



## **MONTAGE- UND BETRIEBSANLEITUNG ASSEMBLY AND INSTRUCTIONS MANUAL INSTRUCTIONS DE MONTAGE ET DE SERVICE**

Multifunktionspacktisch  
Multipurpose packing table  
Table d'emballage

MFP1000



Bitte lesen Sie vor der Verwendung des Produktes unbedingt dieses Handbuch und folgen den darin enthaltenen Anweisungen!

Please read this manual before using the product and follow the instructions it contains!

Veuillez lire ce manuel avant d'utiliser le produit et suivre les instructions qu'il contient!

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## EXPLANATION OF TERMS

### UNIT LOAD



- Total load capacity between 2 horizontal bars
- Max. unit load capacity, stationary: 2000 kg
- Max. unit load capacity, mobile: 500 kg

### COMPARTMENT LOAD



- Total load capacity per beam level
- Max. compartment load: 500 kg per level

### POINT LOAD



- A load on the foundation generated by the upright
- Max. point load per foot plate for outer uprights: 500 kg
- Max. point load per foot plate for inner uprights: 1000 kg



#### Load capacity

The information on load capacity refers to a rack with at least 2 units and at least 2 compartment levels, which are evenly suspended in height.

## OVERVIEW

### ROLL HOLDER SET

For fastening e. g. a roll of bubble wrap.

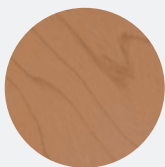
### UPRIGHT

A complete upright consists of two cold-rolled blue upright profiles and cross and diagonal struts, which are also painted blue.

Uprights are available in depths of 400 mm, 500 mm, 600 mm, 800 mm and 1200 mm as standard.

The foot plates, M8 x 55 mm bolt anchors and nuts required for assembly are always included.

### DECKS



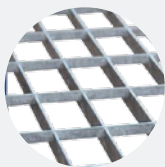
#### Multiplex board

Robust worktop made of beech wood



#### Wood

Chipboard (25 mm) for storing cardboard boxes & parcels



#### Galvanised mesh deck

For the storage of liquids & hazardous goods



#### Steel

For storing liquids

### Complete upright



### HEIGHT-ADJUSTABLE FOOT PART

The work height of the workbench can be individually adjusted by a total of 400 mm in 50 mm increments. Just the insertion height of the upright at the foot part has to be adjusted.



### KANBAN SHELF

For storing cardboard boxes and storage boxes.

### BEAMS

Beams are the load carriers of a storage rack. The shelf is placed on them. They can be individually attached at 50 mm increments using the simple plug-in construction.

Beam lengths are available in 1100 mm and 2200 mm.

### BACK PANEL & TOOL HOLDER

As a perforated panel for fastening your tools and work equipment with the help of tool holders that are attached directly to the perforated panel. The matching accessory sets are listed below. Alternatively, this panel can also be used as a fall protection wall to protect your parts.

### INTEGRATED TOOL CABINETS

**WS4 I** Tool cabinet with drawers



**WST I** Tool cabinet with doors



## GENERAL INFORMATION

### PREVENT DANGERS

The TOPREGAL product you have purchased is manufactured in accordance with the current state of the art and complies with the applicable regulations and rules. Despite all this, it can pose a danger to persons and property if:

- The rack is not properly assembled, improperly modified or converted.
- Accessories used are not original ones.
- The safety regulations are not observed.

Therefore, every person involved in the assembly must read and follow the safety regulations and, if necessary, you should have them confirm this with a signature.

### ACCIDENT PREVENTION REGULATIONS

All relevant accident prevention regulations apply:

- Generally accepted safety regulations
- Country-specific provisions
- Guidelines for storage facilities and equipment of the respective country

### PLEASE NOTE

Before assembly, commissioning or use, the information contained in these instructions must be observed in order to avoid hazards. If you need technical support, please contact us.

In order to avoid personal injury and damage to property, please observe the following:

- The DGUV 108-007 warehouse facility and equipment guidelines.
- The relevant workplace directives and regulations.
- The information from your safety officer
- The structural conditions and regulations, in particular the condition and load-bearing capacity of the floor.
- And ensure that the facilities are in good order and condition. Damaged or deformed components must be replaced immediately. If in doubt, stop assembly or use, secure the installation area and inform your safety officer.
- That loading may only be carried out after all assembly work has been completed.
- That the persons carrying out the assembly and conversion work are to be secured against falling in accordance with the UVV construction work (VBG 37 §12).
- Protective clothing such as helmets, gloves, safety shoes, etc. must be worn during assembly and conversion.
- That the racks must be effectively protected against impact from forklifts or other vehicles.

## ASSEMBLY PREPARATION

All original TOPREGAL components used to stabilise the warehouse equipment must be installed without exception. These include in particular frame components, unit assemblies, diagonal struts, beams, floor anchors, screws/fastening elements and safety pins. During assembly one should ensure that the screws are not over-tightened. The screws must be hand-tightened and tightened later using suitable tools such as a cordless drill or a wrench.

### PLANNING

Before the racks are assembled, the area intended for them is measured and the position of the rows of shelves is recorded. Ensure that the rows of racks are aligned. Tape measure and chalk line are best suited for this.

## TESTING OF FLOOR AND FLOOR TOLERANCES

Before setting up rack systems, check the following:

- Whether the load-bearing capacity of the floor is suitable for safely withstanding the intended loads. If in doubt, consult a specialist and have the load capacities determined. The responsibility for the correctness of the information lies with the client.
- The surface of the floor: a reinforced concrete slab, min. 200 mm thick, concrete quality C20/25 is required. If the surface is covered with magnesite screed, insulating plates and special ground anchors are required to prevent corrosion.



### Assembly

Racks may only be set up and converted by specially instructed persons in compliance with the assembly and operating instructions supplied by us. Racks may only be converted when they are not loaded.

## TECHNICAL REGULATIONS

### BASIC STRUCTURE

All load specifications refer to a rack row with at least 2 units. At least two compartments (4 beams) must be attached to each unit. The compartment heights must be kept approximately the same for all compartments. If the compartment height differs from unit to unit by more than 10 %, the maximum unit load capacity is reduced.

The uprights are connected to the foot plate by screw connections and then fixed to the floor.  
The beams are attached by simple plug-in construction with safety pin.

### COLLISION PROTECTION

Corner areas and passages must be protected by collision protection with a yellow / black hazard label which is not connected to the rack. (see DGUV: 108-007)

### SAFETY DISTANCES

During assembly, the exact location of the rack must be marked on the floor beforehand. The necessary safety distance to building components (e. g. wall, column) and corridors must be observed. (see DGUV: 108-007)

### FLOOR CONDITION

The floor must be level (according to FEM 9.831 and DIN 18202). The minimum concrete quality should be C 20/25.

### LABELLING

Labelling using a load capacity label is compulsory. These labels are included in the delivery volume.

## PLUMB INSTALLATION

The rack must be aligned plumb. Deviations of the rack uprights from the plumb line in longitudinal and depth direction of the racks must not exceed 1/200 of the rack upright height. Levelling plates can be used to compensate for uneven floors. The individual uprights within a row of racks must be aligned.

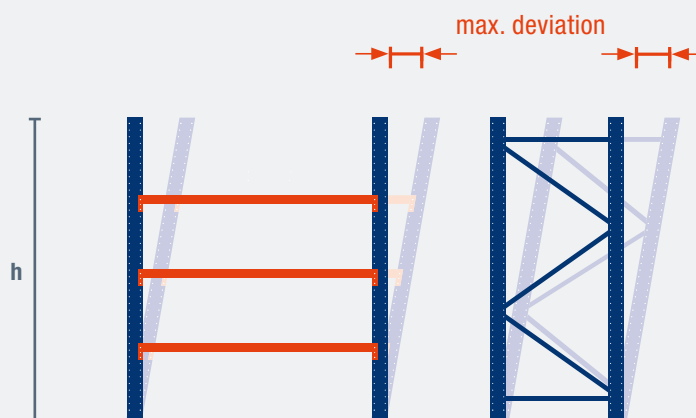
If the height of the top shelf above the floor is more than 5 times the rack depth, it must be secured against tipping, e.g. by anchoring to the floor. Suitable bolt anchors are included in the delivery volume. The shelves may only be loaded after assembly has been completed.

### Example: Rack upright height 4 metres

$$\frac{\text{Shelf height } h}{200} = \text{max. deviation}$$

$$\frac{4000 \text{ mm}}{200} = 20 \text{ mm}$$

In this example, the maximum deviation in longitudinal and transverse direction must therefore not exceed 20 mm.



## OVERVIEW RACK UPRIGHTS

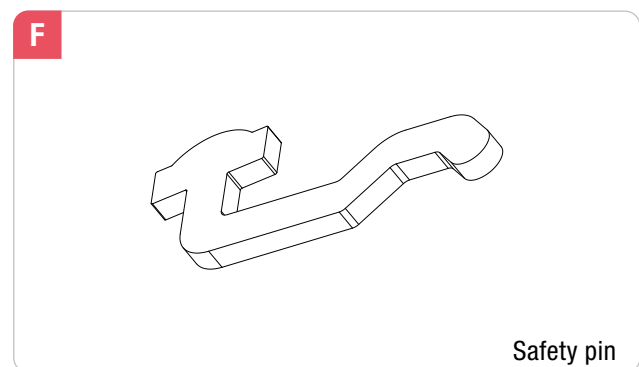
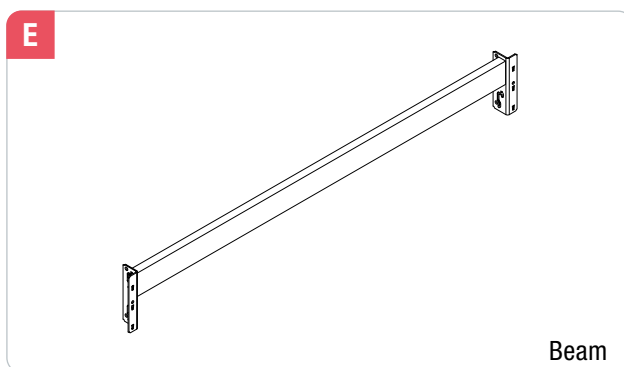
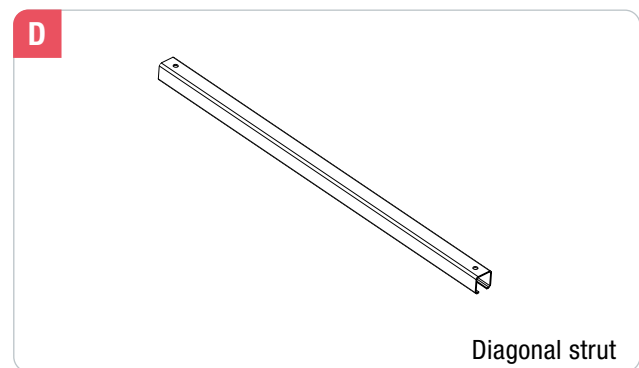
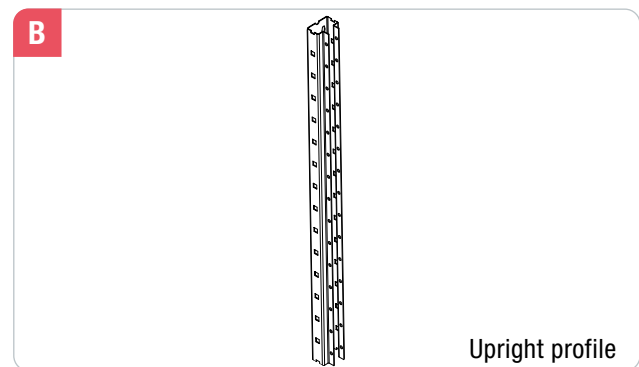
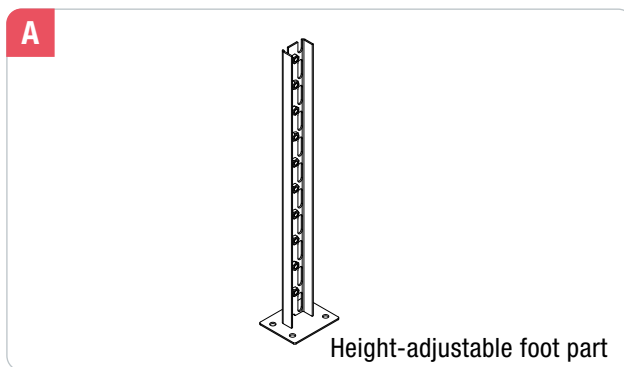


Type	Value	
Height	2 m	2.14 m with roll
Depth	600 mm, 800 mm	
Unit load	2000 kg	500 kg
Number of cross struts	3	
Number of diagonal struts	2	
Color	RAL 5005	

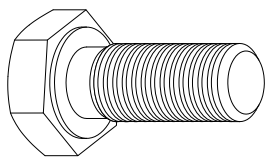
## AVAILABLE SHELVES



Type	Wooden shelf	Steel shelf	Galvanised mesh deck	Tyres / without shelf	Kanban shelf
Load per level		500 kg		400 kg	300 kg
Length			1100 / 2200 mm		
Depth			600 mm, 800 mm		

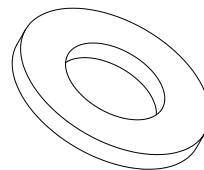


G



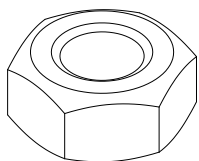
M8 x 20 mm screw

H



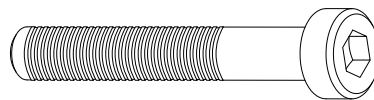
Washer

I



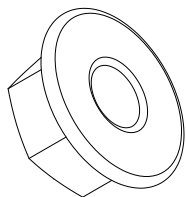
M8 nut

J



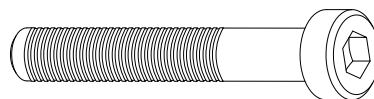
M5 x 35 mm allen screw

K



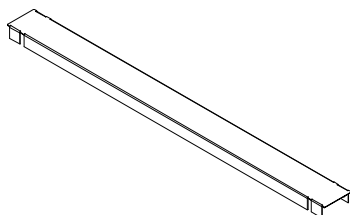
M5 nut

L



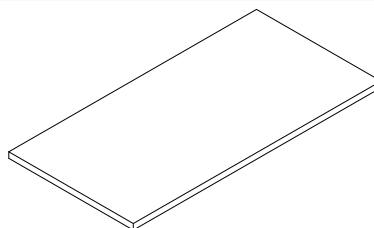
M8 x 25 mm allen screw

M



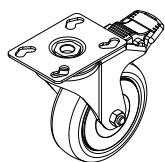
Cover

N



Shelf

O

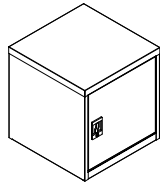


Castor with brake

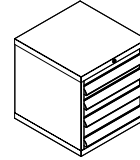
P



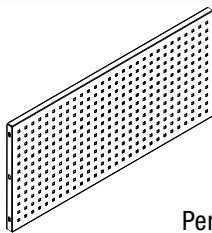
Handle

**Q**


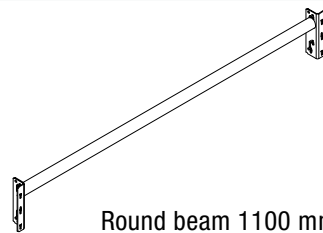
Tool cabinet with doors

**R**


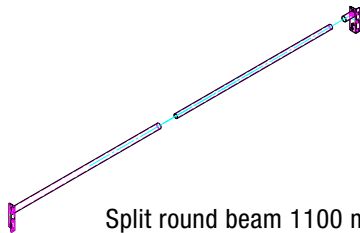
Tool cabinet with drawers

**S**


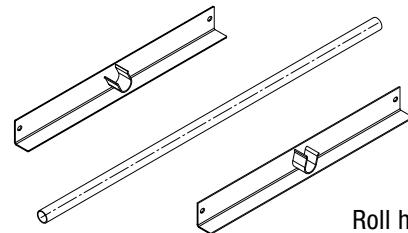
Perforated back panel

**T**


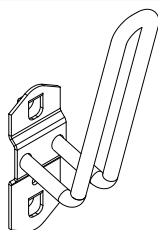
Round beam 1100 mm / 2200 mm

**U**


Split round beam 1100 mm / 2200 mm

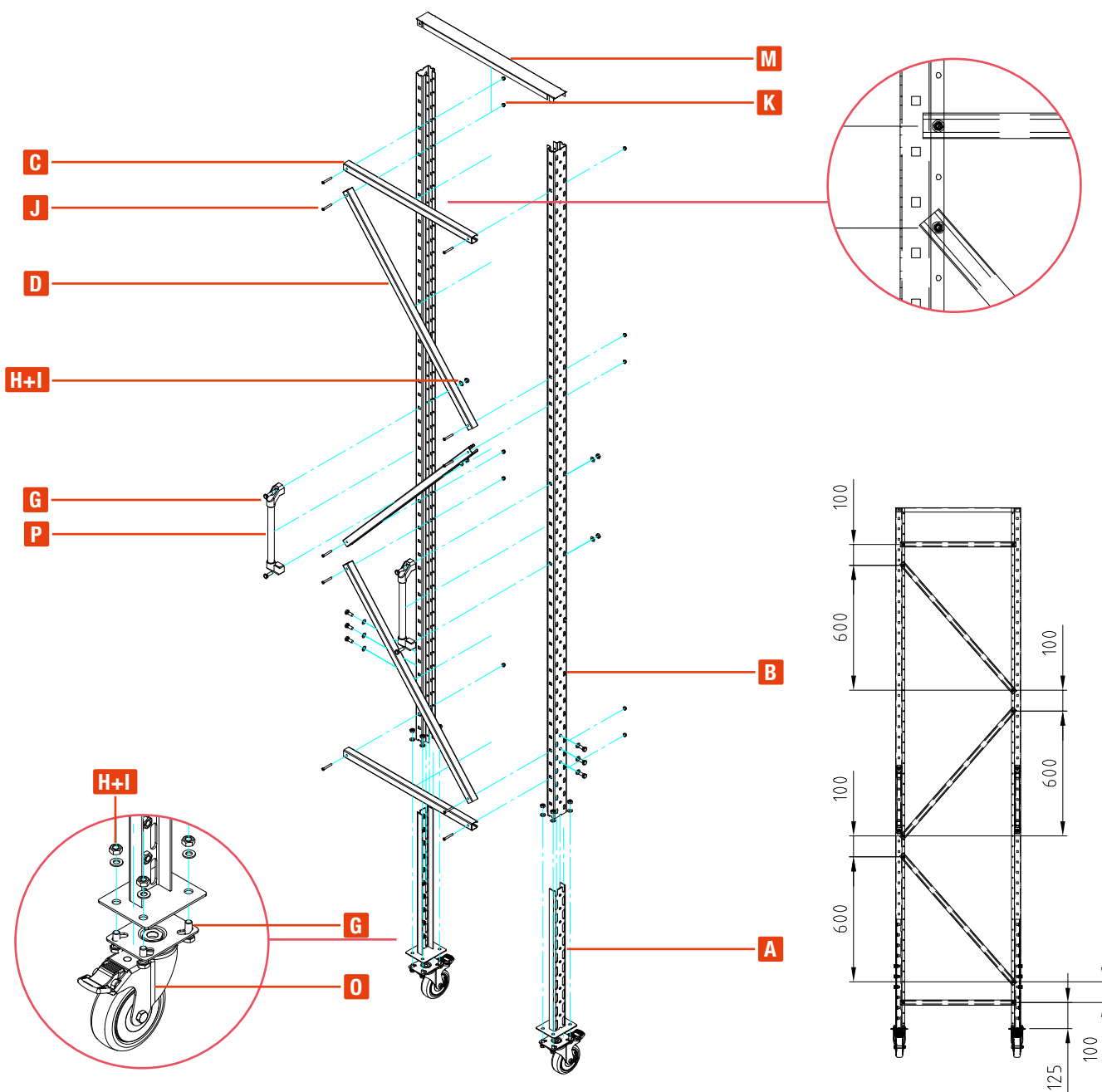
**V**


Roll holder set

**W**


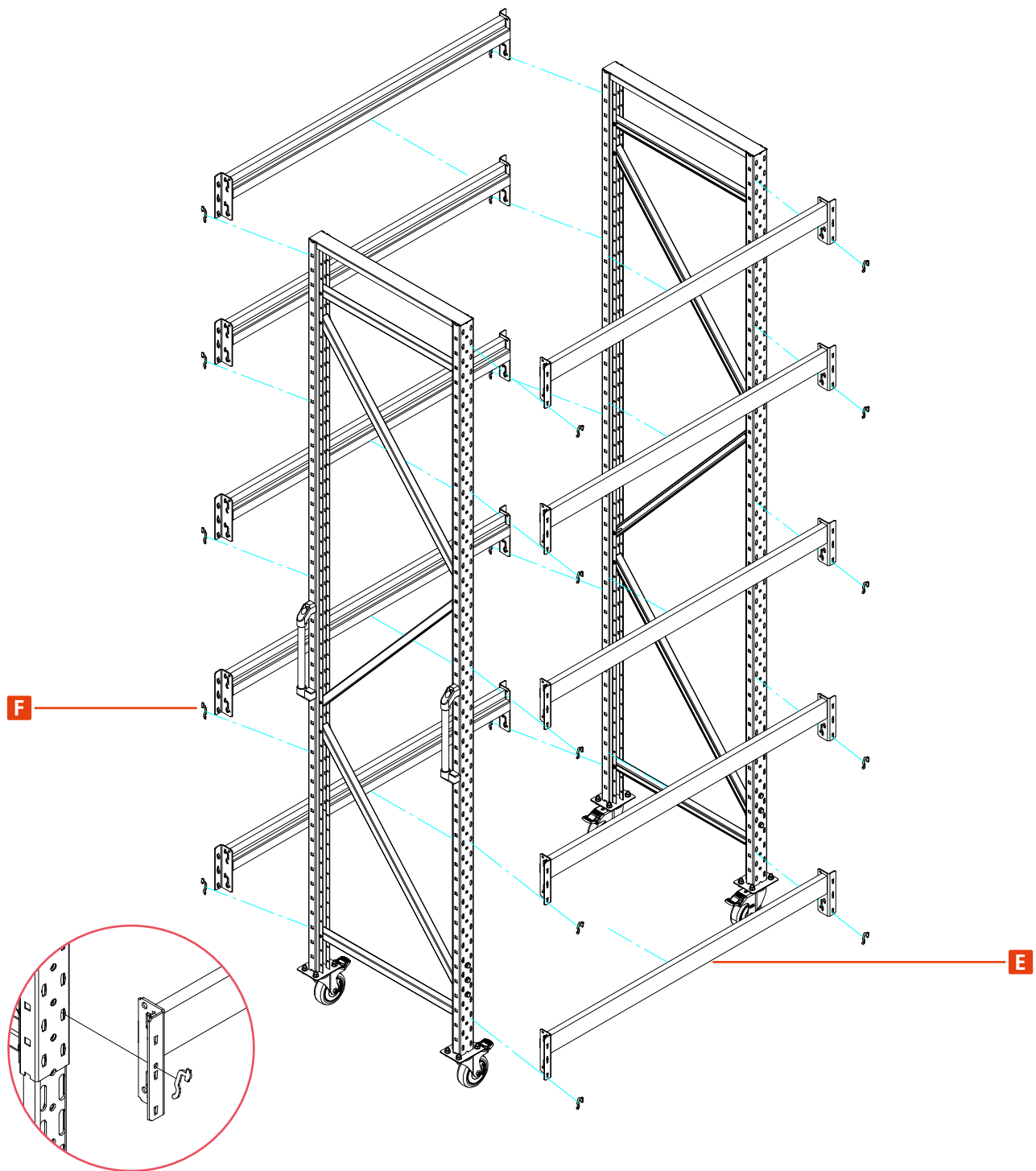
Plug-in roll holder

## UPRIGHT WITH CASTORS, HANDLES & COVERS



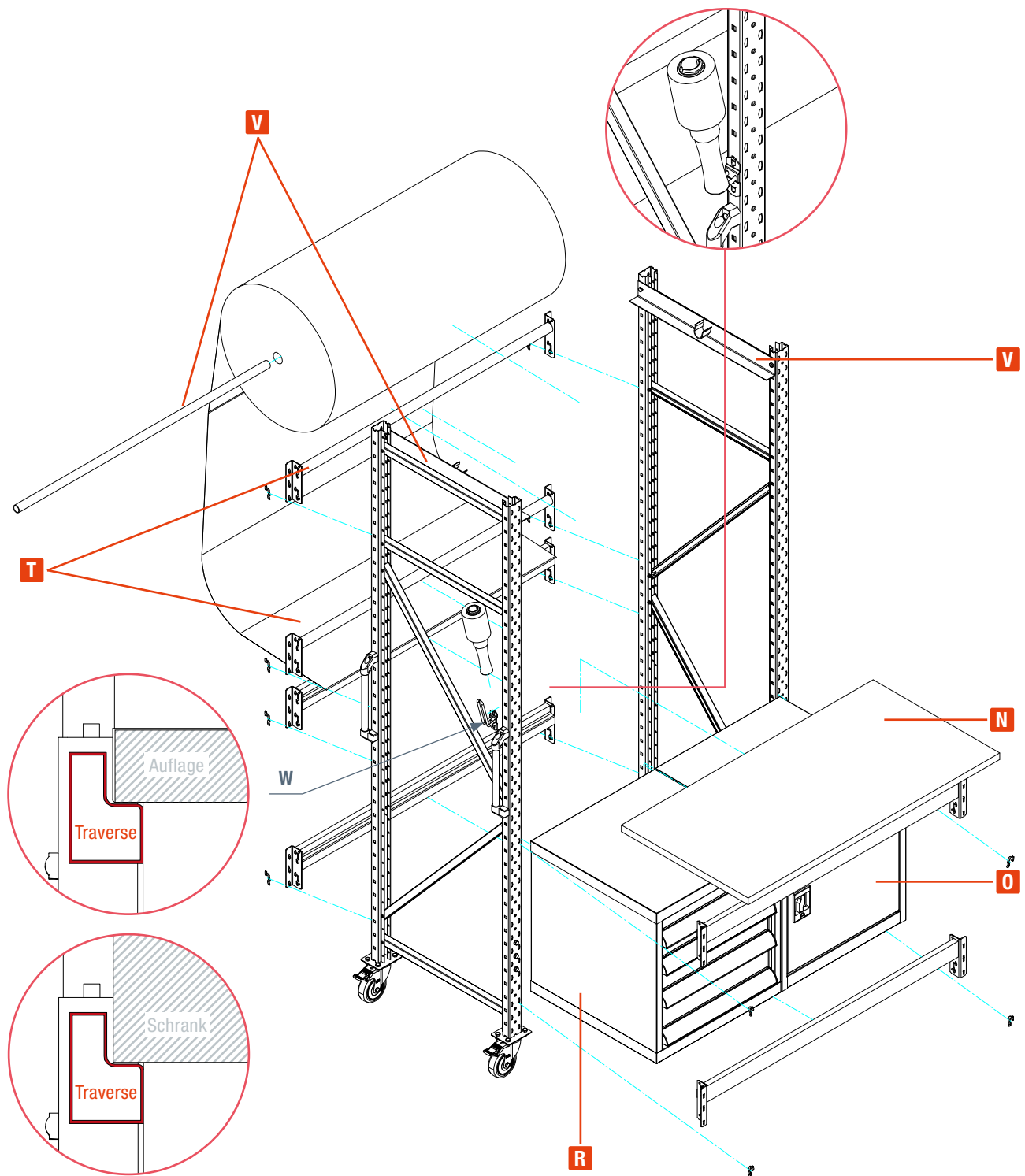
1. Slide upright profile **B** over foot part **A** and fix using screws **G** and washers **H**.
2. Push struts **C** and **D** into upright profile and tighten using bolts **J** and nuts **K**.
3. Mobile version: Secure castors **O** to the foot part using screws **G**, washers **H** and nuts **I**.
4. Place the panels **M** on the upright profile and fit handles **P** using screws **G**, washers **H** and nuts **I**.

## BEAMS



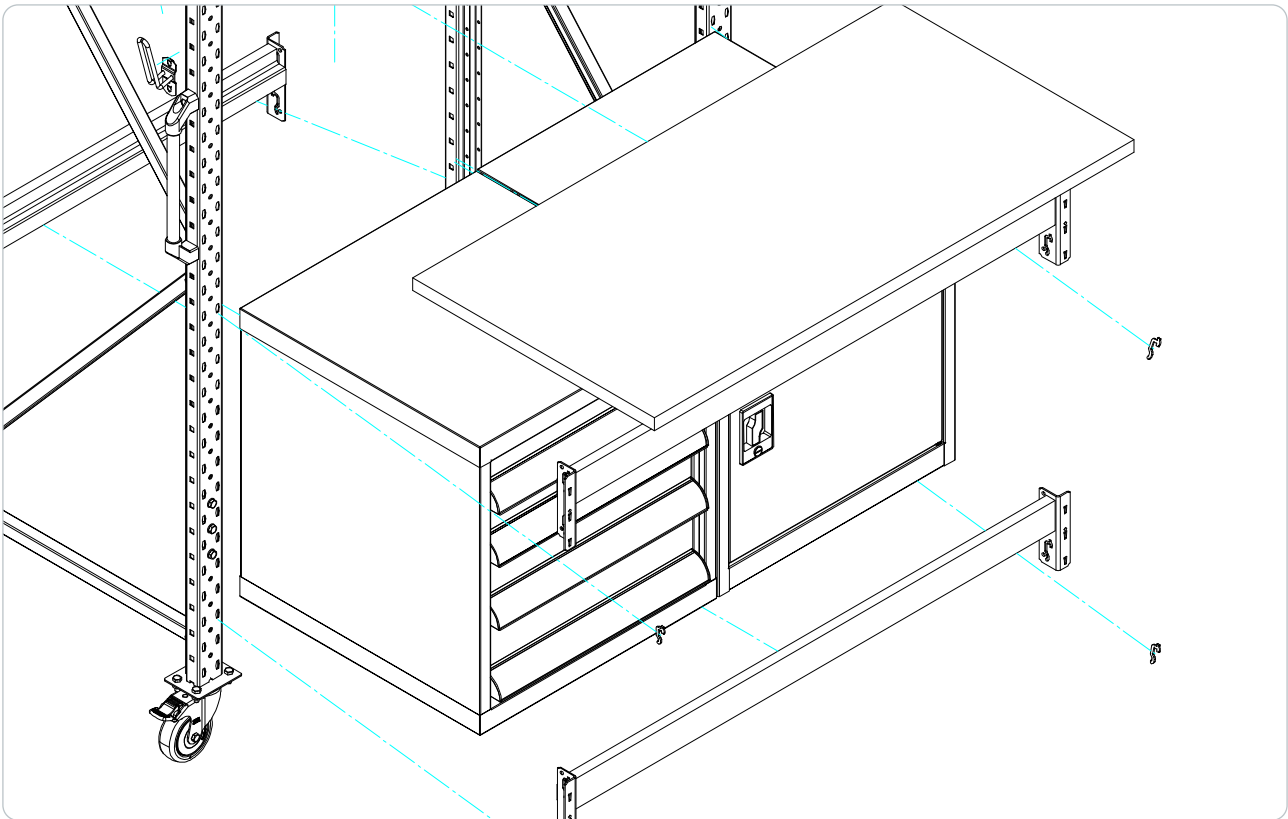
1. Attach the beams **E** to the upright and secure them with safety pin **F**.

## SHELVES & ACCESSORIES, BEST-PRACTICE ASSEMBLY

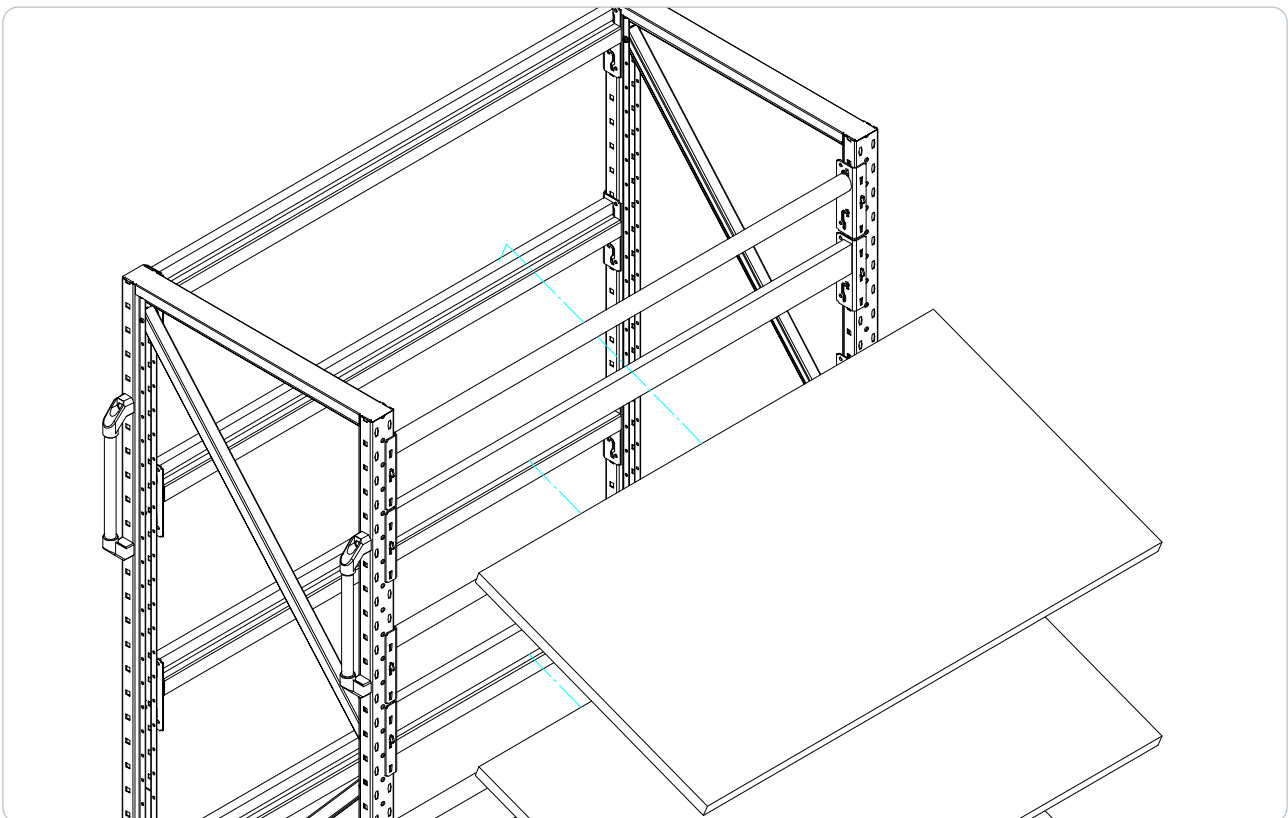


1. Place cabinets **Q** and **R** onto the stepped beam (self-fixing).
2. Insert the shelf **N** into the stepped beam (self-fixing).
3. Attach the round beams **T** as shown.
4. Attach the roll holder set **V** – Attach the roll holder to the upright and insert the galvanised tube.
5. Attach plug-in roll holder **W** to upright.

## CABINETS

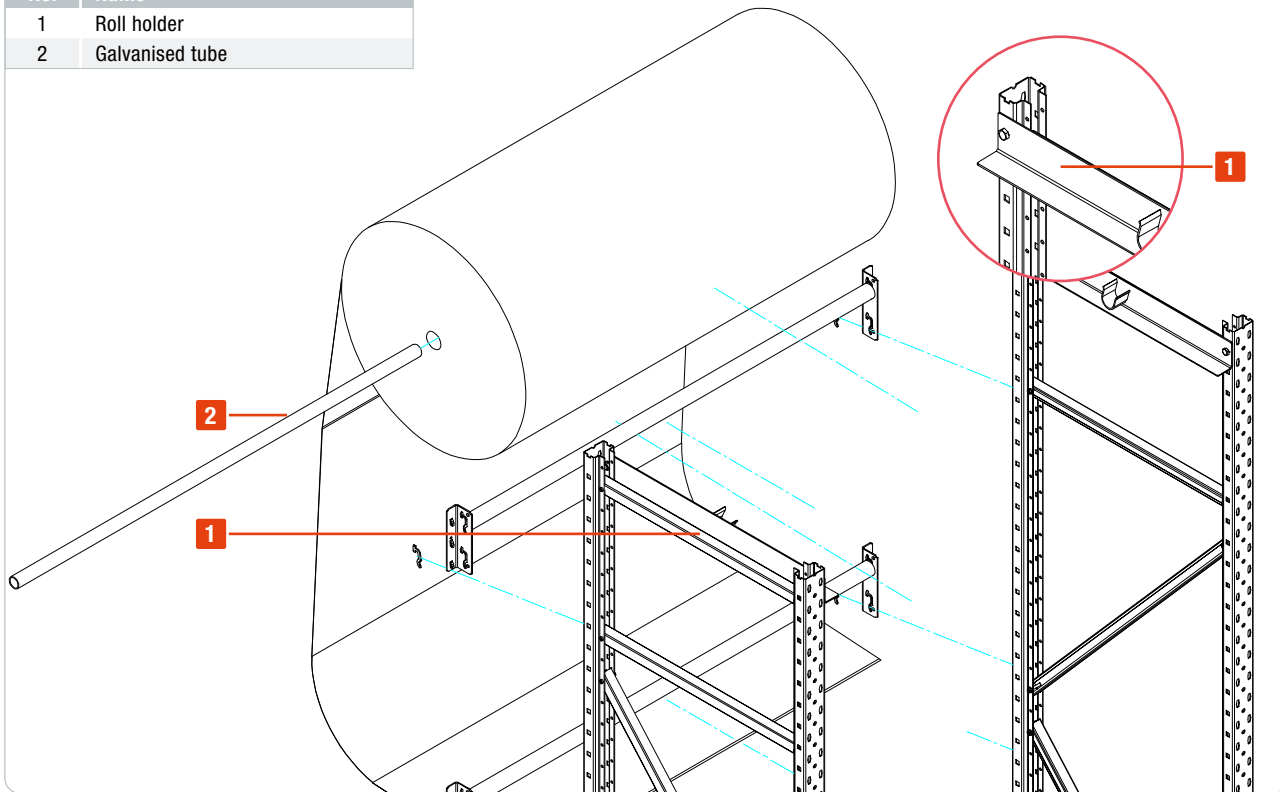


## WITH KANBAN

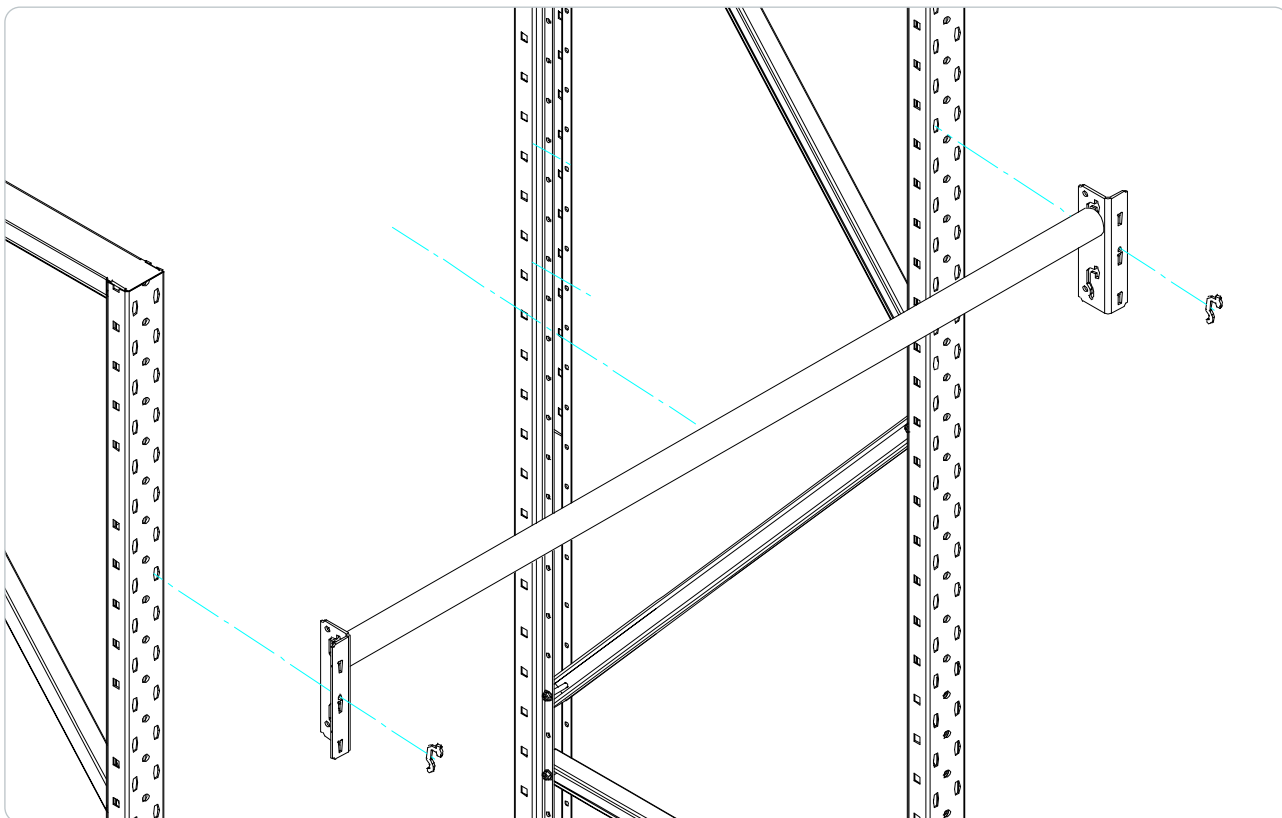


## ROLL HOLDER SET

No.	Name
1	Roll holder
2	Galvanised tube

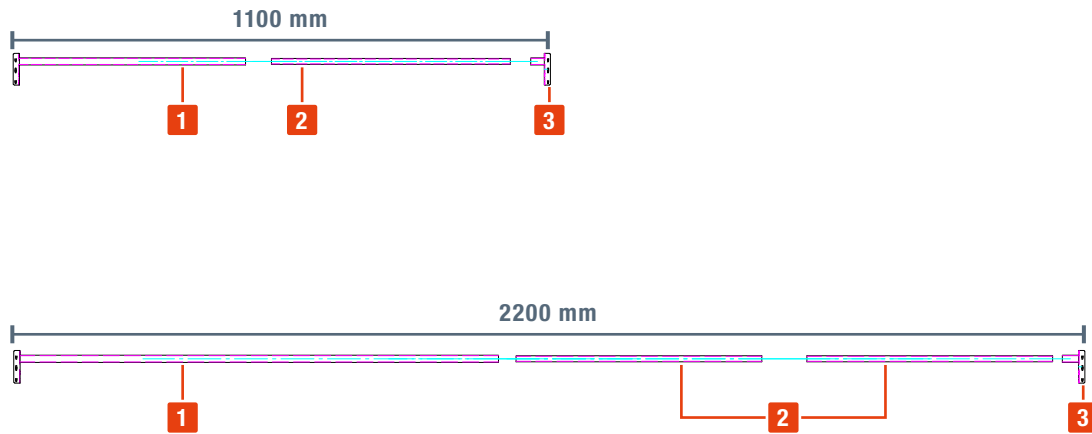


## ROUND BEAM

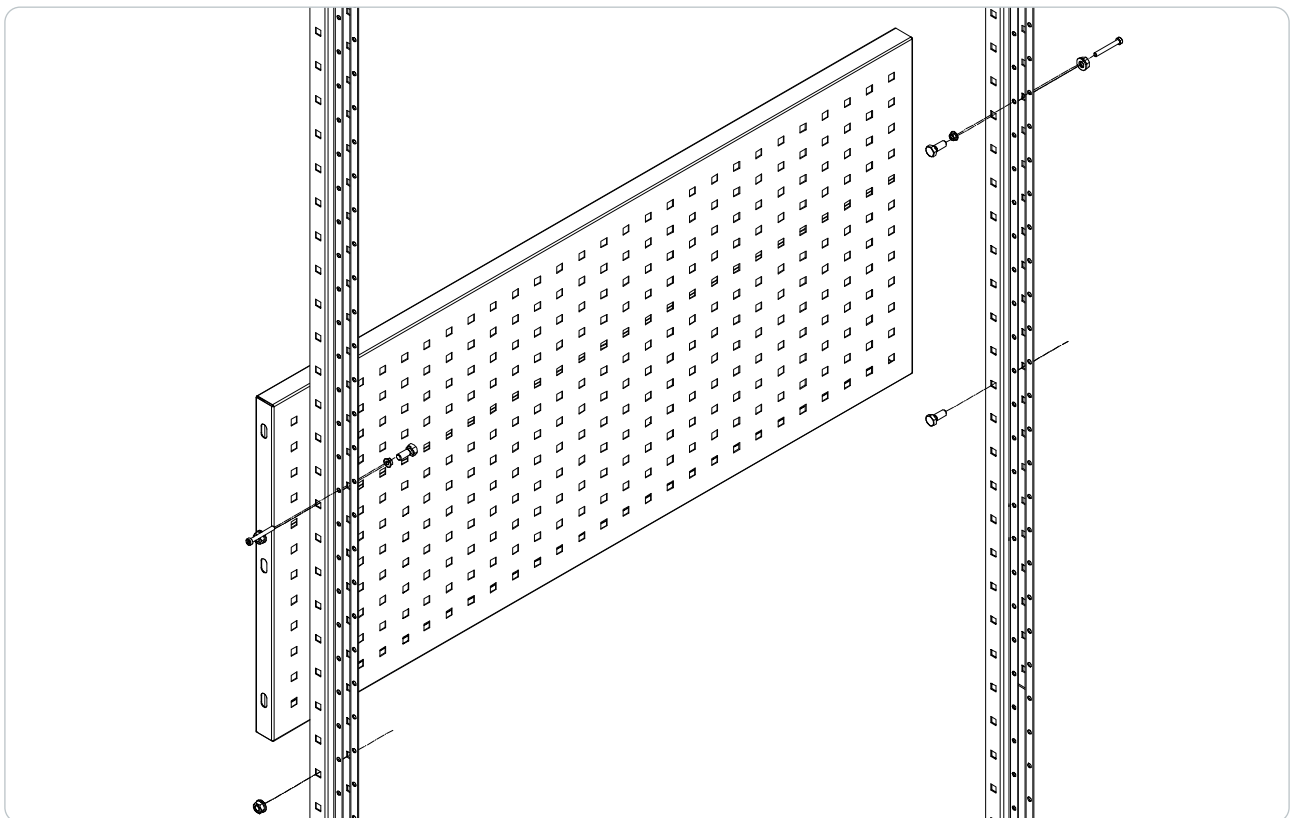


## SPLIT ROUND BEAM

No.	Name
1	Beam
2	Galvanised inner rod
3	Beam end piece



## PERFORATED BACK PANEL



## LOAD & WEIGHT DISTRIBUTION

- The specified, evenly distributed load for compartment and unit must not be exceeded.
- Care must be taken to ensure that the stored goods are evenly distributed on the shelves.
- The load units must not be pushed across the shelves or dropped on them.
- Racks may only be loaded according to our specifications. The loading of the racks must be evenly distributed, as the static design is based on the assumption of an evenly distributed surface load.
- Point impact loads and sliding loads must therefore be avoided.

## INSPECTION & CHECKS

- Has the rack been assembled according to the assembly instructions?
- Are parts of the construction damaged?
- Are there damages due to impact or overload on beams and/or uprights?
- Are the rack supports perpendicular?
- Are there any cracks in the weld seams or in the base material?
- What is the condition and effectiveness of the safety devices?
- What is the condition of the building floor?
- Is the load evenly distributed, are the racks too heavily loaded?
- What is the position of the load unit on the rack?
- Is the stability of the load units given?

## HANDLING

- The racks must always be assembled in accordance with the information in the assembly instructions. Unauthorised changes to the racks are not permitted in any form.
- Appropriate load capacity labels must be attached to all rows of racks. These operating instructions must also be made available to the warehouse workers.
- Local alterations to the racks or the repositioning of beams may only be carried out when they are not loaded.
- People must not stand on racks.
- Damaged and deformed rack parts must be replaced immediately, as the load-bearing capacity is only guaranteed in an undamaged condition. Therefore, damaged components must not be used any further.
- The sum of all compartment loads in a unit must not exceed the maximum unit load.
- A collision of industrial trucks (e. g. forklift trucks) with the rack uprights can lead to a massive impairment of the rack's load-bearing capacity and must therefore be avoided under all circumstances.
- In general, all accident prevention regulations and the statutory provisions for work safety also apply.

## INSTRUCTIONS FOR USE

### GENERAL

People must not stand on rack uprights and shelves.

### OPERATING THE RACKS

Damaged and deformed components of a rack system must be replaced immediately, as the load-bearing capacity can only be guaranteed in perfect condition.

Our specified compartment and unit loads are only valid for evenly distributed loads.

## PERMISSIBLE LOAD CAPACITIES

Compartment load = load per shelf level.

Unit load capacity = max. load between 2 rack uprights.

The goods stored directly on the hall floor are not taken into account. The sum of all compartment loads must not exceed the maximum unit load. Compartment loads are evenly distributed loads.



### Loading and unloading

All multipurpose packing tables may only be loaded and unloaded by hand!  
Loading by stackers, forklift trucks or similar equipment is strictly prohibited!



### Load capacity

The information on load capacity refers to a rack with at least 2 units and at least 2 compartment levels, which are evenly suspended in height.

## RACK INSPECTION

The European guideline DIN EN 15635 points out the responsibility of the operator to keep the racks in a proper condition. To this end, visual inspections and expert inspections must be carried out at regular intervals on the shelves to ensure safety. The following aspects, among others, must be examined:

- Are the rack supports perpendicular?
- Are there any cracks in the weld seams or in the base material?
- What is the condition and effectiveness of the safety devices?
- What is the condition of the building floor?
- What is the position of the load unit on the rack?
- Are load capacity labels and information notes available and up-to-date?
- Is the stability of the load units given?

The inspections carried out, defects and their remedy are to be documented in writing. This documentation is to be kept at least until the next regular inspection. However, it is advisable to keep the documentation for the entire service life of the rack. (cf. BGI/GUV-I 5166)

## PERSONS QUALIFIED FOR INSPECTION

Qualified persons are those who can demonstrate specialist knowledge from recent professional activity in the environment of the test object and appropriate further training. These are e. g. fitters from the manufacturer or appropriately qualified personnel of the operator.

## VISUAL INSPECTION

- Visual inspections are to be carried out on a weekly basis.
- Visual inspections may be carried out by a competent internal person.
- The scope of inspection may be reduced to those parts of the rack where defects are to be expected since the last inspection.

## EXPERT INSPECTION

- Expert inspections are to be carried out at least every 12 months.
- The comprehensive expert inspection should be carried out by an expert, usually external person, and a comprehensive inspection protocol should be written.



Do you have questions about rack inspection or would you like our certified rack inspectors to carry out the inspection for you?

Talk to us about it! Tel. +49 (0)7158-98 43 91

## CRASH PROTECTION RAIL 400 MM

Art.-No. 11757, 11758, 11759, 5434, 11760



- Material thickness: 4 mm
- Height: 400 mm
- Lengths: 930 mm / 1230 mm / 1930 mm / 2530 mm / 3600 mm
- Painted in yellow with black signal stripes
- Protection against accidental collision, e. g. with industrial trucks
- TÜV-tested according to DGUV 108-007

Assembly: Anchor the crash protection rail to the floor using the 8 bolt anchors supplied (4 on each side).

## CRASH PROTECTION RAIL 800 MM

Art.-No. 11761, 11762, 11763, 11764, 11765



- Material thickness: 4 mm
- Height: 800 mm
- Lengths: 930 mm / 1230 mm / 1930 mm / 2530 mm / 3600 mm
- Painted in yellow with black signal stripes
- Protection against accidental collision, e. g. with industrial trucks
- TÜV-tested according to DGUV 108-007

Assembly: Anchor the crash protection rail to the floor using the 8 bolt anchors supplied (4 on each side).

## CRASH PROTECTION BOLLARD

Art.-No. 10136



- Height: 1200 mm / Weight 19 kg
- Diameter 160 mm
- Foot plate with 25 x 250 mm
- Painted in yellow with black signal stripes
- Protection against accidental collision, e. g. with industrial trucks

Assembly: Anchor crash protection bollard to the floor using the 4 bolt anchors supplied.

## L-PROFILE RACK PROTECTOR

Art.-No. 4749, 9870



- Heights: 400 mm / 800 mm incl. 4 bolt anchors
- Painted in yellow with black signal stripes
- Corner rack protection to protect the outer uprights from accidental impact by lifting equipment such as forklift trucks, stackers, etc
- TÜV-tested according to DGUV 108-007

Assembly: Secure L-profile rack protector to the floor using the 4 bolt anchors supplied.

## U-PROFILE RACK PROTECTOR

Art.-No. 4748, 9868

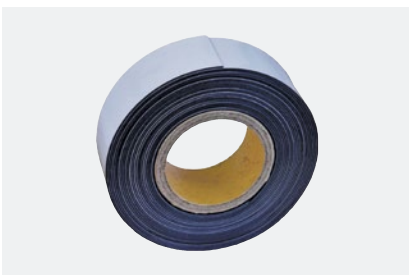


- Heights: 400 mm / 800 mm incl. 4 bolt anchors
- Painted in yellow with black signal stripes
- U-rack protection to protect the inner uprights from accidental impact from lifting equipment such as forklift trucks, stackers, etc

Assembly: Anchor the U-profile rack protector to the ground using the 4 bolt anchors supplied.

## MAGNETIC TAPE

Art.-No. 9590, 9591



- Magnetic tape for labelling racks or e. g. car bodies, machines, etc.
- Dimensions: L 1000 mm / B 50 mm or 100 mm / T 1.50 mm
- Reusable
- Easy cutting to size with standard scissors

## SPACER

Art.-No. 5805

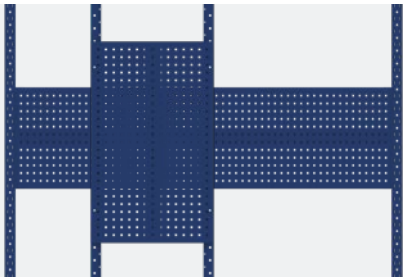


- Spacer for parallel positioning of storage rack rows
- Can also be used to fix the storage rack to the wall
- Length: 200 mm
- Colour TOPREGAL blue (corresponds roughly to RAL 5010)
- For upright height < 2.5 m we recommend 2 spacers per upright
- For upright heights from 3 m we recommend 3 spacers per upright

Assembly: The spacer is mounted to the uprights with screw connections.

## PERFORATED BACK & SIDE PANEL

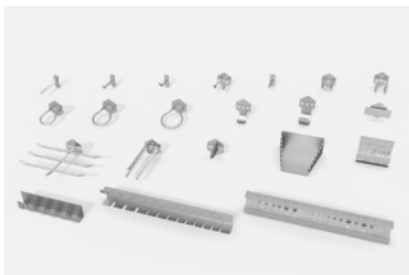
**Art.-No. 18344, 18345, 27630, 27631**



- Perforated back/side panel made of steel, powder-coated RAL5005 Signal blue for storing tools, small parts or work equipment
- Simple plug-in holder systems for attaching tool holders to perforated panels
- Attachment at a flexible distance of 50 mm
- The perforation spacing is approx. 28 mm and is therefore compatible with common applications

## TOOL HOLDERS

**Art.-No. 29214, 29215, 29216**



- Tool holder / machine holder sets made from galvanised steel for our accessories product 'side panel / perforated panel for storage rack / MFR'
- Ideal for the storage of any tools that can be placed on a hook such as pliers, open-end spanners, cordless drills, cables, pipes, saws, etc.
- The individual elements can be attached to our side panels / perforated panels using a simple plug-in system without assembly material

## TOOL CABINETS

**Art.-No. 18569, 18570, 18571, 18572**



- Available in depths of 600 mm and 800 mm
- Colour TOPREGAL blue (corresponds roughly to RAL 5010)
- Height: 570 mm / width: 540 mm
- Cabinets are only inserted, no assembly necessary, self-fixing
- Versions with lockable door or drawers available

## LOCKER

**Art.-No. 20783, 27738**



- Locker with three doors
- Available in depths of 600 mm and 800 mm
- Height: 1765 mm / width: 1080 mm
- Lockable doors (2 keys incl.)
- Incl. 3 clothes rails and 3 shelves

## METAL CABINET

Art.-No. 27734, 20782



- Locker with three doors
- Available in depths of 600 mm and 800 mm
- Height: 1765 mm / width: 1100 mm
- Lockable doors (2 keys incl.)
- Incl. 4 steel shelves

## REUSABLE CONTAINER WITH LID 75 L

Art.-No. 87081, 87397, 87398



- Width: 4000 mm / height: 440 mm / length: 600 mm
- Weights of up to 50 kg per reusable container can be stored
- For space-saving storage and easy transport

## FOLDING PICK BIN 8.5 L

Art.-No. 87077, 87389, 87390



- Width: 216 mm / height: 175 mm / length: 336 mm
- Weights of up to 20 kg can be stored in each pick bin

## FOLDING PICK BIN 15 L

Art.-No. 87078, 87391, 87392



- Width: 270 mm / height: 200 mm / length: 420 mm
- Weights of up to 20 kg can be stored in each pick bin

## FOLDING PICK BIN 30 L

Art.-No. 87079, 87393, 87394



- Width: 303 mm / height: 275 mm / length: 500 mm
- Weights of up to 28 kg can be stored in each pick bin

## REUSABLE CONTAINER 69 L

Art.-No. 87080, 87395, 87396



- Width: 400 mm / height: 400 mm / length: 600 mm
- Weights of up to 50 kg per reusable container can be stored
- For space-saving storage and easy transport

## SERVICE & CONTACT

Contact our product experts and find help and solutions for your product. Here you will find all contact information listed by country and language: [www.topregal.com/en/service](http://www.topregal.com/en/service)

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