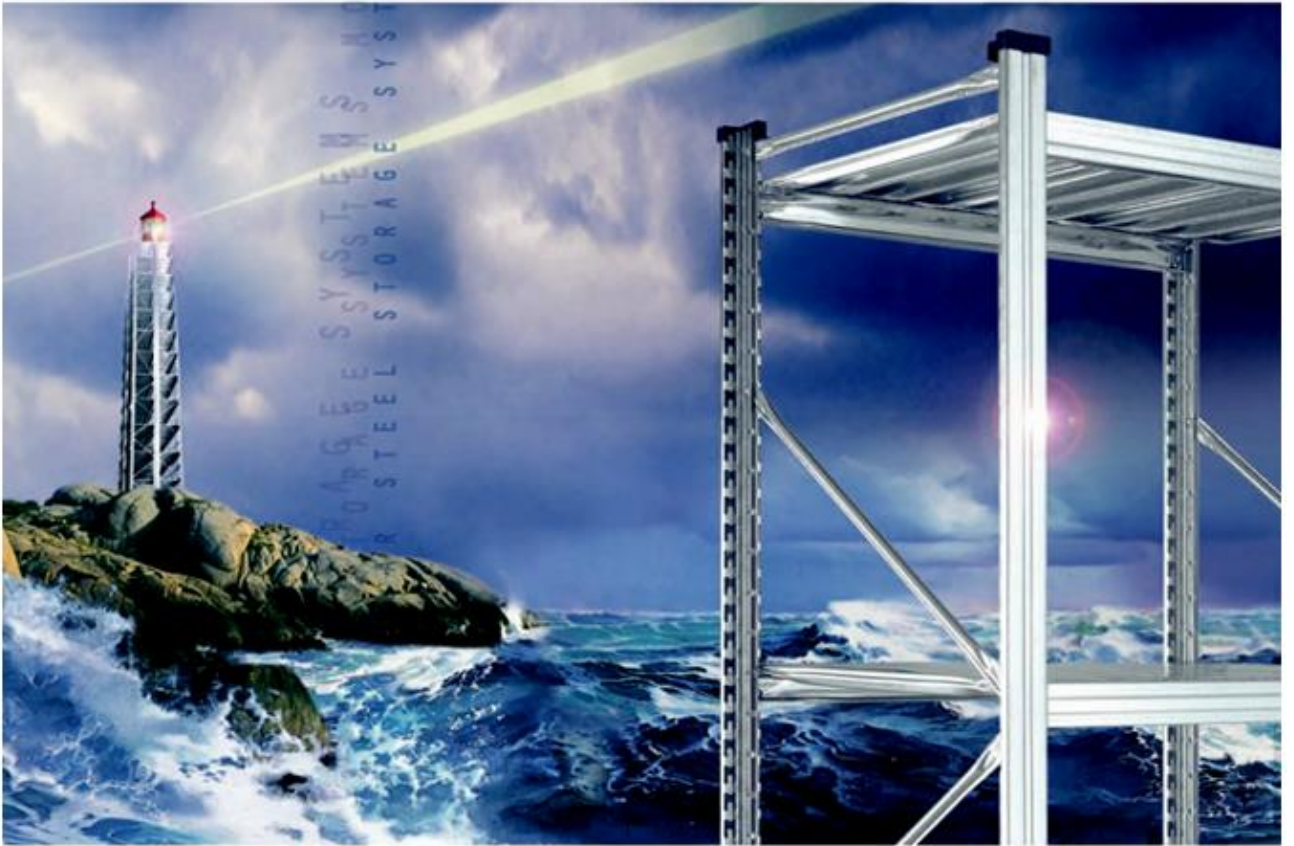


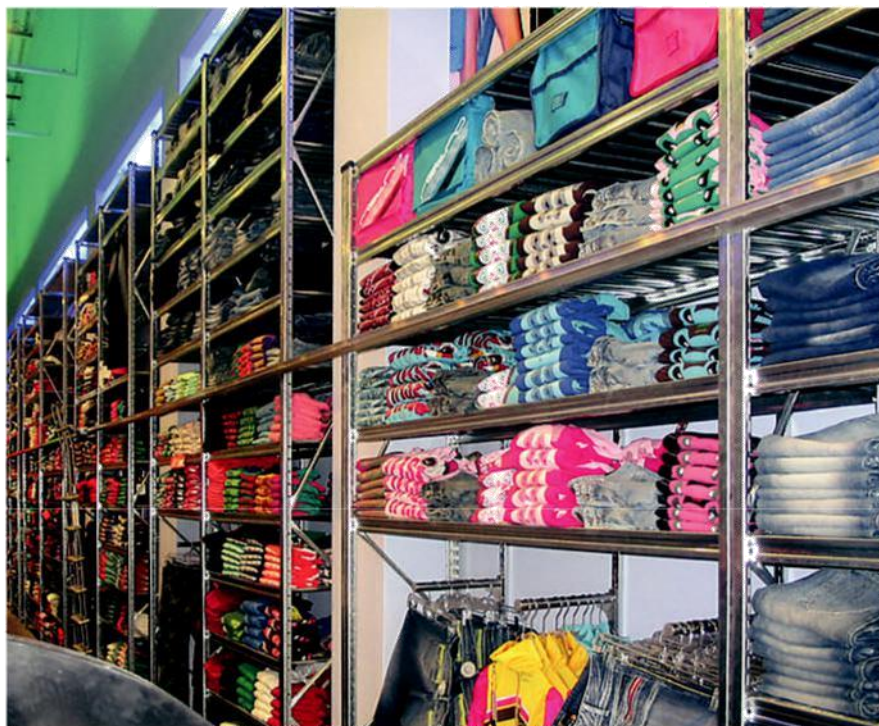
MODULAR STEEL STORAGE SYSTEMS



# Metal Rack Storage Solutions



SR



## THE COMPANY TODAY

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

Our customers are able to alter and extend their existing installations with the same components and the greatest of ease.

Product development, production and turnover is steadily increasing.

Delivery and installation of even major projects can be achieved very quickly. This is possible due to the high rate of production coupled with an extensive network of distributors world-wide, extreme ease of assembly and a very rapid installation time.

The practical structural testings are verified by rigorous commissions in the field of quality and safety certification.



## THE PRODUCT

The UNIRACK USA-USB-USM-USR-USP structures have been designed and implemented to meet the needs of light to medium duty storage: they are also highly suited to the construction of single, two and even three tier structures up to a height of 8 metres with frame loadings up to 4800 daN (in USR version).

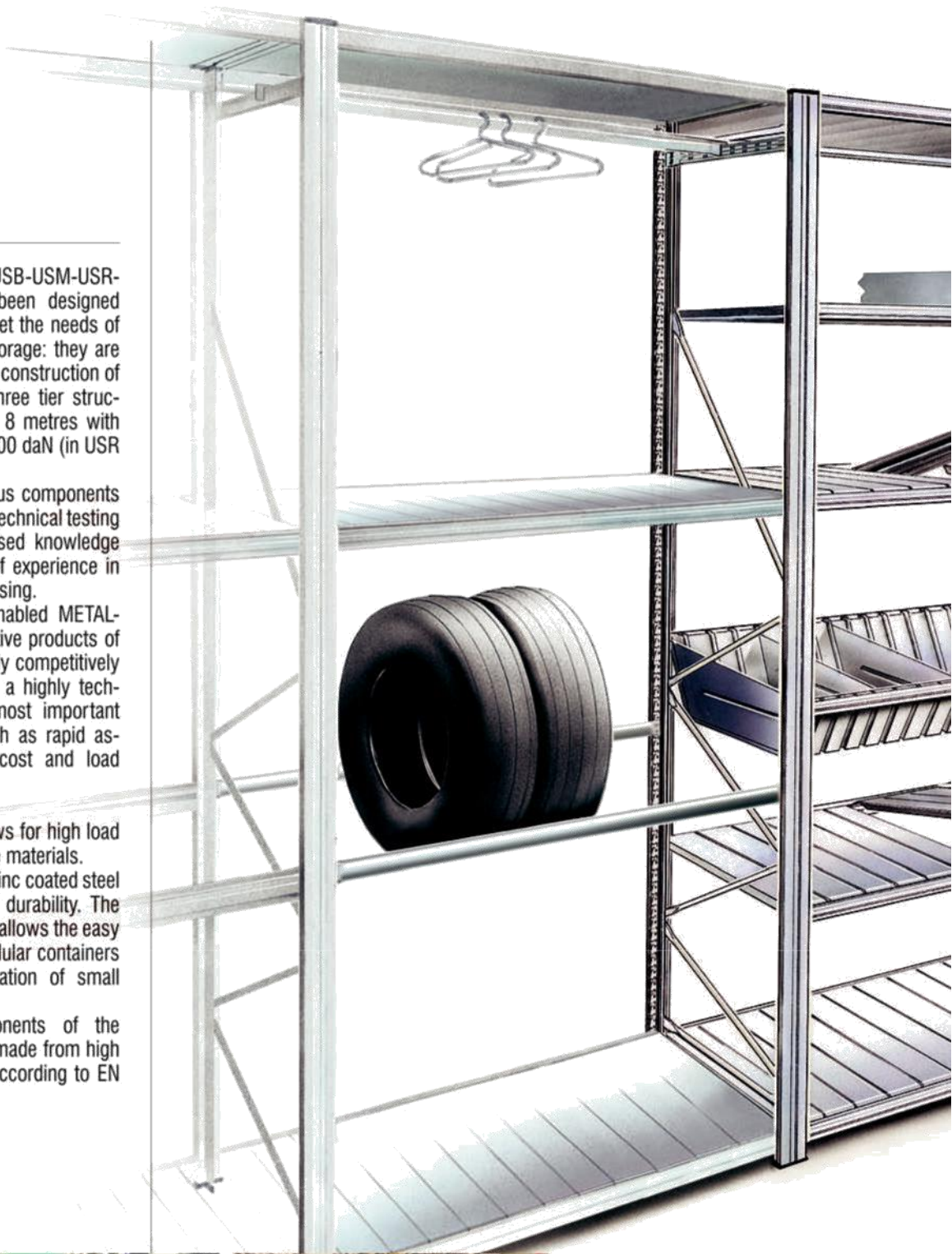
The design of the various components is the result of rigorous technical testing and the highly specialised knowledge developed over years of experience in the field of metal processing.

This experience has enabled METAL-SISTEM to offer innovative products of the highest quality, highly competitively priced, and to produce a highly technical solution to the most important shelving problems, such as rapid assembly, stability, low cost and load bearing capacity.

The special 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 versatility of the system allows the easy use of dividers and modular containers for storage and separation of small loose parts.

The structural components of the UNIRACK systems are made from high tensile steel, certified according to EN 10204 3.1B.





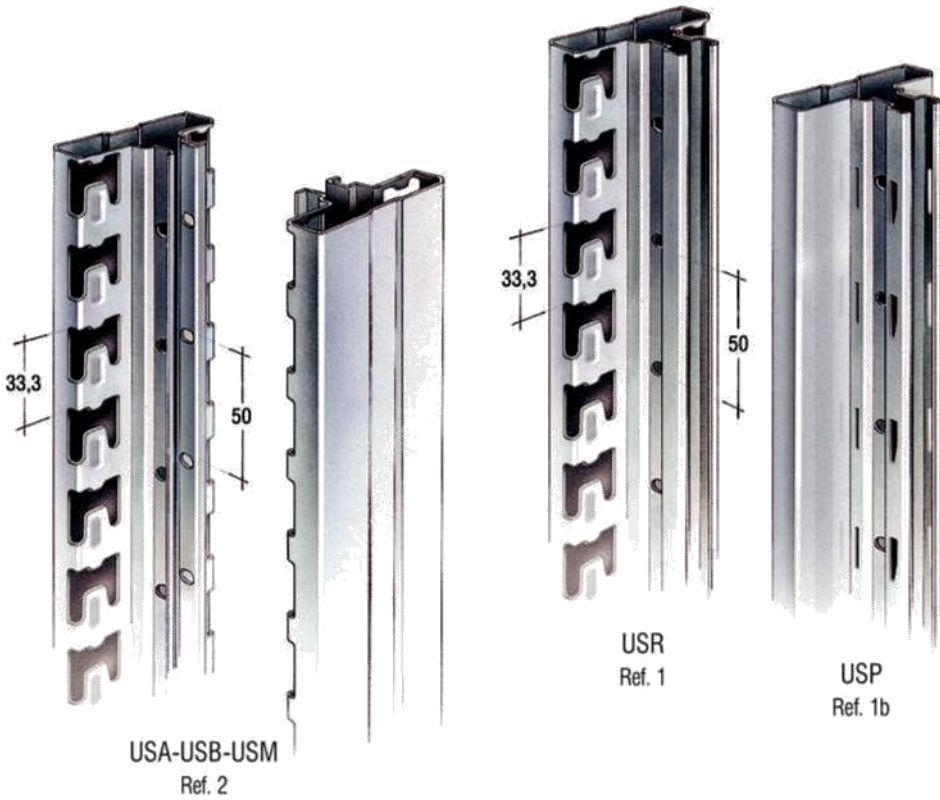
The safety and the quality of the product have always been a primary aim of METALSISTEM and are recognised by TÜV PRODUCT SERVICE in Munich, one of the most rigorous E.C. commissions in the field of quality and safety certification. Thanks to its attractive high-tech design, UNIRACK shelving is trendy and pleasing to the eye. It can provide unique solutions for shopfitting and applications in domestic environments.



# ASSEMBLY INSTRUCTIONS

## Uprights and frames

The USA-USB-USM-USR frame components are interchangeable. Beams are located on the inside of the uprights (Ref.1,2). The USP series (Ref.1b) is used to locate H30 solid shelves into the vertical slots in the upright. Using steel of varying gauge, the three frame types have different load capacities:

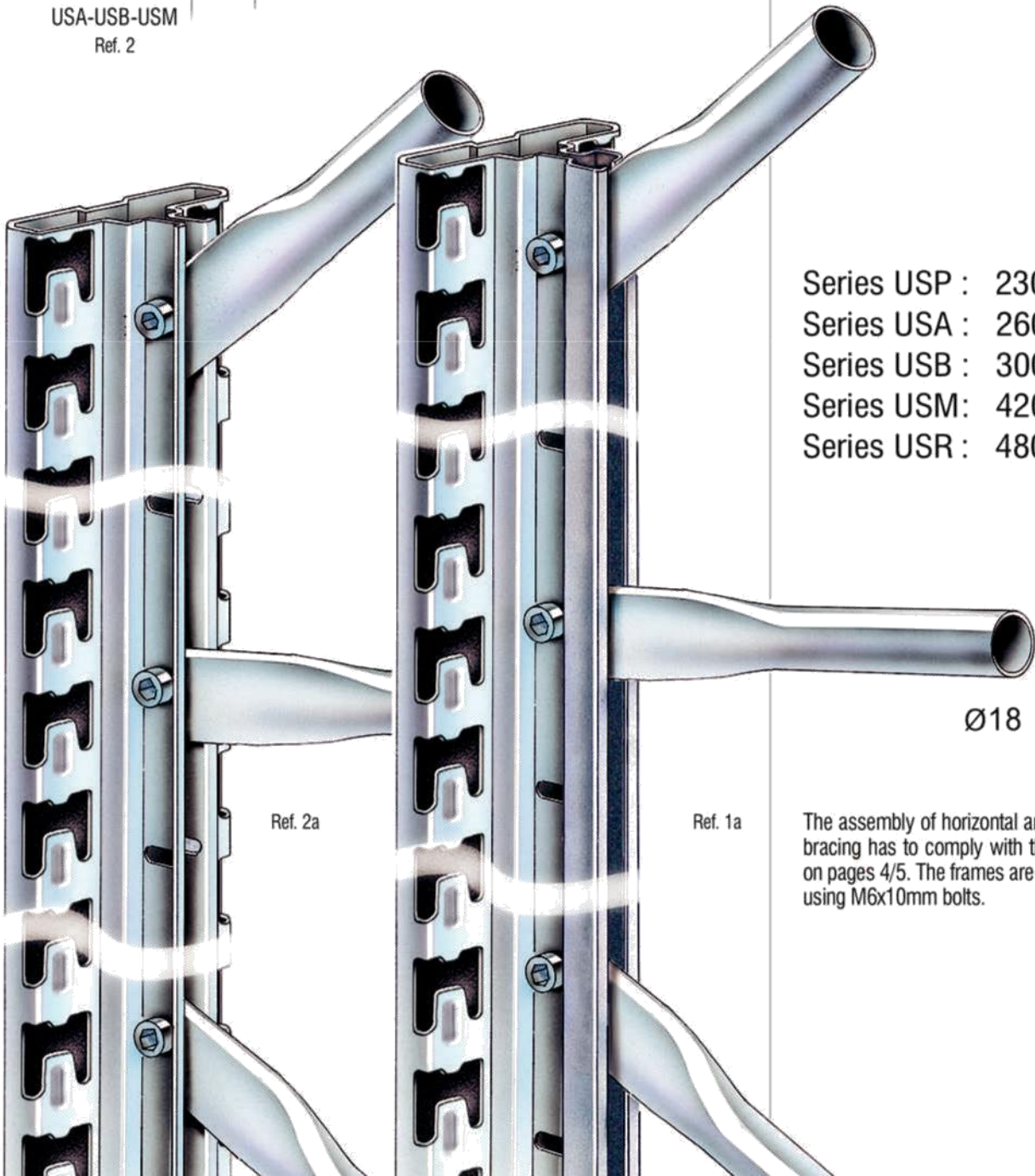


USA-USB-USM  
Ref. 2

USR  
Ref. 1

USP  
Ref. 1b

- Series USP : 2300 daN
- Series USA : 2600 daN
- Series USB : 3000 daN
- Series USM : 4200 daN
- Series USR : 4800 daN



Ref. 2a

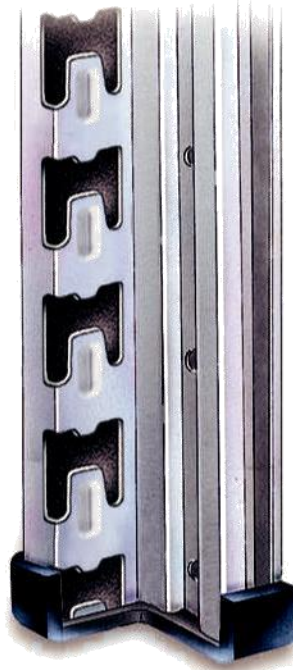
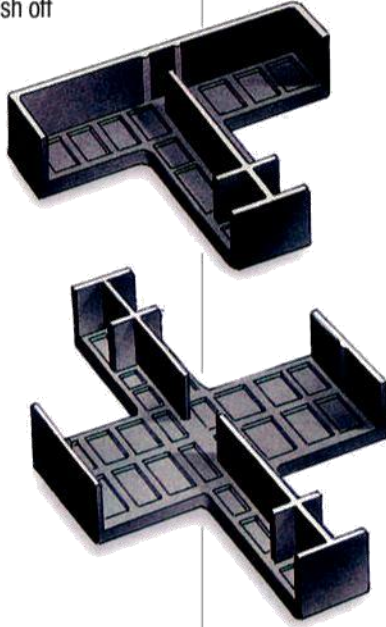
Ref. 1a

Ø18

The assembly of horizontal and diagonal bracing has to comply with the diagram on pages 4/5. The frames are assembled using M6x10mm bolts.

## Base plates

Plastic base plates are fitted by pressing them onto the uprights. They are recommended only for the USA and USP series. In any case, the safety standards as per point e) on page 4 must be adhered to. Plastic bases can also be used as top caps to finish off the uprights.



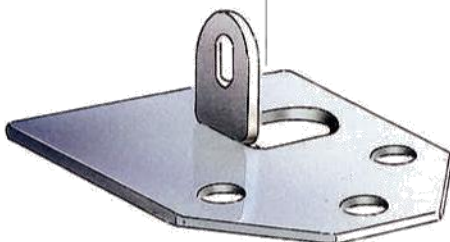
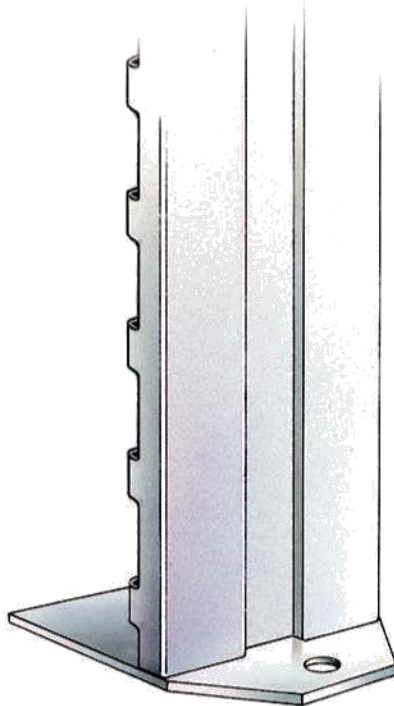
Ref. 4

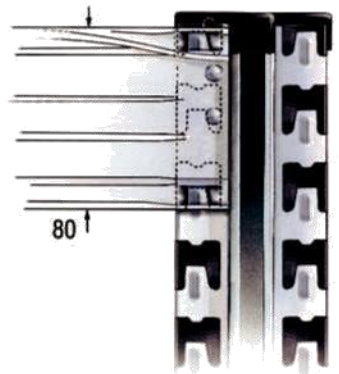
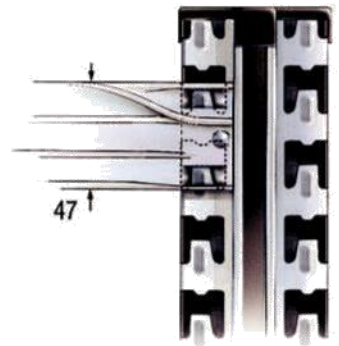
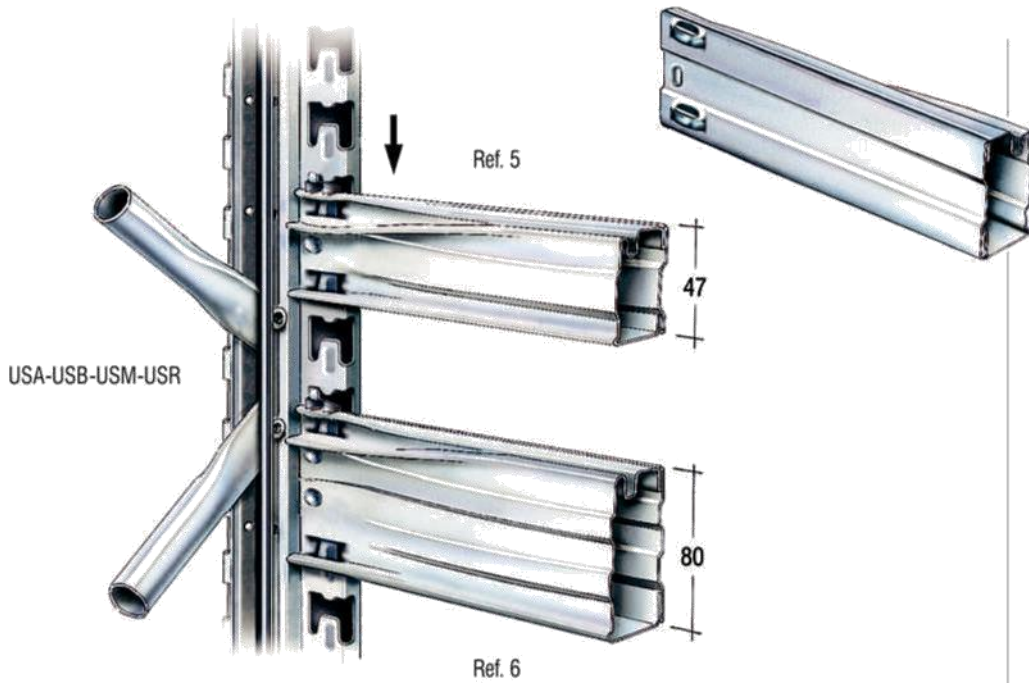


Metal base plates can be fitted in two different positions:

- a) turned inwards, flush with the front face of the upright,
- b) turned outwards, both can be bolted to the floor slab.

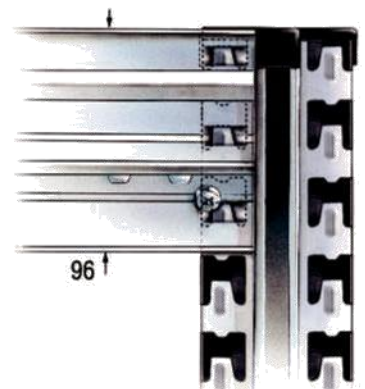
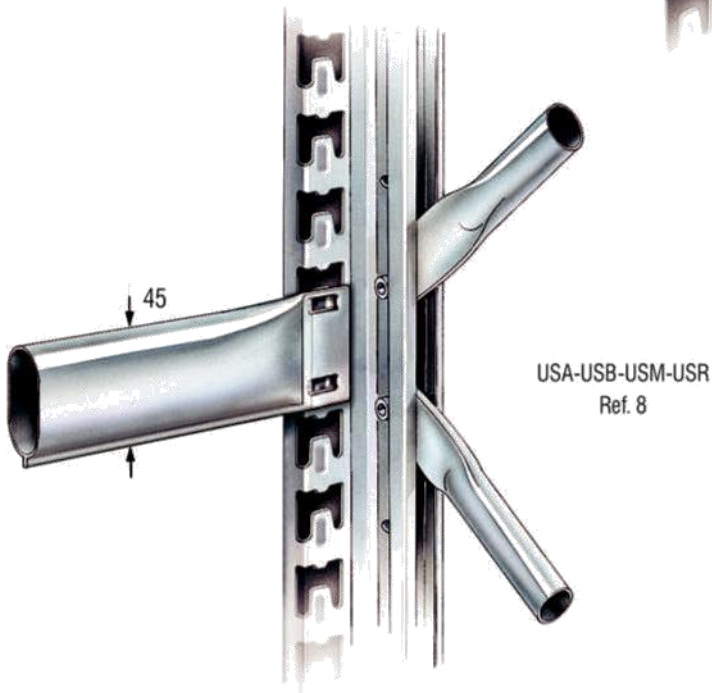
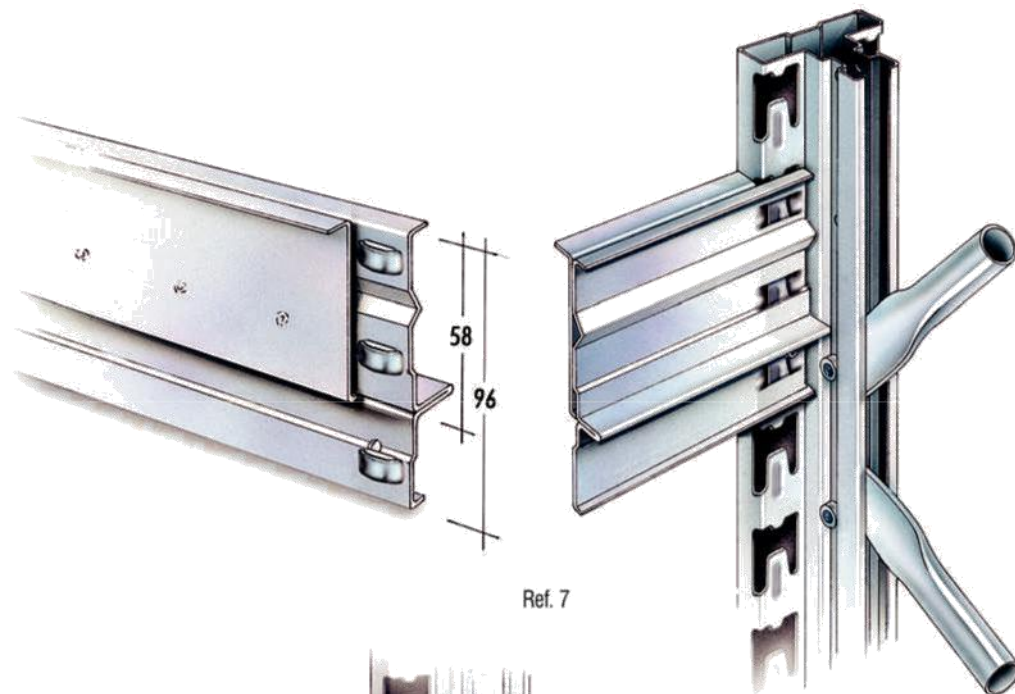
The metal base plates are fastened to the uprights by means of 6x10mm bolts (Ref.4)





## Beams

Take the frames, assembled with bracing and base plates: keep them as perpendicularly as possible and fit the beam by tapping it down onto the tongues, close to the upright, with a plastic-faced hammer to avoid damage to the beam (Ref.5). The beams are compatible on the four frame types USA-USB-USM-USR except the USP series which can be fitted with the solid shelves H30 only. Each type of beam H47/80, the tubular beams and the T-section support bars, once assembled, must be secured with the respective locking pin (see page 21).



# ACCESSORIES

## PVC top caps

Should be fitted always to the upright top, both when supporting handrails and normal shelves (Ref.28).

## 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. 27/28). The garment hanging shelving can be designed on a single or double entry basis and equipped with shelves as well (see pictures).

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 pages 8-9). In this case, please refer to the technical handbook to identify correct use and respective load bearing capacity, as tyre storage introduces dynamic loads into the structure. In the case that the tyres will be stored on H-47-mm beams, it is obligatory to use the US-M series for the frames and the SUPER-3 version of the beams.

Maximum allowed bay length: 1200 mm. Maximum allowed frame depth 400 mm, to ensure safe storage and prevent torsional deflection of the beams.



## Plastic strip for glass shelves

It can be fitted on the beams H47/H80 in order to protect glass shelves or delicate materials. (Ref. 29).

## Security pins

In order to prevent accidental lifting of the beams and shelves, the security pins must be used in all applications (Ref.30). Assembly instructions as per the sketch at right.

## Label Holder

It can be located in any position on both H47 and H80 beams. Dimensions 100x40 mm. (Ref. 31).

