



"SERIES 2000" SHELVING



PRELIMINARY INFORMATION AND SAFETY REQUIREMENTS

SERIES 2000 shelving is intended for the storage of paper collectors or loose/boxed materials, for manual picking, without the use of forklift trucks or mechanical handlers.

The steel used for the components of the shelving is of the "Sendzimir" type DX51D Z100 galvanized. The entire structure is made entirely with interlocking steel components.

Material storage method: it is strongly recommended to fill the various levels from the bottom up, trying to load all the existing shelves in a uniform way.

The distance between the shelves (net light) must not be varied and the 1st shelf below must not be moved higher than the third slot.

It is necessary to proceed to fill the shelving, starting from the lower shelves, preferring the storage of lighter goods on the higher floors.

It is also not recommended to keep the lower shelves empty of goods and at the same time keep the higher levels loaded.

For conscious and safe use, do not overload the shelves beyond the indicated limits.

Do not weld or install third-party systems.

Never alter the initial geometry and the arrangement of the various levels.

Do not climb on the shelves to reach the goods stored above, use portable ladders if necessary. In fact, this incorrect use could cause damage to the shelving and could have serious consequences for the operator's safety, in the event of an accidental fall.

Do not use chemical detergents for cleaning, moisten a cloth with soap and water and wipe over the surfaces. Dry immediately to avoid the formation of encrusting stains or streaks.

DESCRIPTION OF THE SHELVING AND CHARACTERISTICS OF THE COMPONENTS USED



The upright has a section of 36x38 mm, it is slotted on both sides with a 50 mm pitch. It is obtained by cold forming of 12/10 thick galvanized sheet metal and is shaped by ribs. It can be requested in heights starting from 500 mm up to 6000 mm, depending on the needs. The nominal cutting size that can be requested is equivalent to multiples of 50 mm (pitch of the buttonhole).

UPRIGHT



The crossbar, 300/400/500/600 mm long, depending on the reference side, is 20 mm wide and is obtained by pressing a galvanized sheet metal strip having a thickness of 15/10. It is inserted in the uprights, a minimum of 2, to form the side. Depending on the height of the shoulder and the required capacity, the number to consider may vary additionally.



A standard side is made up of: no. 2 uprights, no. 2 crossbars, 2 plastic feet (on request the foot can be supplied in sheet metal, with special holes for fixing to the ground).

On the left, a detail of the side with the main components.

The hook must abut against the housing slot.

It is also necessary that there is no gap between the cross beam and the underlying hook, to give the necessary rigidity to the side itself.

Depending on the height and desired load capacity, a side can be made up of more than two cross bars. Consult the specific capacity table, in TECH AREA, on this website: https://www.cremoniniscaffali.it

The anchoring hook of the shelves, simple or double depending on whether it is used for the end or central sides of a shelving, is made by pressing, from molded sheet metal strip having a thickness of 25/10, subsequently cold electro-galvanised





DOUBLE HOOK



BLIND HOOK: It is useful when you need to mount a crossbar on the side, without the bulk of the hook fins. For example, when there is a need to create pipe systems, for hanging items of clothing or to create tire racks and in all cases where a shelf does not need to be mounted in correspondence with the crosspiece.

FOOT IN SHEET METAL Obtained by molding from galvanized sheet metal strip with a thickness of 15/10, it is designed for fixing to the floor, having 2 front holes for housing the fastener and a central hole for housing the adjustable device on the ceiling. If fixing to the floor, drill with a size 6 drill bit and place the 6x65 steel plug.		
PLASTIC FOOT (thickness 4 mm) is obtained by extrusion molding and is inserted at the base of the upright, when there is no need to fix the shelving to the floor.		
FOOT IN METAL SHEET WITH ADJUSTABLE		
CEILING The foot is obtained by molding from galvanized sheet metal strip having a thickness of 15/10. In the absence of walls or the possibility of bracing the batteries using tie rods, the uprights can be fixed to the ceiling, using the sheet metal foot with an adjustable screw, fitted with a terminal plastic foot. Acting on the adjustment of the screw, it is possible to compensate the distance between the top of the upright and the ceiling, from a minimum of 45 mm up to a maximum of 80 mm.		
Wall fastener They are obtained from 15/10 galvanized sheet metal molding and have a special hole to allow the dowel to be housed. It is used when fixing the shelving in the length side.		



The shelves are made by automated folding of 8/10 thick galvanized sheet metal strips, completely boxed, in such a way as to create a 35 mm high rib (edging) around the entire perimeter. They are equipped with a head notched on the short sides, such as to allow the formation of a continuous surface between the adjacent floors, at the same heights, in a consecutive row of shelving modules.



Bottom view of shelf with optional reinforcement. It is inserted by interlocking and can also be assembled after the assembly of the shelving.

Increases the carrying capacity of the shelf.

At the four corners the rectangular slots are visible, for housing the hooks that support the shelf.



Top view of the smooth, continuous surface of the shelf. The special notches in the four corners, adjacent to the position of the vertical racking posts, allow for the creation of a continuous surface between consecutive levels of shelves.



The shelf reinforcement, an optional accessory, is obtained from cold forming of 8/10 thick galvanized strip, has an omega shape with a 36 mm base and two 24 mm wings. It is used to increase the capacity of the shelf depending on the need. For the correct calculation of any necessary reinforcements, it is mandatory to consult the table with the load capacity indications, which can be downloaded from TECH AREA on this website:

https://www.cremoniniscaffali.it



The attachment for the hanger or tire holder tube is obtained by molding 15/10 thick galvanized sheet metal. It is equipped with no. 2 through holes with a diameter of 21mm, for housing the galvanized pipe.

It is positioned above the crossbar which is inserted into the side.



The attachment for the ladder support tube is obtained by molding 15/10 thick galvanized sheet metal.

It is equipped with 2 holes with a diameter of 21 mm, for housing the galvanized pipe.

In the vertical back, there are n. 2 holes, provided for front fixing to the shelving upright with No. 2 screws 5x20 with self-locking nut.





The tie rod corners, with a 55x75 mm section, are made of 2 mm thick sheet metal, subsequently painted with epoxy powder.

They are used, with the appropriate attachments, as top tie rods to tie the rows of shelving in the center of the room.

They are supplied to measure, depending on the distance between the parallel rows of the shelving.



The tie rod attachments are obtained by cutting, molding and bending from a galvanized sheet of flattened sheet metal with a thickness of 20/10. The fastening bolts of the attacks are made of steel class 8.8. To fix an attack, use no.2 8x20 mm screws and no.2 M8 knurled nuts, screwing them in correspondence with the holes in the tie rod. The hole present in the middle of the short side is used to fix the attachment to the upright, using a 4.8x16 hexagonal head self-drilling screw.



The stability crosspieces are used to brace the spans at the rear. They are made of 20/10 thick galvanized sheet metal.

For correct counting and positioning, it is necessary to request advice from the technical office, which will provide the appropriate solution for the layout to be created.

They are fixed to the uprights by drilling on site, with the insertion of 8x20 mm screws and selflocking nuts. The cross must also be blocked in the central intersection node, using the same screw and fixing nut.

The hardware is included and is supplied when ordering.



The stability band, molded from 15/10 thick galvanized steel sheet, is used to tie the knot formed by the intersection between the shelf and the upright. Depending on the layout and need, they are supplied to increase the rigidity of the shelving, when it is not possible to anchor it to the wall or insert the top tie rods between the rows.

Always ask the technical office for the correct method of use, depending on the layout to be composed.

Fixing is mandatory using nr. 3 self-drilling screws 4.8x16 with hexagonal head, supplied when ordering.

OPTIONAL COMPONENTS

Depending on the need, the range of available accessories is completed by the side panels to close the sides, the backs for the rear closure of the bays and the front closing doors, complete with key lock, (closing doors available only in the 100 cm wide span).







The front closing doors are only available for the 100x200h cm and 100x110h cm spans, or in the 100x300h cm spans, by superimposing a 200h door and a 100h door. The surface finishes are available in the galvanized or pre-painted gray RAL 7035 version.



In detail, in the photo on the left you can see the adjustable internal hinge, which screws between the half-door and the upright. In the central photo, the key lock with opening knob, while in the photo on the right, we have the internal view of a shelving unit closed by side paneling and a rear back panel. The assembly kit for the pair of doors includes no.4 hinges, the fixing screws, the key lock and the locking knobs and no.4 adhesive bumpers.



It is possible to obtain trolleys for the transport of materials within warehouses, equipping the shelving with special swivel wheels (with and without manually operated mechanical parking brake).

Please request the desired configuration from the technical office depending on your specific need. Based on the type of environment and flooring on which the trolley will have to operate and based on the required load capacity, the correct and feasible solution will be proposed, from the point of view of sizing and number of shelves, the allowable load capacity, the maximum height and type of use.

The panels (optional) can be supplied both for the lateral closure and for the rear closure.

Further customizations can be requested as needed and verified, from a feasibility point of view, together with the customer.









It is possible to apply a track to the front uprights, to use a hook-on ladder, to reach the upper levels. The system is made up of galvanized pipes with a diameter of 21 mm, cut to size, depending on the row to be set up. For each front upright, a special attachment is fixed to be bolted, drilling on site for the insertion of no. 2 screws with self-locking nut. Depending on the height of the shelving and the spaces available, a specific project is made, where the ladder with the necessary number of steps is proposed, to allow its safe use by the operators

As an alternative, a platform ladder can be used, with the necessary number of steps, calculated according to the height of the last level of shelves.

Please ask the technical office to draft the solution suited to the desired layout.



To configure a tire rack it is necessary to contact the technical office for the correct counting and sizing of the necessary components.

The system is obtained by inserting pairs of parallel galvanized tubes with a diameter of 21 mm, cut to size, for the spans with a nominal length of 80,100,120,140 cm.

However, it is necessary to prepare a minimum number of intermediate shelves, depending on the desired configuration.

The tubes are inserted into the appropriate connections, which are fitted onto the crossbars of the sides and subsequently blocked at the two ends, with 3.9x13 self-tapping screws, supplied when ordering.

Example of portable trolley with object holder over the first shelf and double tire holder rail. Request the desired configuration from the technical office, to customize according to your specific need.

With the same system you can create hanging rows for the textile/clothing sector.

The tubes can be inserted in the 60/80/100/120/140 cm spans, single or double hung, depending on the depth of the side required.

On website <u>www.cremoniniscaffali.it</u>, it is also possible to consult or download the assembly instructions in TECH AREA.

Some tutorials are also available in the "VIDEO" section, in which the various assembly phases of all the components and accessories are represented.

Also the capacity table, to be affixed to the shelves, can be downloaded from TECH AREA.

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REF. TRANSPORT DOCUMENT :	YEAR:					
SHOULDER CAPACITY: KG						
SHELF CAPACITY: KG						
UNIFORMLY DISTRIBUTED LOAD ON THE SURFACE						
FIRST SHELF HEIGHT: cm						
NUMBER OF SHELVES FOR EACH SPAN:						
CUSTOMER:						
PLEASE NOTE: THE CAPACITIES INDICATED ARE INTENDED FOI IN THEIR ORIGINAL CONFIGURATION	R THE SHELVES ASSEMBLED					
THE HANDLING OF LOADS ON THE SHELVES MUST BE CARRIE	D OUT MANUALLY					
ANY MODIFICATION OF THE ORIGINAL CONFIGURATION THAT SI MUST BE REQUESTED AND AUTHORIZED IN ADVANCE	HOULD BE CONSIDERED NECESSARY					
IT IS FO TO CLI THE SH	ORBIDDEN MB OVER IELVES					

COMPLIANCE WITH THE REFERENCE REGULATIONS

The production processes used in the design and manufacturing of metal shelving comply with the UNI EN ISO 9001:2015 standard.

This means that all production phases undergo controls starting from the acceptance of the materials, continuing throughout the entire production process. The design is validated according to the provisions of the same legislation.

Furthermore, the shelving is produced with materials coming from highly qualified suppliers, in compliance with the ROHS 2002/95/EC directives, the REACH regulation 1987/2006, the technical standards UNI EN 10327:2004 and UNI EN 10143:2006.

The "2000 series" shelving was also subjected to load tests by the CATAS body, in compliance with the UNI10988/02 standard, tests subsequently validated internally.

We also declare that during all production processes, the safety regulations in the workplace established by Legislative Decree 81/2008 and subsequent updates have been respected.

SHOULDER CAPACITY CHART (KG)

No.	2	3	4	5	6	7	8	9
Crossbars								
H CM 200	1340	1440	1540	1620				
H CM 250	1270	1360	1450	1540	1620			
H CM 300	1220	1300	1380	1460	1540	1620		
H CM 350		1240	1320	1400	1480	1560	1620	
H CM 400		1200	1270	1340	1410	1480	1550	
H CM 450			1220	1290	1360	1420	1480	1540
H CM 500			1170	1220	1270	1320	1370	1420
H CM 550				1170	1220	1270	1320	1370
H CM 600				1120	1170	1220	1270	1320

TABLE OF SHELVES CAPACITY (KG). UNIFORMLY DISTRIBUTED LOAD

	No	No 1	No 2	No 3
	reinforcement	reinforcement	reinforcement	reinforcement
Cm 60x30 7/G/W	110	140	160	
Cm 80x30 7/G/W	105	135	155	11
Cm 100x30 Z/G/W	100	125	145	
Cm 120x30 Z/G/W	90	120	140	
Cm 140x30 Z/G/W	75	105	125	
	15	100	125	11
Cm 60x40 7/G/W	105	135	155	11
Cm 80x40 Z/G/W	100	130	150	160
Cm 100x40 Z/G/W	95	125	145	155
Cm 120x40 Z/G/W	85	115	135	150
Cm 140x40 Z/G/W	70	100	120	140
Cm 60x50 Z/G/W	100	130	150	//
Cm 80x50 Z/G/W	95	125	145	155
Cm 100x50 Z/G/W	90	120	140	150
Cm 120x50 Z/G/W	80	110	130	145
Cm 140x50 Z/G/W	65	95	115	135
Cm 60x60 Z/G/W	95	125	145	11
Cm 80x60 Z/G/W	90	120	140	150
Cm 100x60 Z/G/W	85	115	135	145
Cm 120x60 Z/G/W	75	105	125	140
Cm 140x60 Z/G/W	60	90	110	130
Cm 80x70 Z	85	110	130	140
Cm 100x70 Z	80	105	125	135
Cm 120x70 Z	70	95	115	125
Cm 140x70 Z	55	75	85	100
Cm 80x80 Z	75	95	115	135
Cm 100x80 Z	70	90	110	130
Cm 120x80 Z	60	80	100	120
Cm 140x80 Z	50	60	80	95

NOTE:

The unit of measurement for the indicated flow rates is the kilogram. The capacities indicated are intended for uniformly distributed loads, with the shoulders fixed to the wall. In any case, avoid overloading the shelves beyond the indicated weight.

SURFACE FINISH Z= GALVANIZED G= GREY RAL 7035 W= WHITE PVC A1SA



CREMONINI VIRGILIO S.R.L. Via di Mezzo Levante, 1711 40014 Crevalcore (BO) Tel. 051/981398 http://www.cremoniniscaffali.it e-mail: cremonini@cremoniniscaffali.it

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