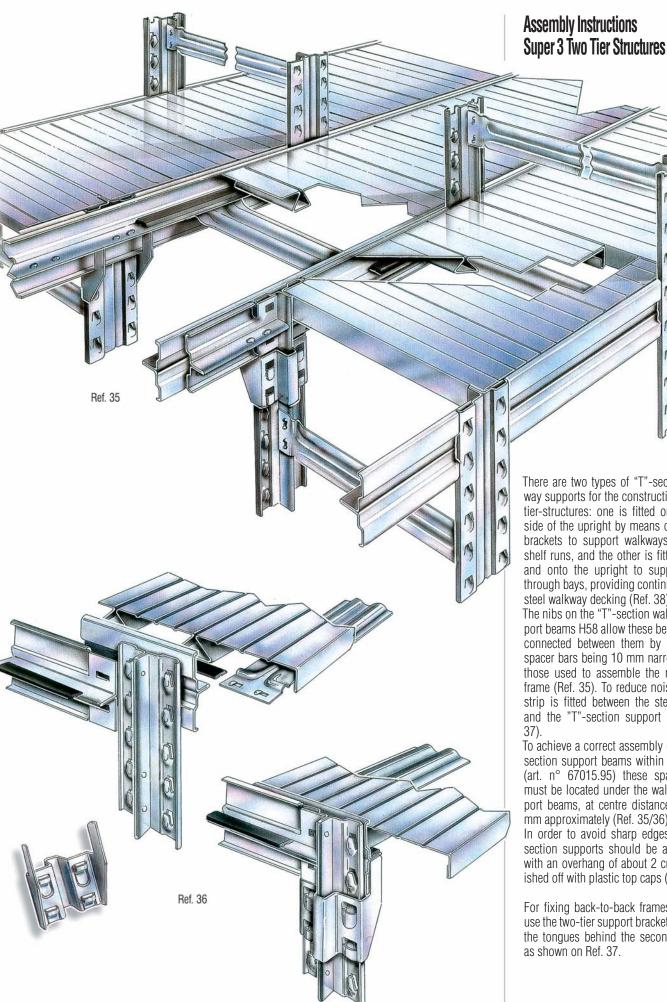
58

96

58 1 Ribbed Open Smooth Compensation planks $^{100} \gamma_{\neq}$ × 200 Ref. 32 3 3 3 DIAMETER Ø 8,5 mm Ref. 34 58 96

300

27



There are two types of "T"-section walkway supports for the construction of twotier-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 walkthrough 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.

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.

When designing two-tier structures, remember that the overall width of every member 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 walk-ways and respectively 12 mm parrower

See more on the web

1

Ref. 37

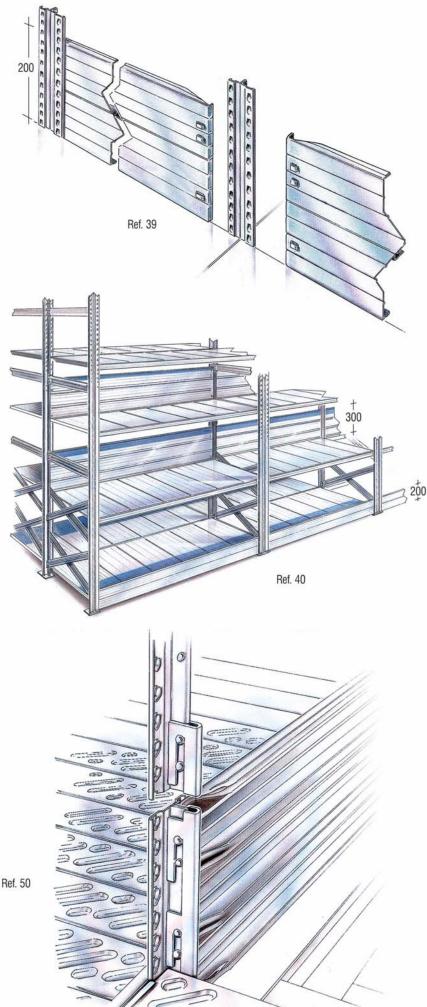
ways and respectively 12 mm narrower than the spacer bars used to assemble

walk-through bays. In all cases, only Super 3 components should be used when designing two-tierstructures.

D



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 up-

rights, 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 50 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. 39/40).

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 52 of this brochure.

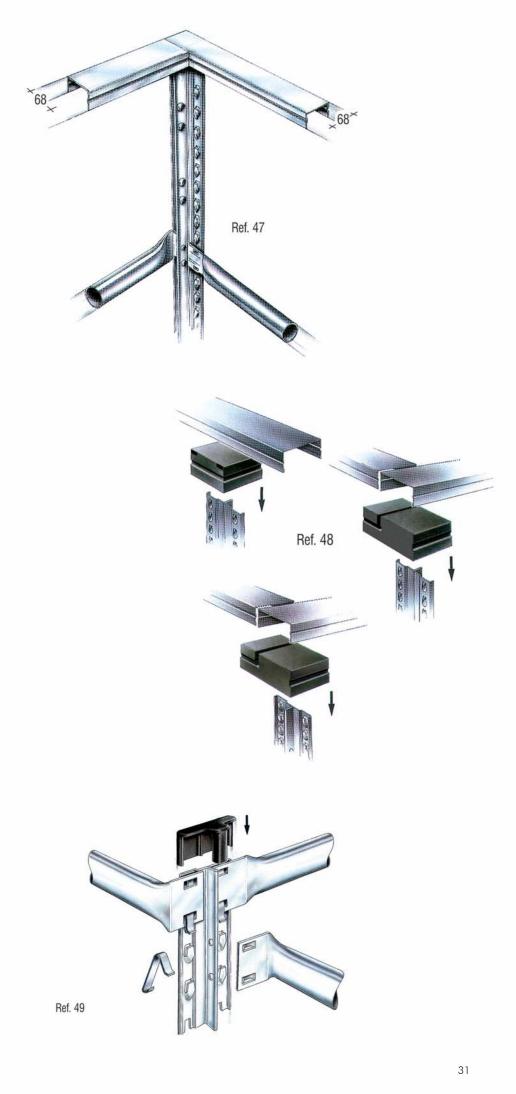


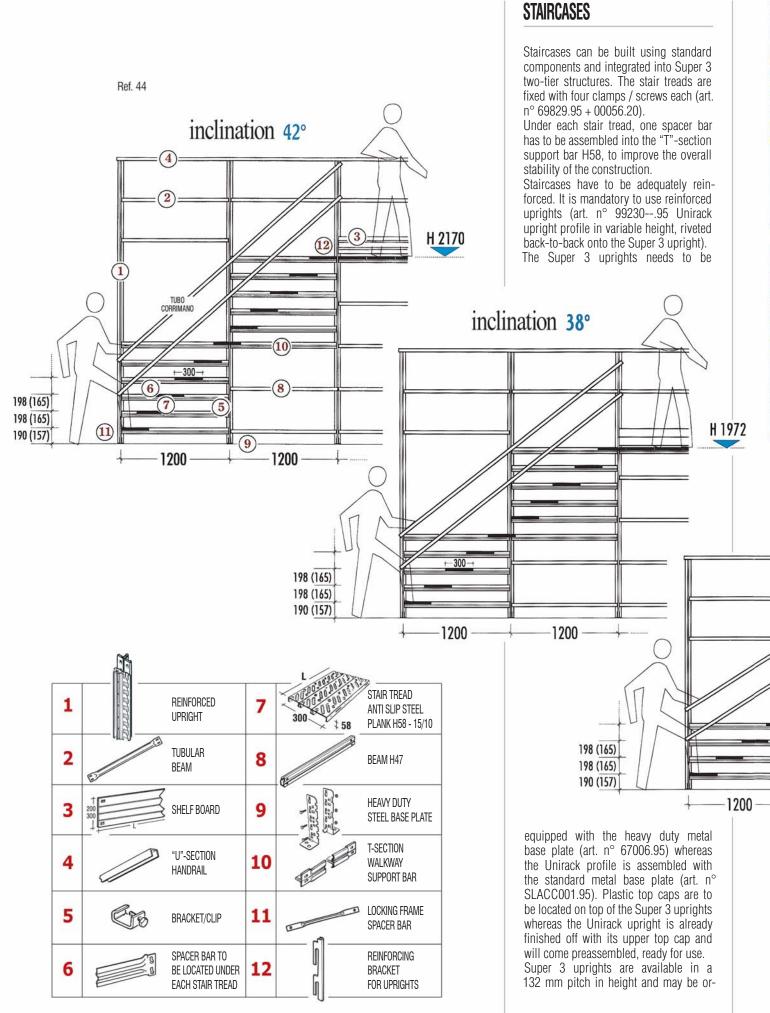
Hand Rails

Hand rails and knee rails are made from oval shaped beams (Ref. 49). For correct ordering of these items, please see instructions on page 50 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.

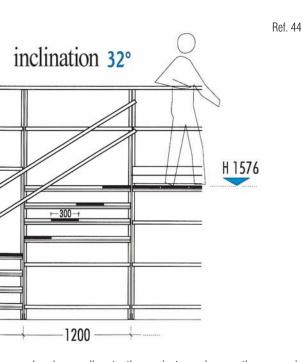






BF MANA BDBE BF





dered according to the project requirements. Unirack upright profiles may be ordered with a 100mm pitch in height. It is recommended to continue with the regular frame bracing pattern within these frames, as soon as possible.

More information regarding ordering modalities on page 52 of this brochure. See also METALŠISTEM Informa n° 653 for further details and additional applica-



000000000000000000 tion examples of the reinforced upright

Welded staircases are also available, to suit any requirement.

Super 3.

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Trendy Shopfitting and Display Solutions

Achieved with standard modular Super 1-2-3- shelving components. See pictures at left and at right.

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 or the use of the reinforcement bar (please refer to page 41).

Reinforcement Bars

This solution couples two connection brackets with a standard 40x20 mm oval section to create a reinforced connection between two uprights of a shelving bay, substantially increasing the stiffness of the shelving row (Ref. 65). This is an ideal solution for a wide range of





applications where firmness is an added value, such as hanging garment shelving and retail furnishing solutions, generally characterised by low frame heights, few beam levels and short shelving row configurations.

When applying the integrated shopfitting and display solution mentioned above (Super 1-2-3 frames assembled with Euroscacco shelf panels), the bracing system may be substituted by a continuous row of reinforcement bars placed at 2/3's of the frames' height.

This configuration will provide a maximum load bearing capacity of 350 daN per bay (assuming 5 load levels at 70 daN each), with uniformly distributed loads. The design of the connection bracket creates a four pronged connection to the uprights while maintaining full access to the bay.

This unique solution not only guarantees flexibility in application but, more importantly, it ensures extraordinary nodal performance.

Reinforcement bars, like any other standard beam component, requires the mandatory application of safety pins.

For more information, please refer to METALSISTEM Informa n° 706 and to page n° 53 of this brochure.

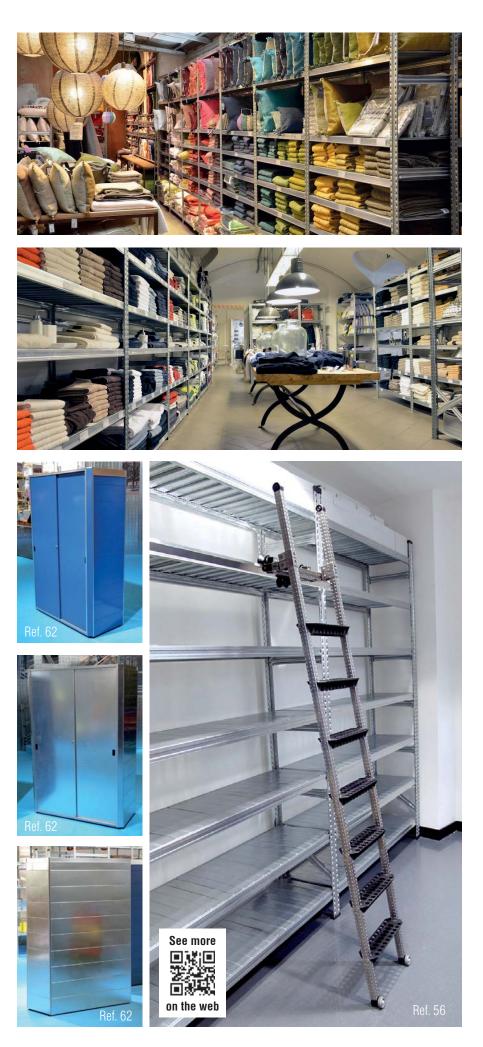
Modular Steel Cabinets

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 1 beams and H12 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 for 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 53.

Mobile Ladders

Mobile ladders are available in 2000/2500/3000 mm height (in 5, 7 or 9 steps configuration) and can be supplied with guide rail and curves to adapt them to any environment (Ref. 56). For ordering please refer to page 49.



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 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.

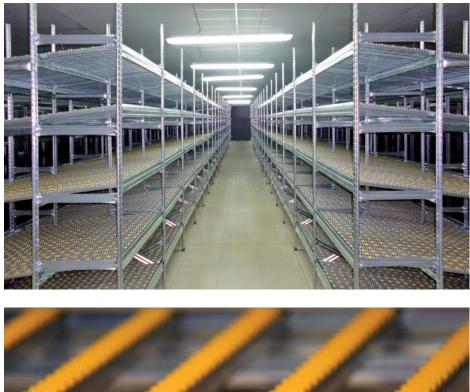
The sliding rails are made to match the height of the shelving beams on top and at the bottom of the shelving bay. In case of MOBIBASIC mobile shelving installations, the rails are fixed directly to the MOBIBASIC chassis and to the shelving beam on top of the bay, to ensure a dust proof connection. For more information and ordering, please refer to page 53.



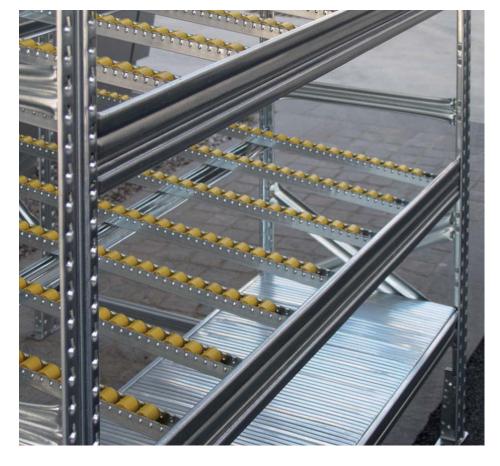












Carton Flow

Carton flow beds 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 54 of this brochure.

Removable Divider

The roller beds can be equipped with removable dividers that make use of the 32/4 zinc-coated profile. They are installed by pressure therefore, the width of lanes can be changed easily. The divider can cover the entire length of the roller bed but can also be used as partial start or end roller bed division.



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.

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

Walkway Beams

Walkway beams provide an alternative solution to the use of "T"-section support bars, enabling the steel planks to be laid in length direction along the walkways (Ref. 57). Walkway beams are made from a profile section 70x70/6 containing perforations along one face of the profile.

These perforations are used to connect the steel plank fixing brackets (art. 69864.98) as shown in the picture below. Thanks to their profile width of 70 mm, walkway beams provide a large and smooth surface for the connection of adjoining steel planks on top, thus ensuring appropriate continuity and evenness at the steel plank joints.

The connectors of the walkway beams are assembled directly on site and fit perfectly into the beam support brackets (art. 67022.95).

Two self-perforating screws are used to fasten the connection; see picture below. The installation of these screws is mandatory. Walkway beam profiles are ordered in nominal dimension.



Ref. 52

Ref. 53

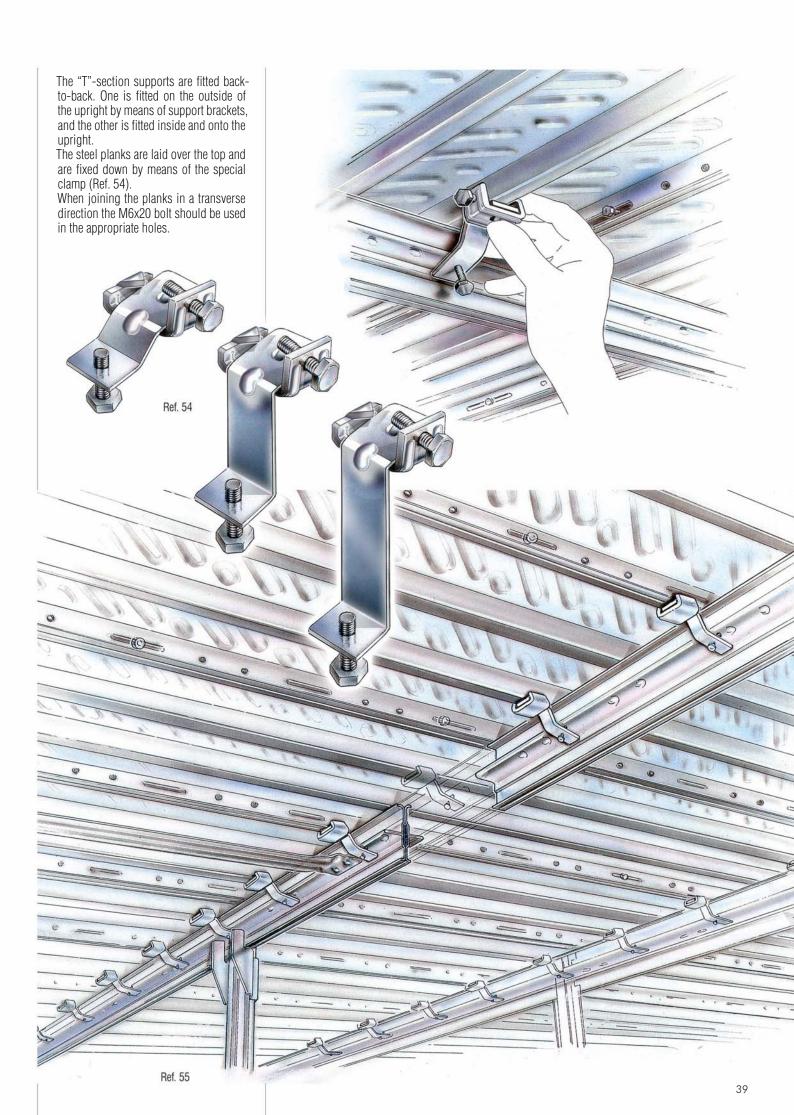
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Walkway Beam Assembly

Ref.	Article	Description	Q.ty
1	Al210013.95	Walkway Beam Profile 70x70/6	1
2	AI210082.95	Walkway Beam Connectors	2
3	69864.98	Steel Plank Fixing Bracket	2
4	00058.20	Screw 5,5x19	2
5	67022.95	Walkway Beam Support Bracket	2

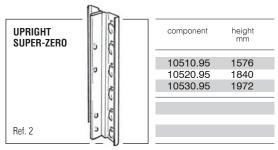
Ref. 57



SUPER ZERO

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	70112.95	1840	400	4
brochure.	70115.95	1972	400	5
	70115.95	1972	400	5
	70110.05	1570	500	4
	70118.95	1576	500	4
	70121.95	1840	500	4
	70124.95	1972	500	5
	70127.95	1576	600	4
	70130.95	1840	600	4
	70133.95	1972	600	5
	70136.95	1576	700	4
	70139.95	1840	700	4
	70142.95	1972	700	5
	70142.33	1372	100	5
	70145.95	1576	800	4
	70148.95	1840	800	4
	70151.95	1972	800	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.

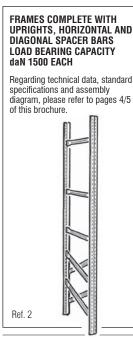
BEAM SUPER-ZERO	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	SHOPFITTING Accessories	component
	30000L.95	600	200	Chrome-plated ho	oks, bars and wire
	30001L.95	900	200		031.006.21
	30003L.95	1050	170	<	
47	30004L.95	1200	150	\sim	031.005.21
				~ \.	
	The load bearing ca	pacity of the bea	ams is to be understood as referring to of beams. The load bearing indication	\rightarrow	
Ref. 3	is valid and applical	ble for a use of th	he beams with modular shelves and/or	A	031.028.21
101.0	modular containers				031.031.21

COMPLETE SHELVES WITH BEAMS SUPER-ZERO	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>
AND PANELS H12 mm	80001.95	900	320	200
Regarding technical data	80004.95	900	400	200
and standard specifications,	80007.95	900	500	185
please refer to pages 4/5	80010.95	900	600	150
of this brochure.	80013.95	900	700	130
	80014.95	1050	320	170
	80015.95	1050	400	170
	80016.95	1050	500	170
450 ×	80017.95	1050	600	170
600	80018.95	1050	700	155
+ 				
	80019.95	1200	320	150
	80022.95	1200	400	150
47	80025.95	1200	500	150
Ref. 5	80028.95	1200	600	150
101. 0	80031.95	1200	700	150

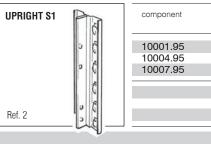
COMPLETE SHELVES WITH BEAMS SUPER-ZERO	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>
AND PANELS H25/A				
Regarding technical data	80004A.95	900	400	200
and standard specifications,	80007A.95	900	500	200
please refer to pages 4/5	80010A.95	900	600	200
of this brochure.	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				

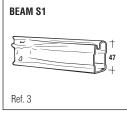
SHOPFITTING Accessories	component	depth mm	
Chrome-plated h	ooks, bars and wire ro	ds	
	031.006.21 031.005.21	350 400	
	031.028.21 031.031.21 031.030.21	350 400 500	
	031.025.21	350	
	031.086.21 031.080.21	200 400	
	207.004.21 207.006.21	350 450	
	207.014.21 207.016.21	350 450	
	207.024.21 207.026.21	350 450	

PATENTED BOLTFREE SHELVING SYSTEM



component	height mm	depth mm	horizontal & diagonal spacer bars
70001.95	1972	320 320	5
70004.95 70007.95	2500 3028	320	8
70010.95 70013.95	1972 2500	400 400	5
70016.95	3028	400	8
70019.95	1972 2500	500 500	5
70022.95	3028	500	8
70028.95	1972	600	5
70031.95 70034.95	2500 3028	600 600	6 8
70037.95	1972	700	5
70040.95 70043.95	2500 3028	700 700	6 8
70046.95	1972	800	5
70049.95 70052.95	2500 3028	800 800	6 8





component	length mm	Load <dan> per pair - u.d.l.</dan>
30000.95	600	280
30001.95	900	280
30003.95	1050	235
30004.95	1200	205
30005.95	1350	180
30007.95	1500	145
30008.95	1650	120

height mm

1972

2500

3028

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 depth mm Load capacity <daN> u.d.l. component length mm depth mm Load capacity <daN> u.d.l. **COMPLETE SHELVES COMPLETE SHELVES** WITH BEAMS S1 WITH BEAMS S1 AND PANELS H12 mm AND PANELS H25/A 80501.95 900 320 280 80504A.95 900 400 280 Regarding technical data 80504.95 900 400 235 Regarding technical data 80507A.95 900 500 280 and standard specifications, and standard specifications, 80507.95 900 500 185 80510A.95 900 600 280 please refer to pages 4/5 please refer to pages 4/5 80510.95 900 600 150 80513A.95 900 700 280 of this brochure. of this brochure. 80513.95 900 700 130 80516A.95 900 800 230 320 205 80522A.95 1200 400 205 80519.95 1200 205 80525A.95 1200 500 205 80522.95 1200 400 80525.95 1200 500 205 80528A.95 1200 600 205 205 80531A.95 1200 205 80528.95 1200 600 700 450 600 900 180 80534A.95 800 180 80531.95 1200 700 1200 300 80537.95 320 145 80540A.95 400 145 1500 1500 80540.95 1500 400 145 500 80543A.95 1500 145 47 80543.95 1500 500 145 80546A.95 600 145 1500 1 47 600 145 80546.95 1500 80549A.95 1500 700 145 Ref 5 Ref 6 145 80549.95 1500 700 80552A.95 1500 800 130

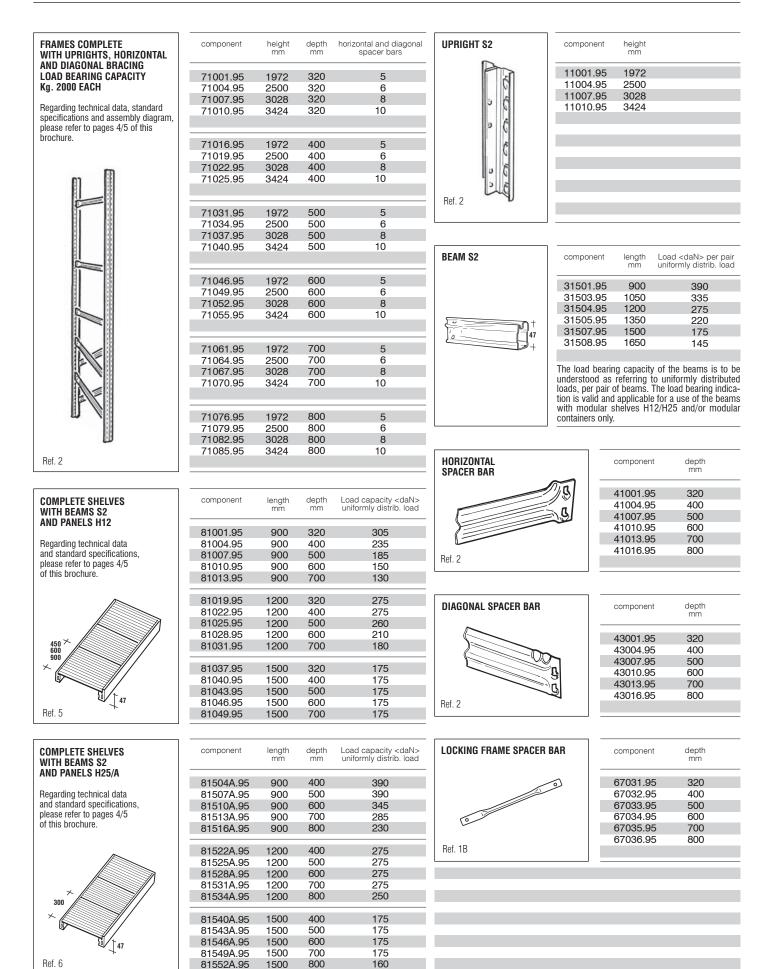
SUPER 1

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
smooth version perforated version	1000 1000 1000 1000 1000 1250 1250 1250	300 400 500 600 700 300 400 500 600	636.002.01 636.012.01 636.022.01 636.032.01 636.042.01 636.007.01 636.007.01 636.027.01 636.027.01	626.002.01 626.012.01 626.022.01 626.032.01 626.042.01 626.007.01 626.017.01 626.027.01 626.037.01	Pag. 34	macro-code composed of 68051.95 00020.20 00027.20 00035.20 bracing diagonal length of diagona		n° 4 n° 12 n° 8 n° 4	n° 4 n° 12 n° 8 n° 4
Pag. 34	1250 1330 1330 1330 1330 1330	700 300 400 500 600 700	636.047.01 636.004.01 636.014.01 636.024.01 636.034.01 636.044.01	626.047.01 626.004.01 626.014.01 626.024.01 626.034.01 626.034.01	FRAME SPACER BAR FOR EUROSCACCO SHELF PANELS	component 41701.95 41704.95 41707.95 41710.95 41713.95	depth mm 300 400 500 600 700		

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. When applying the integrated shopfitting and display solution mentioned above (Super 1-2-3 frames assembled with Euroscacco shelf panels), the bracing system may be substituted by a continuous row of reinforcement bars placed at 2/3's of the frames' height. This configuration will provide a maximum load bearing capacity of 350 daN per bay (assuming 5 load levels at 70 daN each), with uniformly distributed loads.

PATENTED BOLTFREE SHELVING SYSTEM



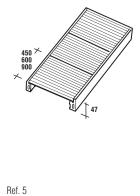
PATENTED BOLTFREE SHELVING SYSTEM

FRAMES COMPLETE WITH UPRIGHTS, HORIZONTAL	component	height mm	depth mm	horizontal and diagonal spacer bars
AND DIAGONAL BRACING Load Bearing Capacity	72001.95	1972	320	5
Kg. 3600 EACH	72004.95 72007.95	2500 3028	320 320	6 8
Regarding technical data, standard specifications and assembly diagram,	72010.95 72013.95	3424 3952	320 320	10 11
please refer to pages 4/5 of this prochure.	72016.95 72019.95	4480 5008	320 320	13 15
	72019.95	1972	400	5
	72025.95	2500	400	6
	72028.95 72031.95	3028 3424	400 400	8 10
er 🕅	72034.95 72037.95	3952 4480	400 400	11 13
	72040.95	5008	400	15
	72043.95 72046.95	1972 2500	500 500	5 6
	72049.95 72052.95	3028 3424	500 500	8 10
	72055.95	3952	500	11
	72058.95 72061.95	4480 5008	500 500	13 15
	72064.95	1972	600	5
	72067.95 72070.95	2500 3028	600 600	6 8
	72073.95 72076.95	3424 3952	600 600	10 11
	72079.95 72082.95	4480 5008	600 600	13 15
	72085.95	1972	700	5
	72088.95	2500	700	6
	72091.95 72094.95	3028 3424	700 700	8 10
	72097.95 72100.95	3952 4480	700 700	11 13
	72103.95	5008	700	15
	72106.95 72109.95	1972 2500	800 800	5 6
	72112.95 72115.95	3028 3424	800 800	8 10
	72118.95	3952	800	11
Ref. 2	72121.95 72124.95	4480 5008	800 800	13 15
UPRIGHT \$3	component	height mm		
đ	12001.95	1972		
5	12004.95 12007.95	2500 3028		
≥ Č	12010.95 12013.95	3424 3952		
C	12016.95	4480		
0 5	12019.95	5008		
Ref. 2				
1101. 2				
BEAM S3	component		ad <dan></dan>	
			pair - u.d.l.	
	32501.95 32503.95	900 1050	450 385	
	32504.95 32505.95	1200 1350	320 255	
	32507.95 32508.95	1500 1650	205 170	
	32508.95	1800	140	
	The load bearing ca	apacity of the b	beams is to	be understood as referring
Ref. 3	indication is valid	and applicable	e for a use o	beams. The load bearing of the beams with modular
	shelves and/or mo	odular contain	ers only.	

PATENTED BOLTFREE SHELVING SYSTEM

COMPLETE SHELVES WITH BEAMS S3 AND PANELS H12

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



	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>	
a ons, 5	82001.95 82004.95 82007.95 82010.95	900 900 900 900	320 400 500 600	305 235 185 150	
	82013.95	900	700	130	
	82019.95 82022.95	1200 1200	320 400	320 320	
	82025.95 82028.95	1200 1200	500 600	260 210	
	82031.95	1200	700	180	
	82037.95 82040.95 82043.95	1500 1500 1500	320 400 500	205 205 205	
47	82046.95 82049.95	1500 1500	600 700	205 205 205	
	82055.95	1800	320	140	
	82058.95 82061.95	1800 1800	400	140 140	
	82064.95 82067.95	1800 1800	600 700	140 140	

COMPLETE SHELVES WITH BEAMS S3 AND PANELS H25/A	component	length mm	depth mm	Load capacity <dan> uniformly distrib. load</dan>	
	82504A.95	900	400	450	
Regarding technical data	82507A.95	900	500	420	
and standard specifications,	82510A.95	900	600	345	
please refer to pages 4/5	82513A.95	900	700	285	
of this brochure.	82516A.95	900	800	230	
~	82522A.95	1200	400	320	
	82525A.95	1200	500	320	
	82528A.95	1200	600	320	
	82531A.95	1200	700	320	
+	82534A.95	1200	800	290	
300					
	82540A.95	1500	400	205	
E 147	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	
D-f C	82573A.95	1800	700	140	
Ref. 6	020104.00	1000	100	עדו	



load capacity <daN> uniformly distrib. load load capacity <daN> uniformly distrib. load article H25/C depth mm article H25/D 52521.95 52524.95 52541.95 400 150 180 150 500 52544.95 180 52527.95 120 600 52547.95 150 52530.95 700 52550.95 95 120 52533.95 800 52553.95 70 85

The load bearing capacities indicated in this table refer to uniformly distributed loads < daN > per shelf panel.

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 $^{\circ}$ 577.

Pag. 15

84564A.95

84567A.95

84570A.95 84573A.95

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 H12	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
0				please refer to pages 4/5	83125.95	1500	600	260
, the second sec				of this brochure.	83128.95	1500	700	220
<u> </u>					83131.95	1800	320	310
+					83134.95	1800	400	310
					83137.95	1800	500	310
	The load bearing	ng capacit	y of the beams is to be	× ()	83140.95	1800	600	305
	understood as r	eferring to u	y of the beams is to be iniformly distributed loads, bearing indication is valid		83143.95	1800	700	260
Ref. 6 bis	and applicable is shelves and/or i	for a use o	t the beams with 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 H25/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
7				of this brochure.	83352A.95	1500	800	350
				× / 1	83364A.95 83367A.95	1800 1800	400 500	310 310
				300	83370A.95	1800	600	310
	The load beari	ing capaci	ty of the beams is to be uniformly distributed loads,	*	83373A.95	1800	700	310
Ref. 6 bis	per pair of bear and applicable shelves and/or	ns. The loa for a use o	d bearing indication is valid of the beams with modular	Ref. 6 bis				

BEAM S3G	component	length mm	Load <dan> per pair uniformly distrib. load</dan>	COMPLETE SHELVES With Beams S2G And Panels H25/A	component	length mm	depth mm	Load capacity <dan> u.d.l.</dan>
	35004.95	1500	640	AND PANELS H23/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
10 million				please refer to pages 4/5	83549A.95	1500	700	520
				of this brochure.	83552A.95	1500	800	425
<u> 80</u>					83564A.95	1800	400	430
+				300 -	83567A.95	1800	500	430
					83570A.95	1800	600	430
	The load bear	ing capaci	ty of the beams is to be		83573A.95	1800	700	430
	understood as	reterring to	uniformly distributed loads,					
Ref. 6 bis	and applicable shelves and/or	for a use of modular c	d bearing indication is valid of the beams with modular ontainers only.	Ref. 6 bis				

COMPLETE SHELV With Beams S3G And Panels H25/				COMPLETE SHELV With Beams S3G And Panels H25/			
Regarding technical of standard specification please refer to pages of this brochure.	ns,	30 ×		Regarding technical of standard specification please refer to pages of this brochure.	ns,	7	300 -
Ref. 6 bis			TU 1 80	Ref. 6 bis			TU 1 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

 84564B.95 84567B.95 84570B.95 84573B.95

PERFORATED PLASTIC SHELF PANELS

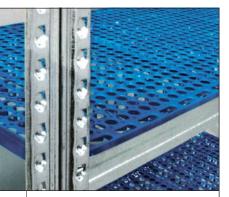
METALSISTEM's plastic shelf panels are made from high quality polypropylene according to the RoHS directive and compatible for use within the food sector. The perforation is >50% of the shelf surface area. FROST shelf panels are available for use in cooling rooms. FROST shelf panels are made from specific materials and additives to achieve a higher grade of suppleness. Their use is restricted to environments below 0° C. Load bearing capacities are indicated below and refer to uniformly distributed loads, differentiated according to the degree of deflection. See also page 15, Ref. 60.

Additionally to the plastic shelf panels in 300 mm width, compensation panels in 150 mm and 200 mm width are also available to suit bay lengths of 1050/1350/1650 mm.

The load bearing capacities of these compensation panels are indicated below and refer to uniformly distributed loads, differentiated according to the degree of deflection.

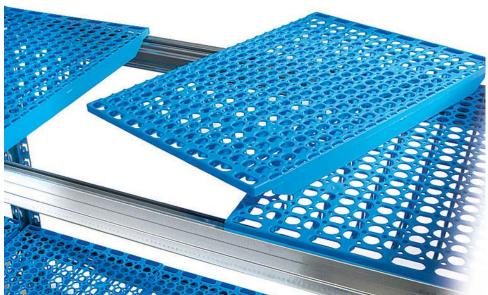
Notes: High temperature increase the shelves' suppleness while low temperatures make them brittle. The material used for the manufacture of standard plastic shelves is optimised to offer best performance at room temperature. Frost shelf panels contain an additive allowing the shelves to be applied in cooling rooms, at low temperatures. The use of our shelf panels in environments other than those indicated could compromise performance.

PL30X32D1.98 40 - Frost Green 320 Image: Constraint of the constra	7° +30° 2 NOT 2 NOT 2 NOT 2 NOT 2 NOT 3 GOOD
PL30X32D1.98 40 - Frost Green 320 Image: Constraint of the constra	
PL30X32D1.98 40 - Frost Green 320 Image: Constraint of the constra	
PL30X40D1.98 40 - Frost Green Frost Green 400 Image: Company (Company) Image: Company Image: Company Image	
PL30X50D1.98 40 - 500 - 500	
PL30X50D1.98 40 - 500 - 500	GOOD
PL30X32C1.98 35 45 320 😳 🗊 🖑 🐯	
	2
PL30X40C1.98 35 45 400 😳 🗗 🗤 🖓	GOOD
	GOOD
PL30X60C1.98 15 30 600 🔀 🗊 🖉	GOOD
PL30X32A1.98 35 45 320 C S PL30X32A1.98 35 45	GOOD
	GOOD
PL30X50A1.98 25 45 Yellow 500 E Soco	GOOD
PL30X60A1.98 15 30 600 🔀 🗊 💭 🖏 🖉	GOOD
PL30X32B1.98 35 45 320 C A5	GOOD
PL30X40B1.98 35 45 Light 400 😳 🗊 🖑 KOT SO	GOOD
PL30X50B1.98 25 45 Blue 500 🕮 🗊 🖑 🐯 🕴	GOOD
PL30X60B1.98 15 30 PL30X32B2.98 35 45	GOOD
PL30X32B2.98 35 45 🛃 S20 😳 🗊 🖑 🐯 🕴	GOOD
PL30X40B2.98 35 45 45 400 UU NOTED	GOOD
PL30X50B2.98 25 45 Blue 500 E 500 M C	GOOD
PL30X60B2.98 15 30 600 🔀 🗊 🕅	GOOD
PL30X32V1.98 35 45 320 E Store 320	GOOD
PL30X40V1.98 35 45 Dark 400 🙂 🗊 🖑 KOT SO	GOOD
PL30X50V1.98 25 45 Green 500 🗉 🗊 🖑 🐯	GOOD
PL30X60V1.98 15 30 600 🔀 🗊 🗰 🚺	GOOD
PL30X32N1.98 35 45 320 🔃 🗊 🖑 🐯 🖉	GOOD
PL30X40N1.98 35 45 400 😳 🗊 🕅 NOT SO	GOOD
Black	GOOD
PL30X60N1.98 15 30 600 🔀 🗊 🗰 🕻	GOOD



PERFORATED PLASTIC SHELF PANELS

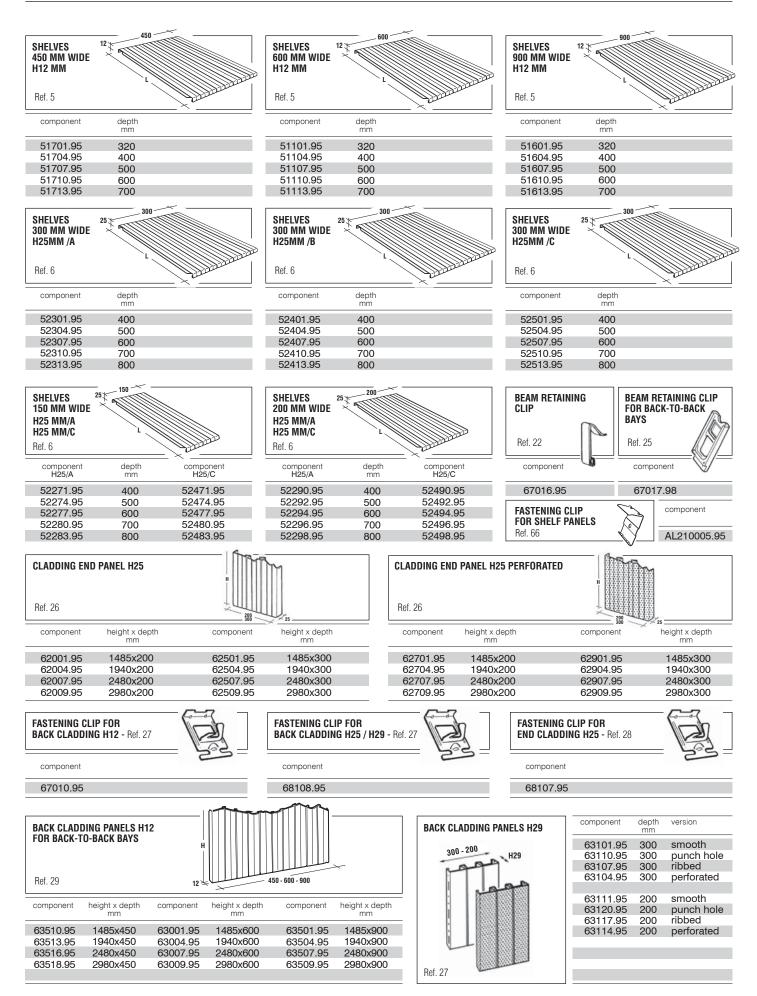




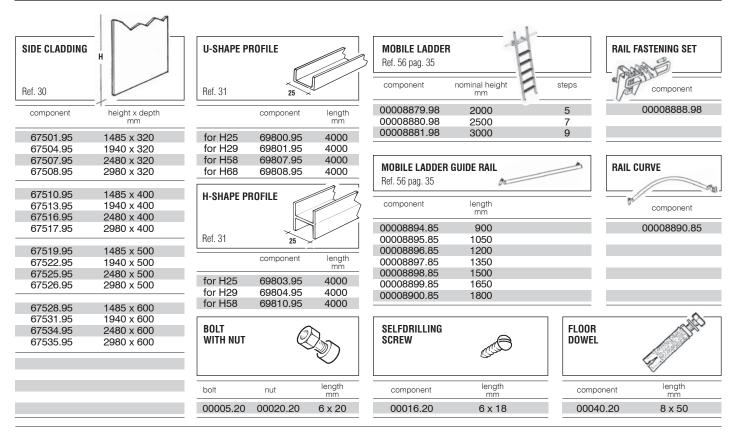
Additionally to the plastic shelf panels in 300 mm width, compensation panels in 150 mm and 200 mm width are also available to suit bay lengths of 1050/1350/1650 mm. The load bearing capacities of these compensation panels are indicated below and refer to uniformly distributed loads, differentiated according to the degree of deflection.

Article Code	Low deflection	High deflection	of Shelf	Colour		Depth (mm)	Impact resistance	Field o	f application	on (°C)	Article Code	Low deflection	High deflection		
Panel width		aring ca- aN) - u.d.l.	Type	Type			Dep.	resi				Panel width		aring ca- aN) - u.d.l.	
L=200 mm	L=200 mm	L=200 mm						-30°↔ 0°	0° +7°	+7° +30°	L=150 mm	L=150 mm	L=150 mm		
PL20X32D1.98	27	-	F			320	\vdots	GOOD		E NOT GOOD	PL15X32D1.98	20	-		
PL20X40D1.98	27	-	FROST	Frost Green		400	\vdots	GOOD	MOT SO GOOD	E NOT GOOD	PL15X40D1.98	20	-		
PL20X50D1.98	27	-	ш			500	\vdots	GOOD			PL15X50D1.98	20	-		
PL20X32C1.98	23	30			£379	320	\odot	E NOT GOOD		GOOD	PL15X32C1.98	18	23		
PL20X40C1.98	23	30		White		400	\odot	E NOT GOOD	MOT SO GOOD	GOOD	PL15X40C1.98	18	23		
PL20X50C1.98	17	30		Yellow	Sheer	500	\vdots			GOOD	PL15X50C1.98	13	23		
PL20X32A1.98	23	30			Yellow Solution	320	\odot	E NOT GOOD	MOT SO GOOD	GOOD	PL15X32A1.98	18	23		
PL20X40A1.98	23	30				400	\odot			GOOD	PL15X40A1.98	18	23		
PL20X50A1.98	17	30				500	\vdots	E NOT GOOD		GOOD	PL15X50A1.98	13	23		
PL20X32B1.98	23	30					320	\odot	E NOT GOOD		GOOD	PL15X32B1.98	18	23	
PL20X40B1.98	23	30	۵					400	\odot	E NOT GOOD	MOT SO GOOD	GOOD	PL15X40B1.98	18	23
PL20X50B1.98	17	30	STANDARD			500	\vdots	E NOT GOOD		GOOD	PL15X50B1.98	13	23		
PL20X32B2.98	23	30	TAN				111111	320	\odot	E NOT GOOD		GOOD	PL15X32B2.98	18	23
PL20X40B2.98	23	30	S	Blue		400	\odot	E NOT GOOD		GOOD	PL15X40B2.98	18	23		
PL20X50B2.98	17	30				500	\vdots	E NOT GOOD		GOOD	PL15X50B2.98	13	23		
PL20X32V1.98	23	30				320	\odot			GOOD	PL15X32V1.98	18	23		
PL20X40V1.98	23	30		Dark Green		400	\odot	E NOT GOOD		GOOD	PL15X40V1.98	18	23		
PL20X50V1.98	17	30			and an	500	\vdots	E NOT GOOD		GOOD	PL15X50V1.98	13	23		
PL20X32N1.98	23	30				320	\odot	E NOT GOOD		GOOD	PL15X32N1.98	18	23		
PL20X40N1.98	23	30		Black		400	\odot	E NOT GOOD	MOT SO GOOD	GOOD	PL15X40N1.98	18	23		
PL20X50N1.98	17	30				500	\vdots	E NOT GOOD	MOT SO GOOD	GOOD	PL15X50N1.98	13	23		

ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES

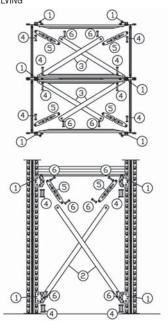


ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES



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"



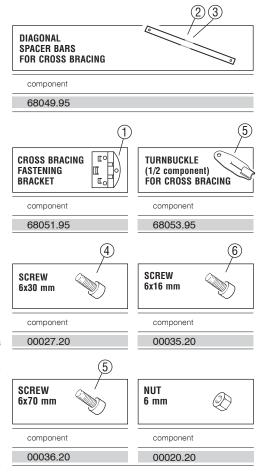
CROSS BRACING SUPER 1-2-3 SERIES

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.

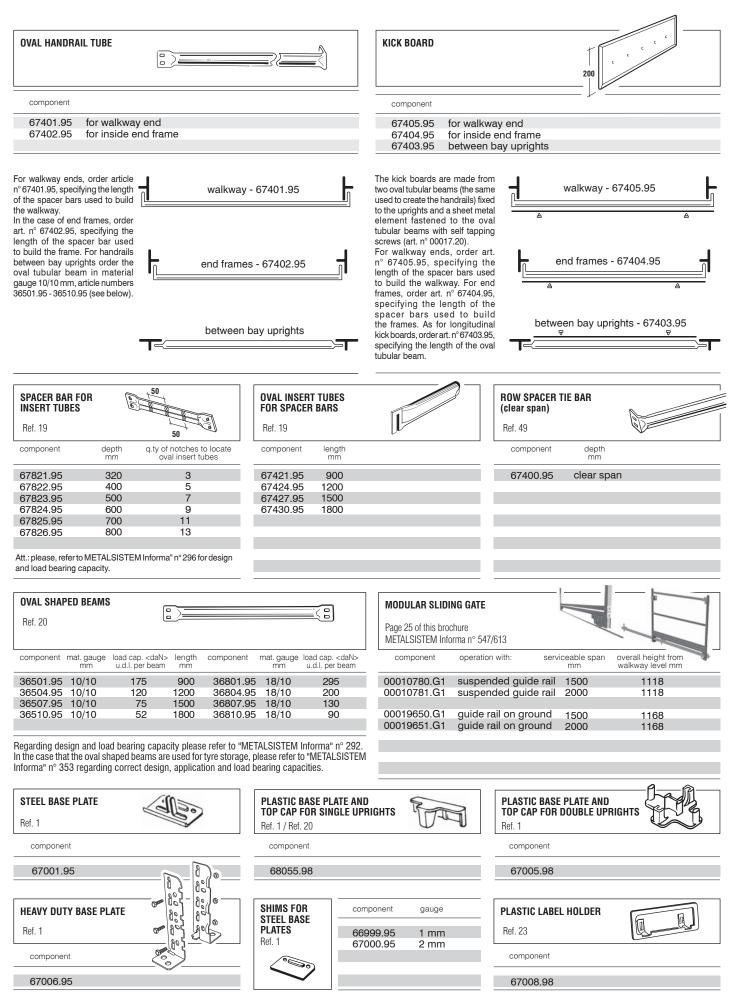
MACROCODE 67023.98 for single sided shelving. The macrocode 67023.98 comprises all components shown in the sketch, except items 2-3 **MACROCODE 67024.98** for double sided shelving. The macrocode 67024.98 comprises all components shown in the sketch, except items 2-3

item	Macrocode 67023.98 q.ty of components	item	Macrocode 67024.98 q.ty of components	
68051.95	6	68051.95	8	
68053.95	8	68053.95	12	
00020.20	28	00020.20	40	
00027.20	16	00027.20	24	
00035.20	8	00035.20	10	
00036.20	4	00036.20	6	

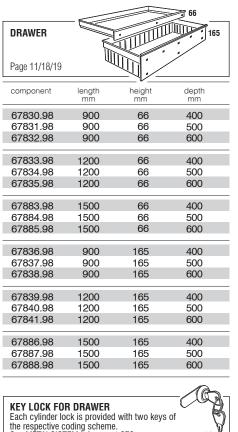
CROSS BRACING SUPER 1-2-3 SERIES

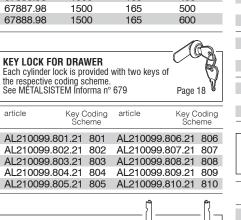


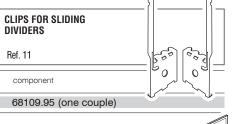
ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES



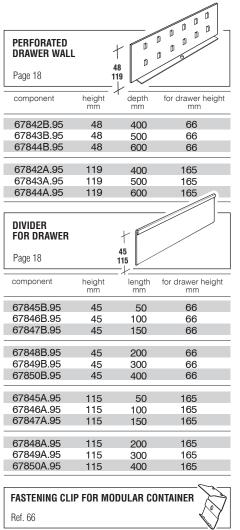
ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES

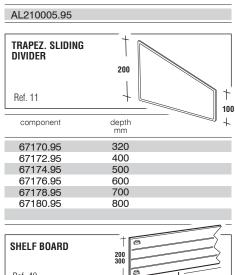






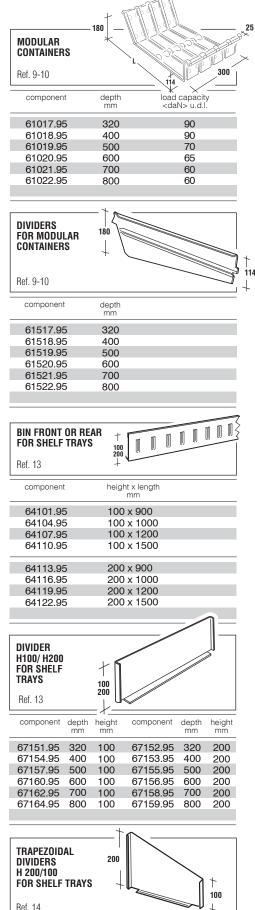
SLIDING DIVIDER H100/H200 Ref. 11	100 200	
component	depth mm	height mm
67200.95	320	100
67204.95	400	100
67206.95	500	100
67208.95	600	100
67210.95	700	100
67212.95	800	100
67220.95	320	200
67222.95	400	200
67224.95	500	200
67226.95	600	200
67228.95	700	200
67230.95	800	200





article

Ref. 40		
 component	height x length mm	
64016.95	200 x 900	
64019.95	200 x 1200	
64022.95	200 x 1500	
64025.95	200 x 1800	
64031.95	300 x 900	
64034.95	300 x 1200	
64037.95	300 x 1500	
64040.95	300 x 1800	



depth mm

320

400

500

component

67181.95

67184.95

67187.95

depth mm

600

700

800

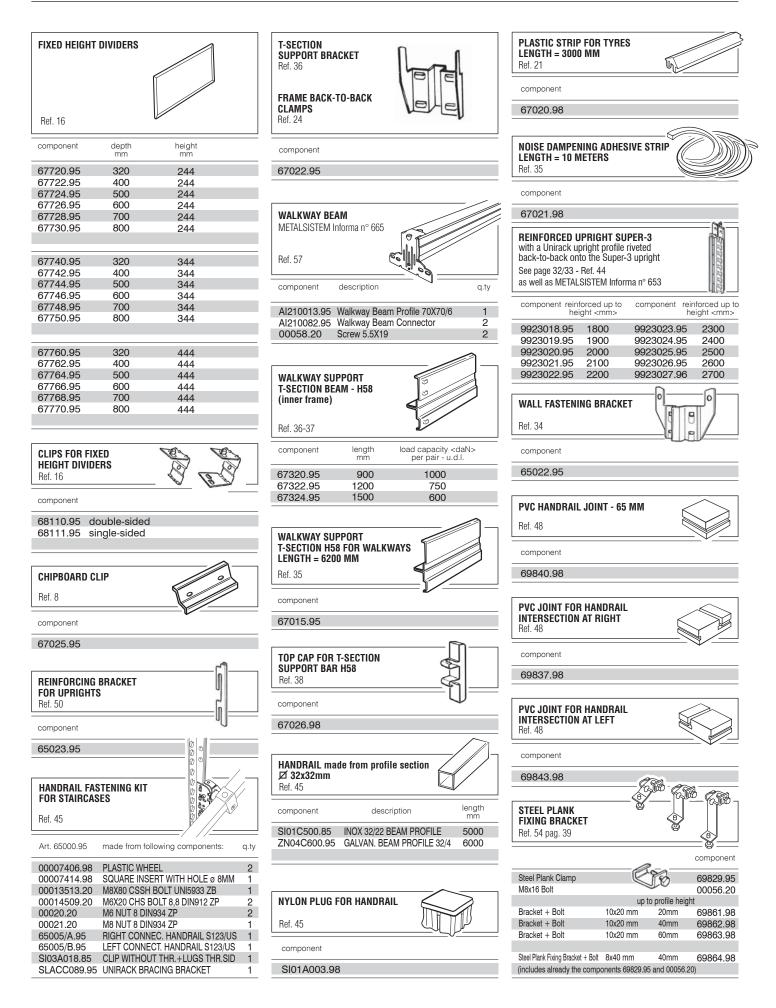
component

67190.95

67192.95

67194.95

ACCESSORIES FOR SUPER 1-2-3 SHELVING SERIES



		12	
LOCKABLE DOOR, Standard Finish: Grey RAL 7001			LOCKABLE SLII • available in zir • standard colo • see also MET/
component	length x height mm		bay length x heig mm
68201.98 68204.98 68207.98	900x2000H 1200x2000H 1500x2000H		900x2000H 1200x2000H 1500x2000H
68210.98 68213.98 68216.98	900x2500H 1200x2500H 1500x2500H		900x2500H 1200x2500H 1500x2500H

LOCKABLE SLIDING DOOR • available in zinc coated version or powder coated. • standard colour blue, RAL 5010 - other colours available upon request • see also METALSISTEM Informa n° 583 Ref. 63								
bay length x height mm	zinc coated version component	powder coated versic component	'n					
900x2000H	68220.95	68220						
1200x2000H	68222.95	68222						
1500x2000H	68224.95	68224						
900x2500H	68230.95	68230						
1200x2500H	68232.95	68232						
1500x2500H	68234.95	68234						

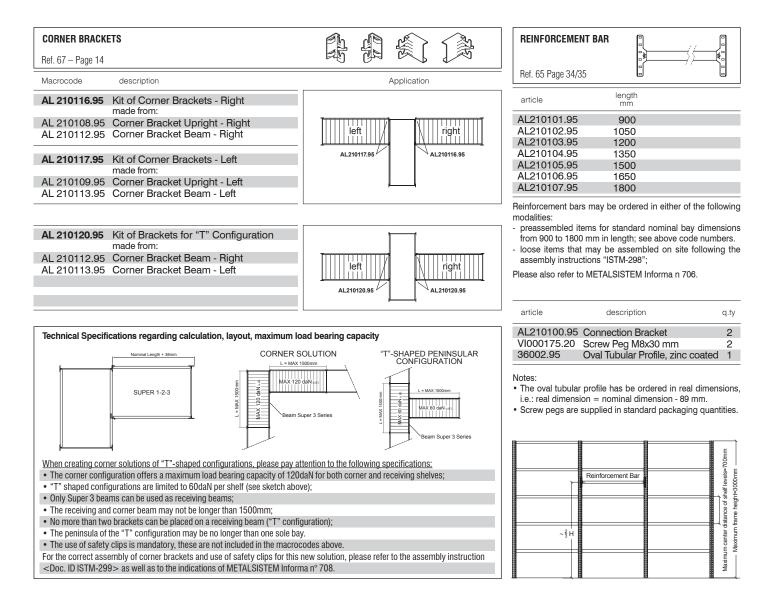




LxDxH overall dimension <mm> 1025/1325/1625x595x1975

STEEL CABINET WITH 4 M Super 1 beams and H12 mm		CLADDING SET made from side/back/top (*) cladding panels.			
Cabinet available in zinc coa		(*) top cladding panel stand.	ard zinc coated		
Standard colours: red RAL 3		Cladding Set includes fasten	ing 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	
900x500x2000	MS210001.95	MS210001	MS210004.95	MS210004	
1200x500x2000	MS210002.95	MS210002	MS210005.95	MS210005	
1500x500x2000	MS210003.95	MS210003	MS210006.95	MS210006	

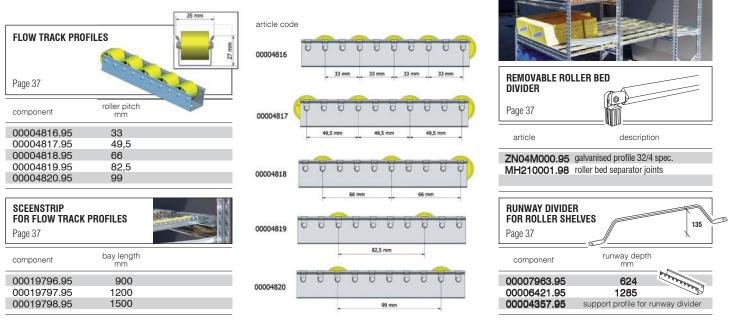
R-



PATENTED BOLTFREE SHELVING SYSTEM

DIVIDER FOR EXHAUST PIPES Ref. 18			III	1	
component 67301.98	horizontal				
67302.98	vertical		K ·		
		1			
inner and outer	BE DIVIDERS	1 Startes	ITEM:	Single Sided Plastic Bin Trolley	Double Sided Plastic Bin Trolley
inner and outer	BE DIVIDERS		ITEM: component	Single Sided Plastic Bin Trolley 00005598.98	Double Sided Plastic Bin Trolley 00005179.98
inner and outer Ref. 17				· · · · · · · · · · · · · · · · · · ·	
inner and outer	BE DIVIDERS		component	00005598.98	00005179.98
inner and outer Ref. 17	height		component dimension <lxdxh> mm load levels</lxdxh>	00005598.98 720 x 390 x 1210 6 single sided levels	00005179.98 1120 x 500 x 1240 7 double sided levels
inner and outer Ref. 17 component	height		component dimension <lxdxh> mm load levels Description: trolley on fou</lxdxh>	00005598.98 720 x 390 x 1210 6 single sided levels Ir rubber rimmed swivelling castors	00005179.98 1120 x 500 x 1240 7 double sided levels , two with brakes.
67290.95	height mm 280 inner		component dimension <lxdxh> mm load levels Description: trolley on fou</lxdxh>	00005598.98 720 x 390 x 1210 6 single sided levels Ir rubber rimmed swivelling castors te BULL plastic bin series on 6 or 7	00005179.98 1120 x 500 x 1240 7 double sided levels , two with brakes.

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



LOAD BEARIN	G CAPACITY	<dan> OF</dan>	SINGLE FLOV	N TRACK PRO	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 TRACK CUT PITCHES 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.

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



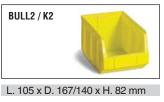
"SIMPLY SUPER" are DO-IT-YOURSELF shelving kits, conceived for easy use within the domestic environment. Simply Super is available in two different heights - 1840 and 1576 mm - with 5 or 4 shelf levels in height, respectively. Two shelf options are available: plastic panels or steel shelf panels. Starter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

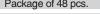
component	shelving kit to build a:	nominal bay dimensions L x D x H - mm	shelf panel type & q.ty	component	description	box height mm
75000.98 75000C.98	starter unit add-on-unit	1000 x 400 x 1576	4 steel shelves	75105/E.98 see Ref. A above:	Packaging set composed of cardboard bo	1580 ox + sticker + flyer
75001.98 75001C.98	starter unit add-on-unit	1000 x 400 x 1840	5 steel shelves	75107/E.98 see Ref. A above:	Packaging set composed of cardboard be	1850 ox + sticker + flyer
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	1580
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	1850

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 pleasant design.









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





Package of 4 pcs.



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

Package of 24 pcs.



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

Package of 8 pcs.





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.

FEM section X

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