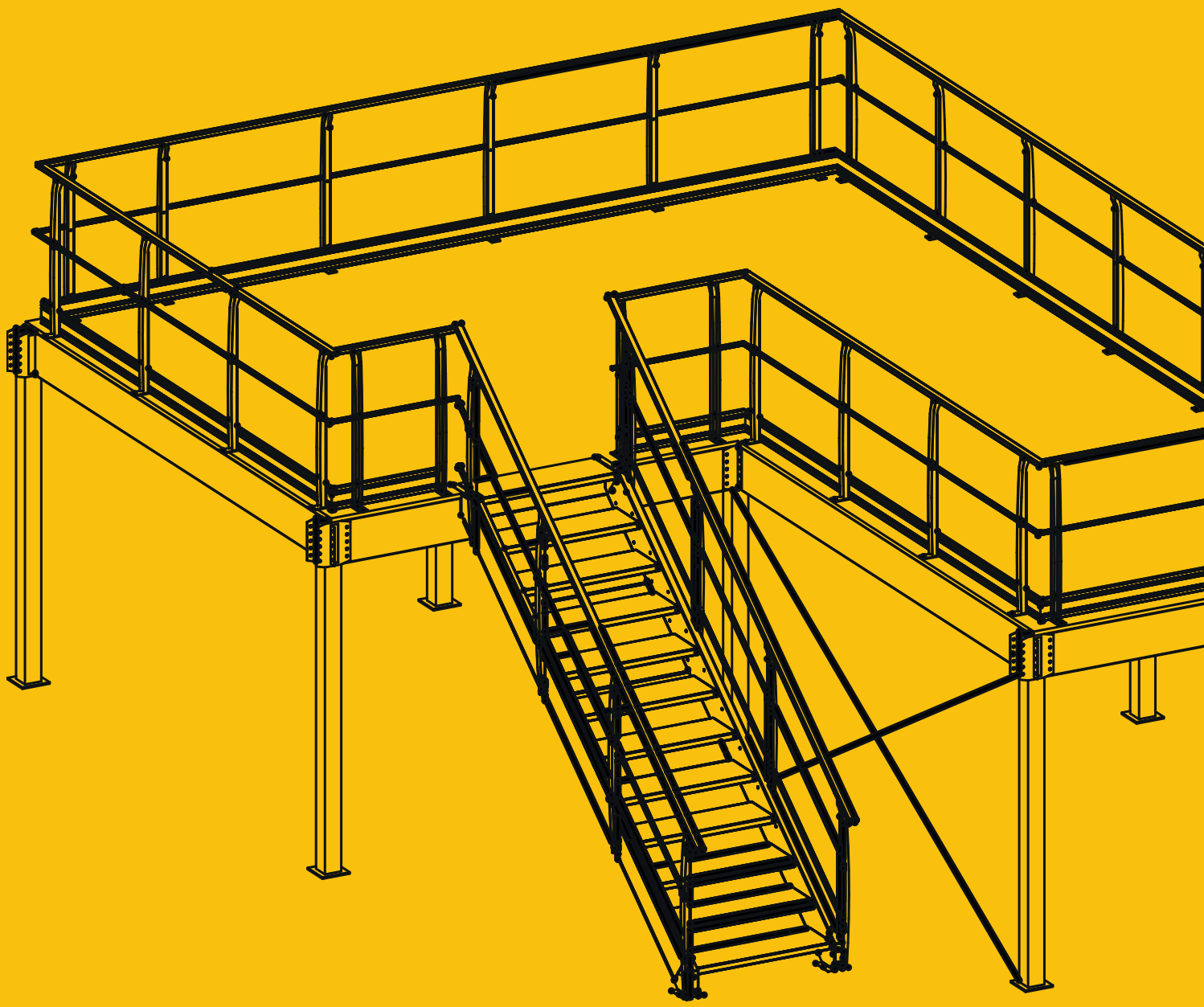
MEZZAMAN

MEZZANINE

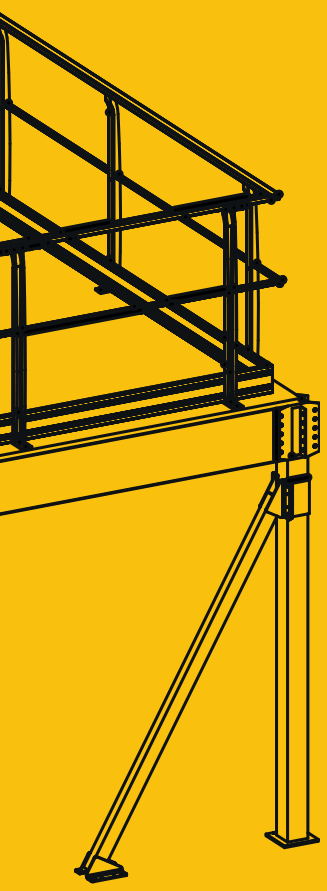
CUSTOMISED SOLUTION FOR OPTIMISING YOUR SPACE

MANORGA

THE PERMANENT INNOVATION



EDITORIAL

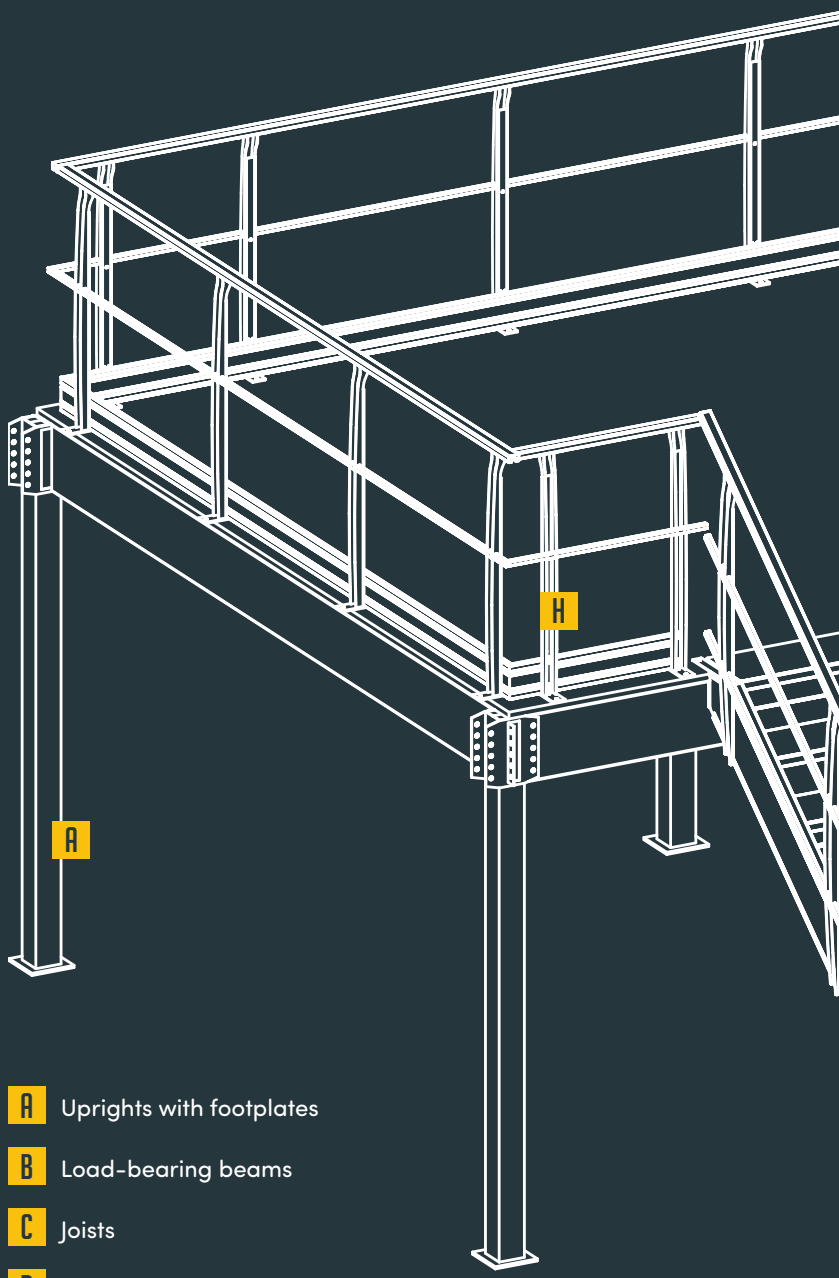


COMPOSITION OF THE MEZZAMAN STRUCTURE

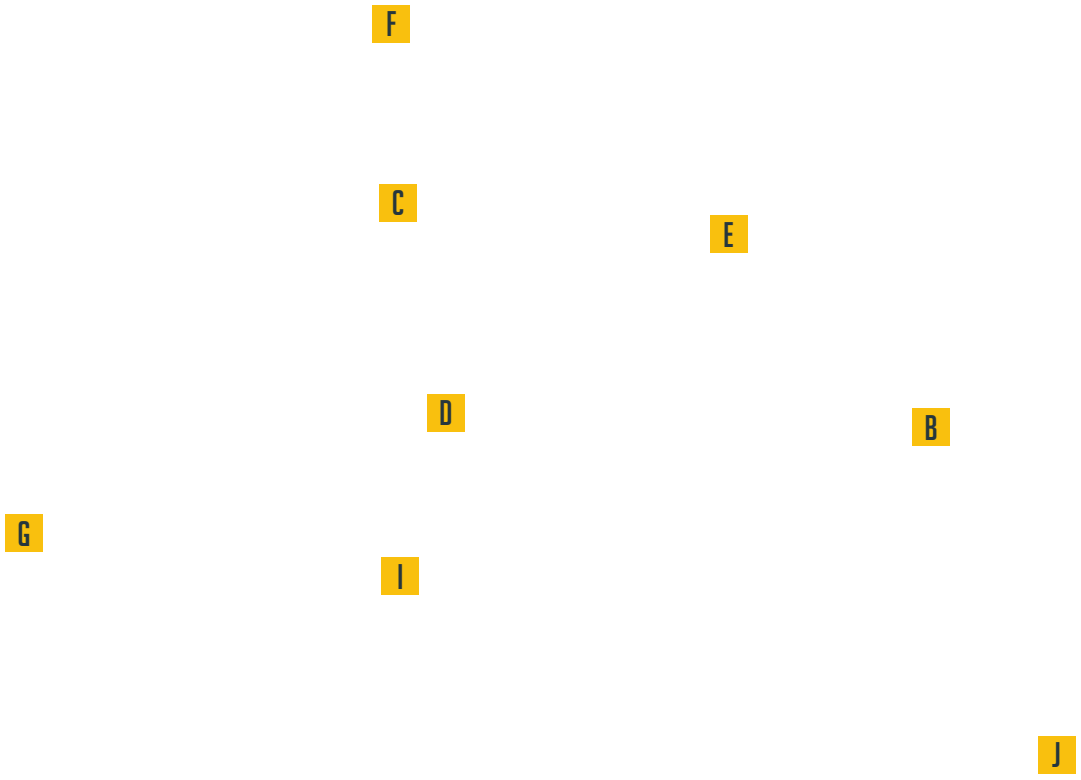
The structure of the Mezzaman mezzanine is:
- made from powder-coated steel,
- sturdy, certified and standardised,
- self-supporting.

It consists of:
- uprights with footplates,
- fixed or adjustable beams and joists,
- floor,
- cross braces or strut-brace.

Delivered customised and ready to assemble, the Mezzaman mezzanine is quick and easy to install. No drilling or welding is required on site.



- A Uprights with footplates
- B Load-bearing beams
- C Joists
- D Non-load-bearing beams
- E Battens
- F Floor
- G Stairs
- H Railing
- I Cross brace
- J Strut-brace


F
C
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D
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G
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J

COMPOSITION OF THE MEZZAMAN STRUCTURE

UPRIGHTS A

These are the structure's main supports on the ground and consist of a tube, a footplate and connectors to assemble them on the beams.

These one-piece components are tailored made *(depending on the load to be supported, their cross-section and size vary).*

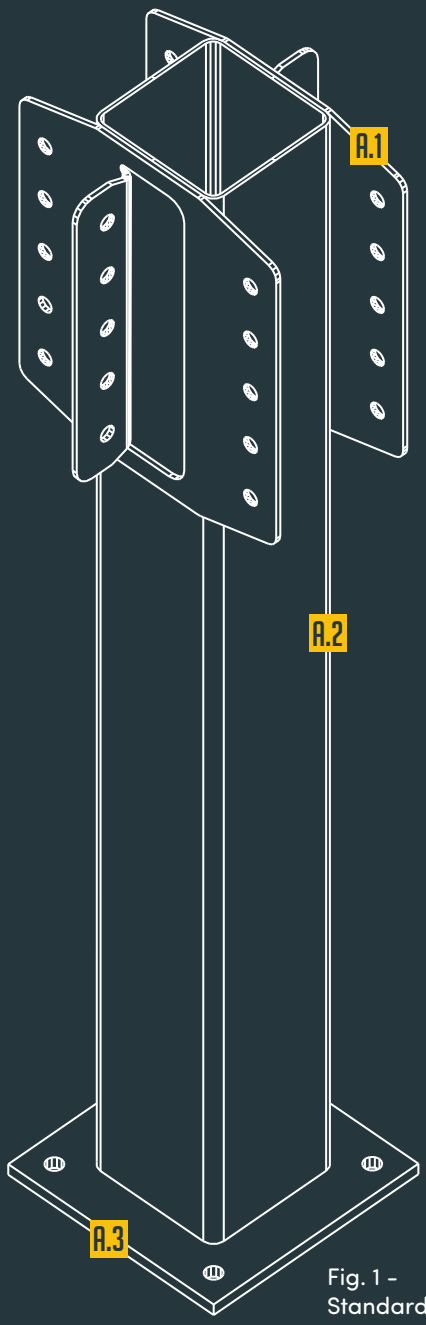
BEAMS B/C/D

C-shaped profiles of various cross-sections, defined according to the project.

FINISH

Uprights:
- epoxy paint,
- standard colour anthracite grey RAL 7024 *(Other RALs available, see page 26).*

Beams and joists:
- galvanised.



A.1 Connectors
A.2 Tube
A.3 Footplate

Fig. 1 - Standard footplate

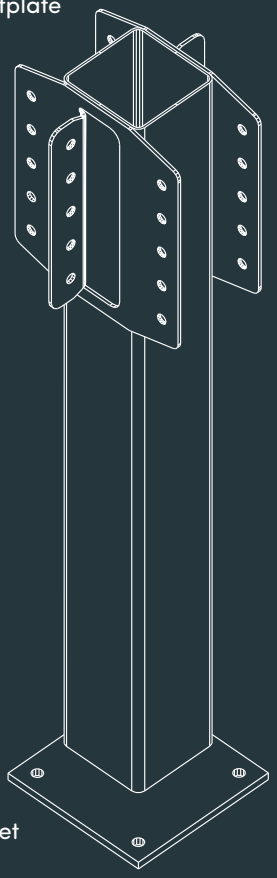
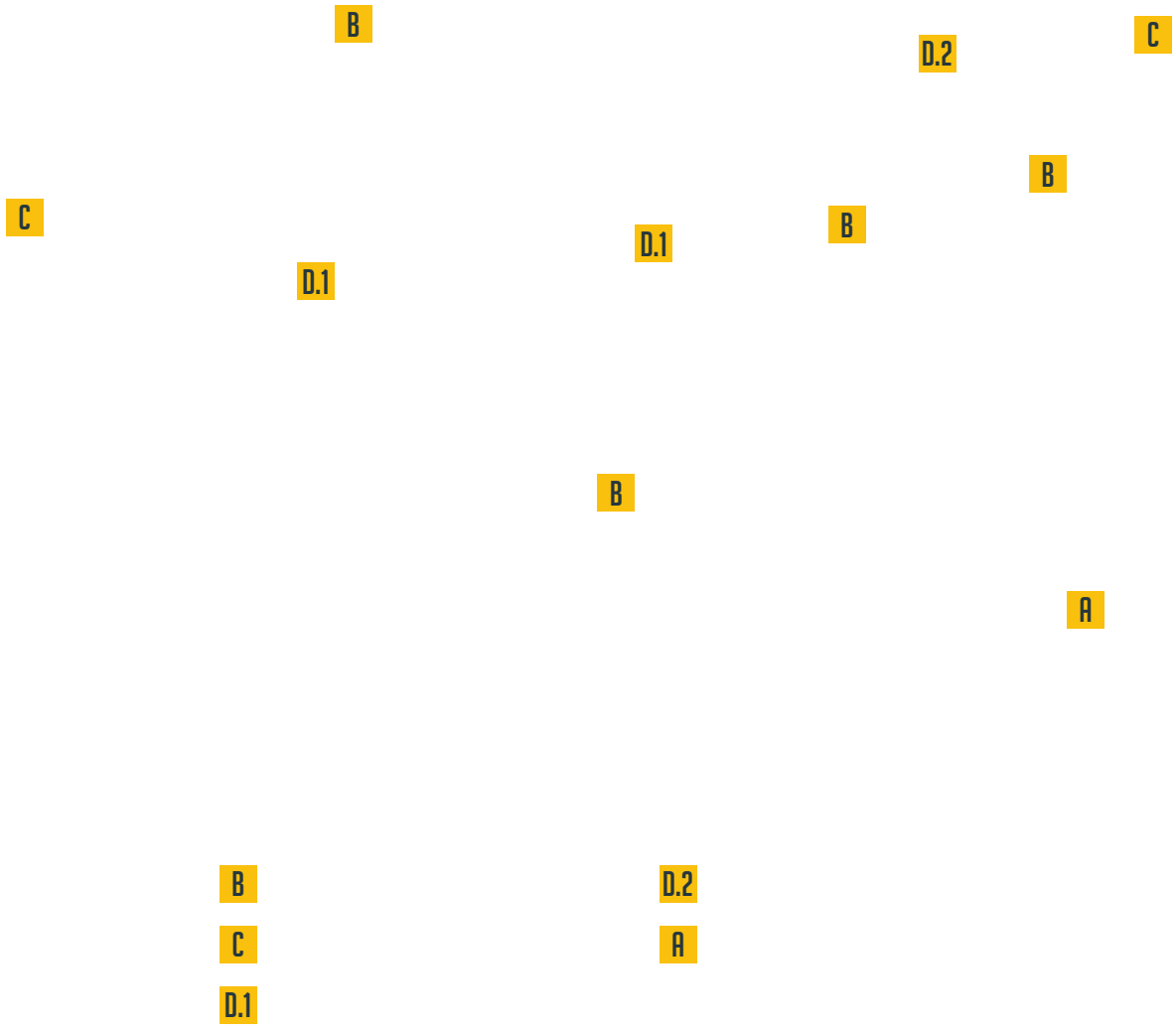


Fig. 2 - Offset footplate

UPRIGHTS A

- Made of welded profile tubes of various cross-sections:
  - 100 x 100 x 3 mm,
  - 120 x 120 x 3 mm,
  - 120 x 120 x 5 mm,
  - 120 x 120 x 8 mm.
- Welded onto footplates:
  - for support and attachment to the ground,
  - cross-section 200 x 200 x 10 mm or 300 x 300 x 15 mm, defined according to the loads to be transmitted to the ground (Fig. 1),
- In standard configuration, the footplates are welded to the centre of the uprights. However, for better adaptation to the environment, such as a mezzanine against a wall, they can be installed off-centre (Fig. 2). This option only applies to the 200 x 200 mm cross-section.
- The top connectors (4 mm thick, welded in the factory) are used for assembling the beams. They also make subsequent extension possible.

BEAMS B/C/D



TECHNICAL ADAPTABILITY

OVERHANG

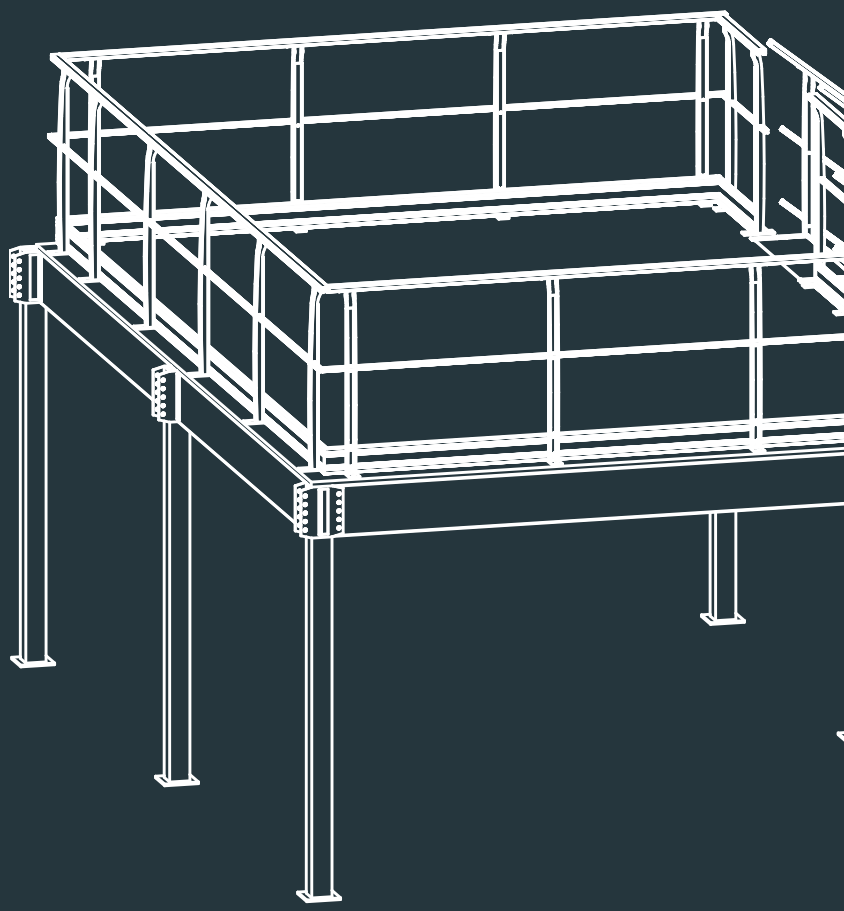
Technical feature to extend the load-bearing structure without the need for upright support.

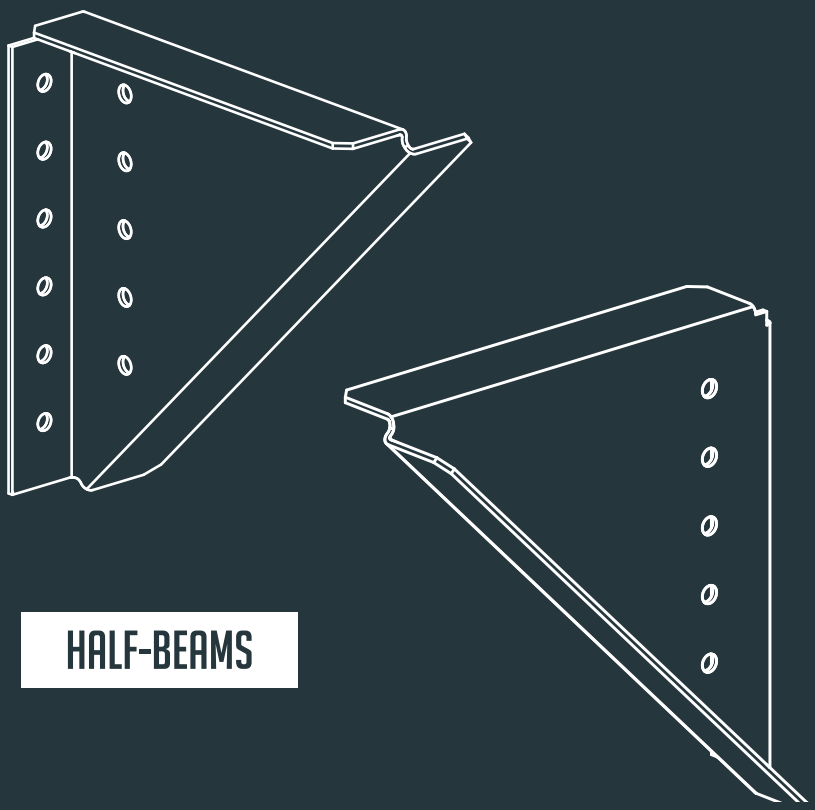
This fitting is recommended to fit around an obstacle at height, for instance a fire hose station, a machine, etc.

HALF-BEAMS

Fitting that gives a maximum floor overhang of 500 mm (450 mm half-beam + 50 mm chipboard) without using an upright.

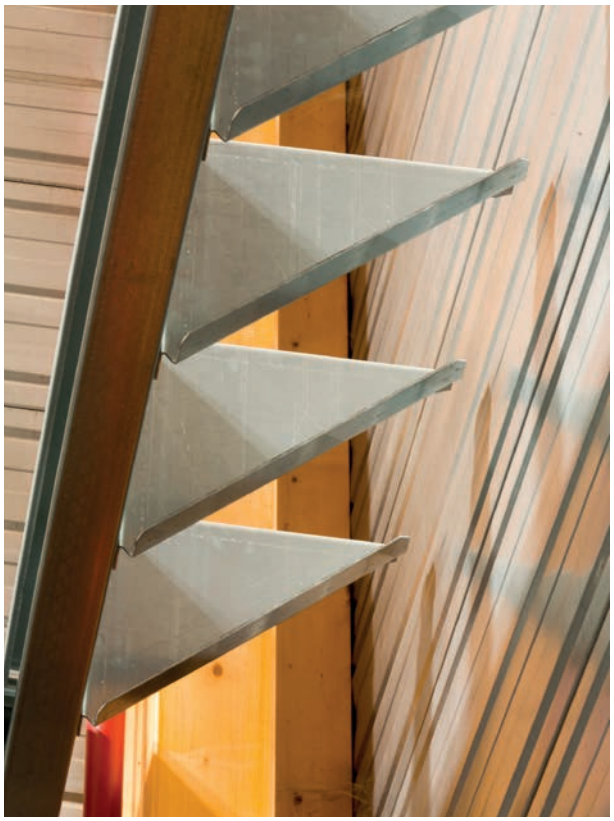
The half-beams attach to the load-bearing beam and adapt to the required overhang.

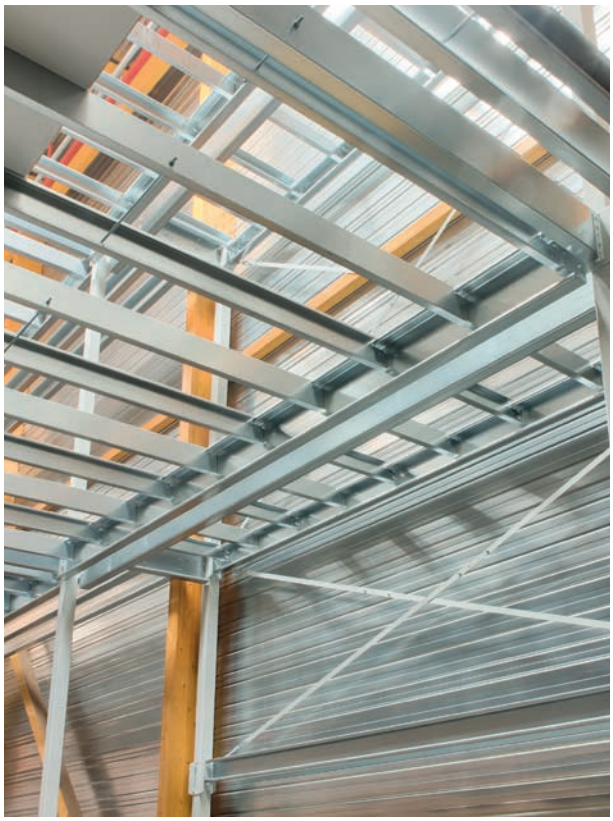




HALF-BEAMS

OVERHANG





SPECIAL FITTINGS

TRIANGULAR ELEMENT

Technical fitting for optimising the space to be developed. With this fitting, the contours of a building can be followed.

It is also suitable for rounded architecture.

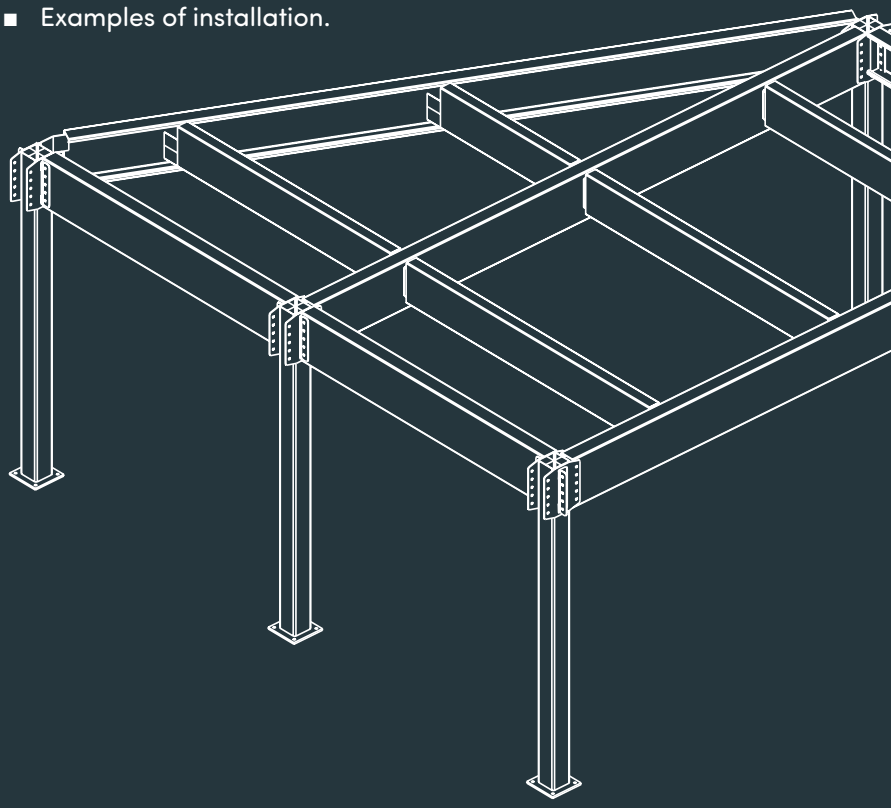
RECEPTION LANDING

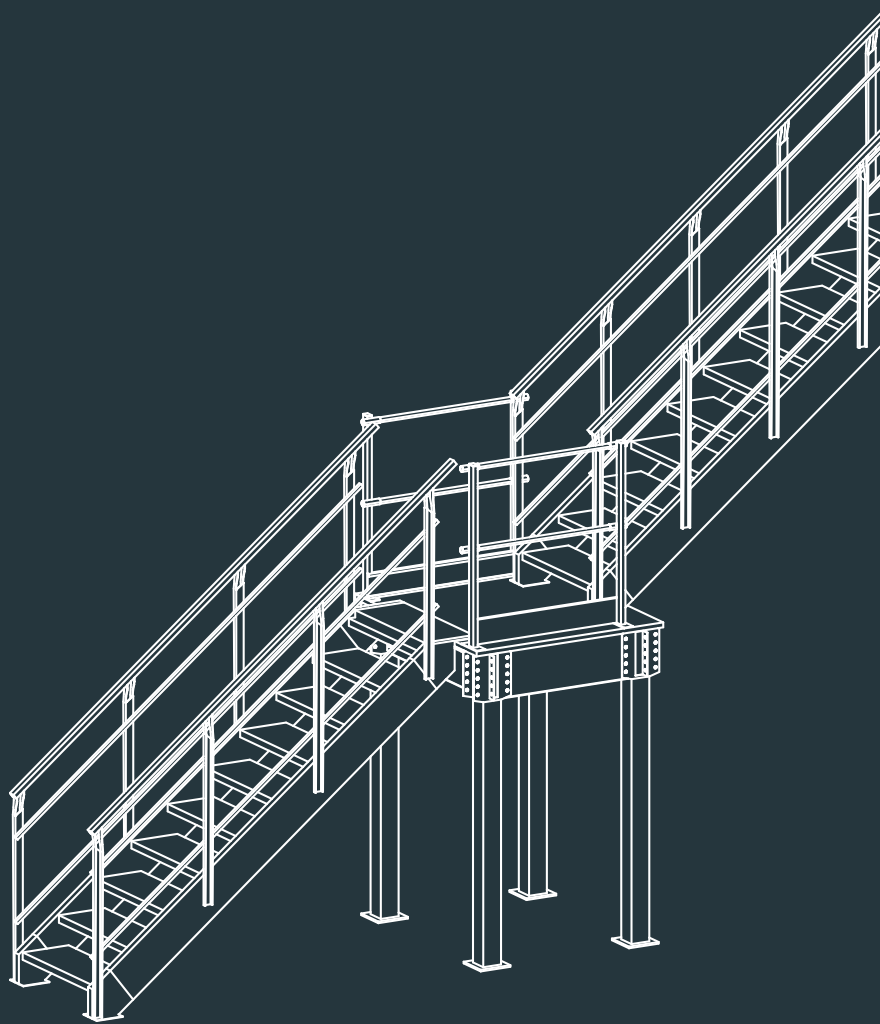
The reception landing allows stairs to be installed parallel to the mezzanine. This technique reduces the footprint.

The landing can be:
- incorporated into the mezzanine,
- installed independently using 4 uprights *(perfect for when the stairs are in several flights).*

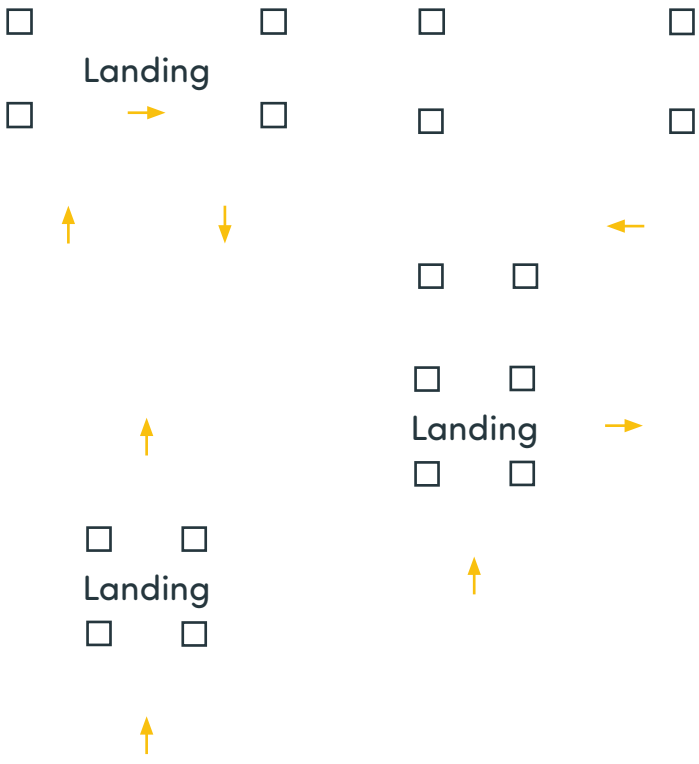
TRIANGULAR ELEMENT

■ Examples of installation.





DIFFERENT RECEPTION LANDINGS



FLOOR COMPOSITION

STANDARD FLOOR F.1

Perfect for meeting standard storage needs. The floor is positioned and assembled directly on the beam structure.

Possible load capacities*:
from 250 kg/m² to 1,000 kg/m².

"DRY" FLOOR F.2

Double-layer floor: Corrugated, galvanised steel sheet with chipboard on top.

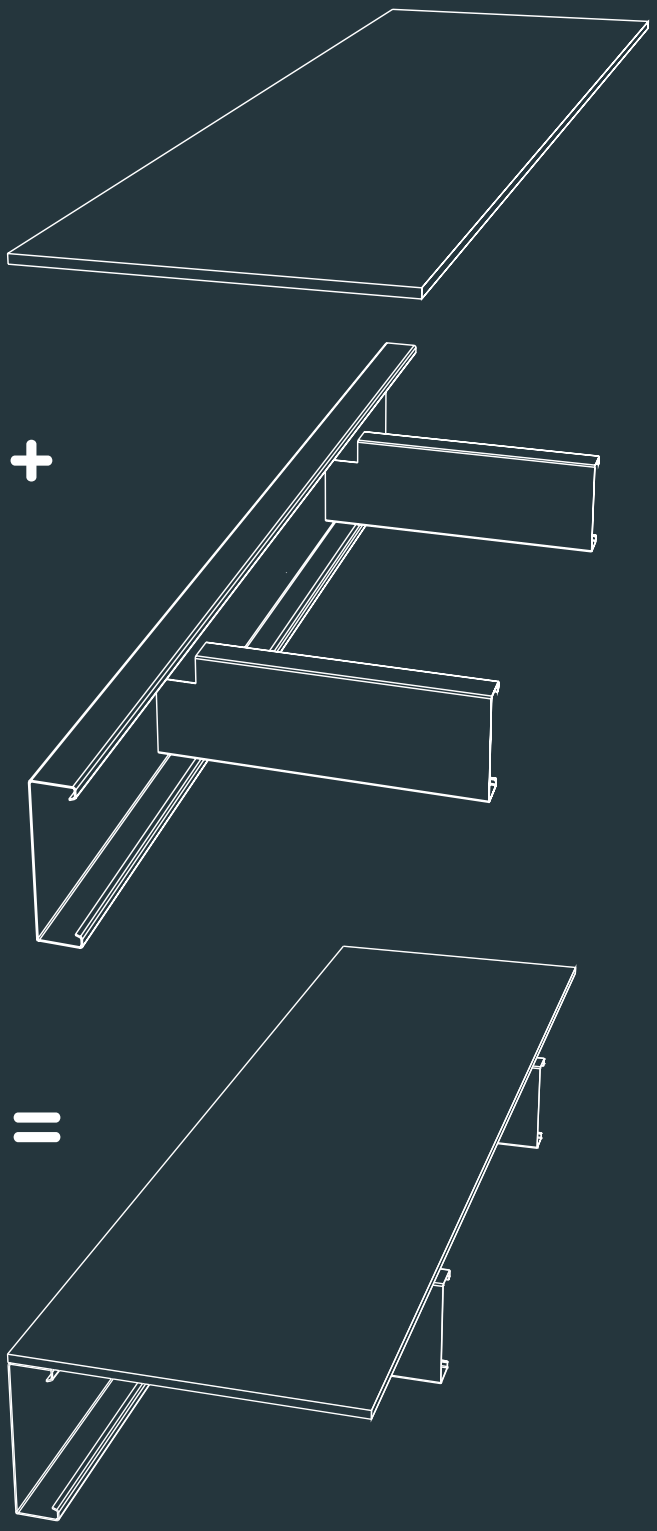
This combination is recommended if the mezzanine is intended:
- to accommodate workstations or offices,
- for a sales area, retail space or sports hall.

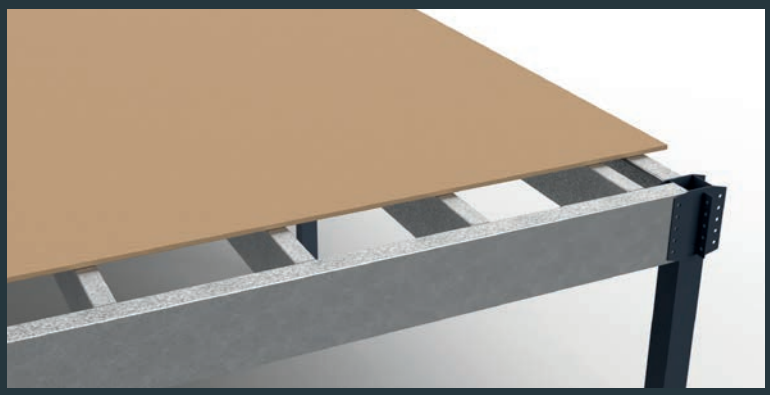
This floor technique has a number of advantages:
- a perfect finish under the mezzanine with the option of painting the corrugated steel sheet,
- feed-through for electrical cables,
- liquid retention.

**The load capacities indicated are maximum uniformly distributed loads. They vary depending on dimensions and conditions of use. Please ask.*

STANDARD FLOOR F.1

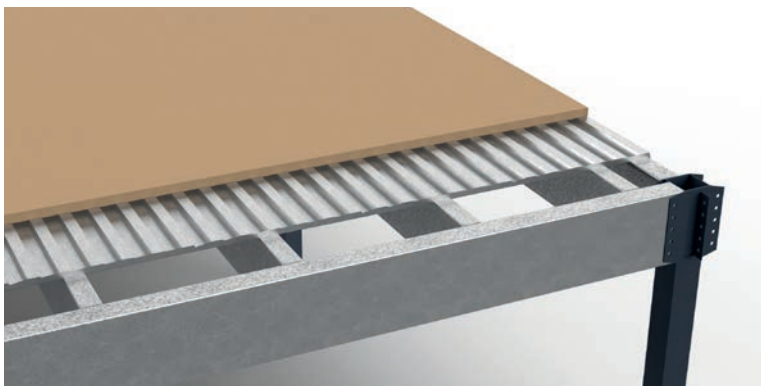
- Floor attaches to the main and secondary beams.





“DRY” FLOOR F.2

“TOPPED” FLOOR



THE DIFFERENT FLOORS

WOODEN FLOOR

A universal floor available in several versions, for storing boxes, miscellaneous equipment or pallets with a load capacity* of 250 to 1,000 kg/m².

It can be used to organise shelving.

The list opposite is not exhaustive. It gives the floors most commonly used with the Mezzaman mezzanine. A tailored study by our design office is required to meet your needs as precisely as possible.

METAL FLOOR

If wood is prohibited, for instance if there is a sprinkler system or an unusual environment, metal floors can still be used:
- metal grating,
- tread plate.

The load capacity* is identical to the wooden floor.

The load capacities indicated are maximum uniformly distributed loads. They vary depending on dimensions and conditions of use. Please ask.

19 MM PANEL - P4

- **Recommended use:**
  - in dry environments,
  - to complement corrugated steel sheet to form a highly resistant mixed floor (see page 13).
- **Technical features:**
  - rough on both sides,
  - structural floor with CE class: P4,
  - M3 classification (not fire rated),
  - maximum load capacity*: 500 kg/m².

30 MM PANEL - P4

- **Recommended use:**
  - in dry environments
- **Technical features:**
  - rough on both sides,
  - tongue and grooved on 4 sides,
  - structural floor with CE class: P4,
  - M3 classification (not fire rated),
  - maximum load capacity*: 500 kg/m².

22 MM PANEL - P5

- **Recommended use:**
  - in wet environments and/or where fire resistance is required,
  - to complement corrugated steel sheet to form a highly resistant mixed floor (see page 13),
  - double-layer (for better fire resistance).
- **Technical features:**
  - rough on both sides,
  - impermeable and/or flameproof structural floor with CE class: P5,
  - maximum load capacity*: 500 kg/m².

38 MM PANEL - P6
STANDARD

38 MM PANEL - P6
WHITE UNDERSIDE

38 MM PANEL - P6
SPECKLED GREY ANTI-SLIP - R10

38 MM PANEL - P6
GREY ANTI-SLIP - R12

Features and CE classes	
Common features	- Tongue and grooved on 4 sides - Certified CTBS quality - Structural floor
P4 panel	- Structural floor with CE class: P4 - M3 classification (not fire rated)
P5 panel	- Impermeable/flameproof structural floor with CE class: P5 (resistant to high humidity) and flame-retardant (R30) and steam barrier
P6 panel	- Extremely structural floor with CE class: P6 - M3 classification (not fire rated)

THE STAIRS

MEZZASTAIR G.1

Version corresponding to the standard industrial requirements of the Mezzaman mezzanine such as access to a storage area or warehouse.

MEZZASTAIR + G.2

Perfect for service sector installations such as access to offices or work areas.

MEZZASTAIR ERP G.3

Special stairs for the public. Attractive and customisable with many options to create a structural whole that fits seamlessly into the environment.

MEZZASTAIR / MEZZASTAIR + G.1 G.2

- Metal anti-slip steps for safe use.
- Landing step overlay to allow continuity of the anti-slip floor between the stairs and the mezzanine.
- Rigid and attractive handrail as a result of the shape of the upright, the intermediate safety tube and the handrail, continuous over the whole length of the staircase.
- Optional screw cover finishings,
- Optional under-step plate to reinforce the stability of the stairs and limit the build-up of dust under the stairs (including for stairs with a flight greater than 3 metres).

MEZZASTAIR G.1

- 3 angles available:
  - 35° (for the German market),
  - 38° (for the French market),
  - 45° ("space-saver" configuration recommended for secondary access).
- 4 useful step widths available: 600, 800, 1,000 or 1,200 mm.
- Complies with standards: NF EN ISO 14122-1 to 3, NF E 85-015 (38° and 45°) and ASR 1.8 (35°).

MEZZASTAIR + G.2

- Single angle 29°.
- Single useful step width: 1,200 mm.
- Complies with standards: NF EN ISO 14122-1 to 3, NF E 85-015, and the French Labour Code.

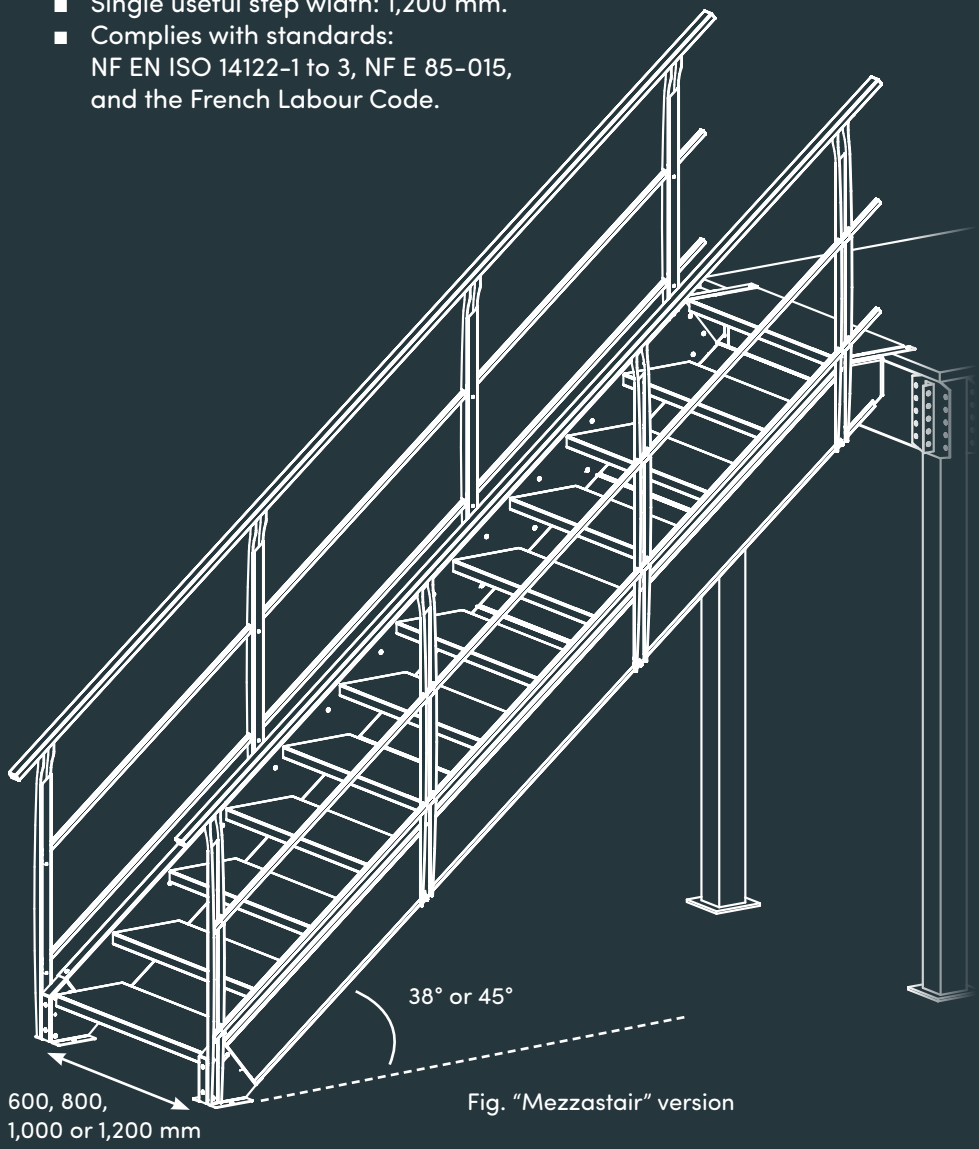
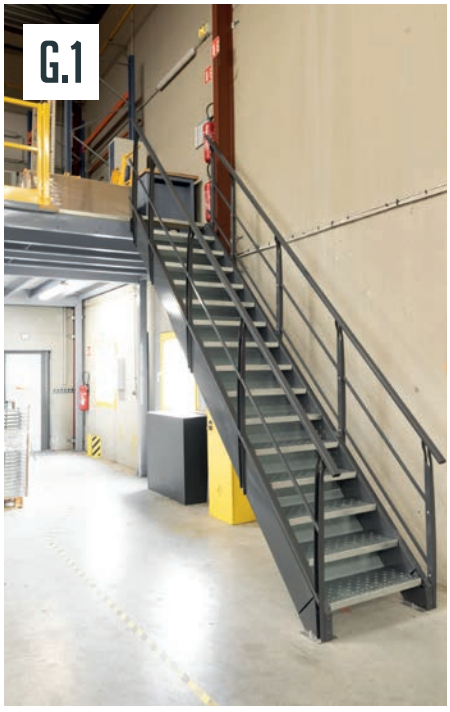
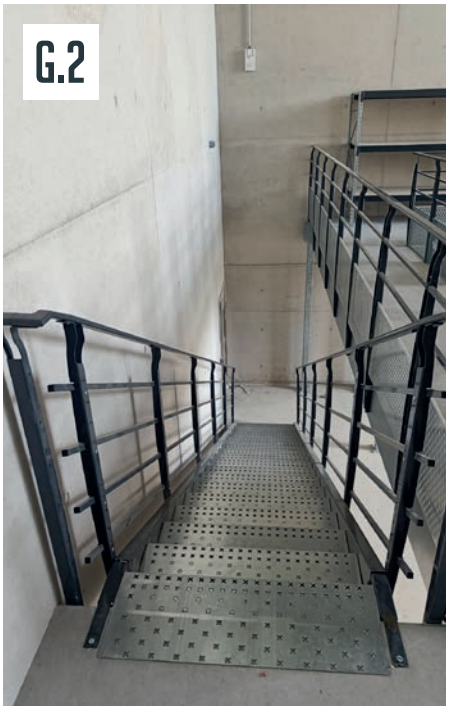
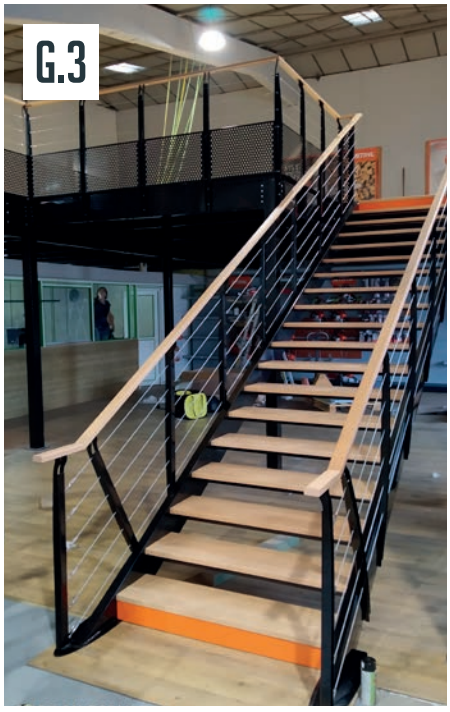


Fig. "Mezzastair" version

MEZZASTAIR ERP G.3







RAILINGS

MEZZASTAIR H.1

Standard, functional version, ensures the safety of users on all floor types (see p.14 to 15).

Fixing:
- on floor with backplate system under the mezzanine,
- surface-mounted on the beam.

MEZZASTAIR + H.2

Version with a sleek design, as well as ensuring the safety of users, it adds a stylish look to the environment and optimises the useful floor area.

Fixing:
- on floor with backplate system under the mezzanine,
- surface-mounted on the beam.

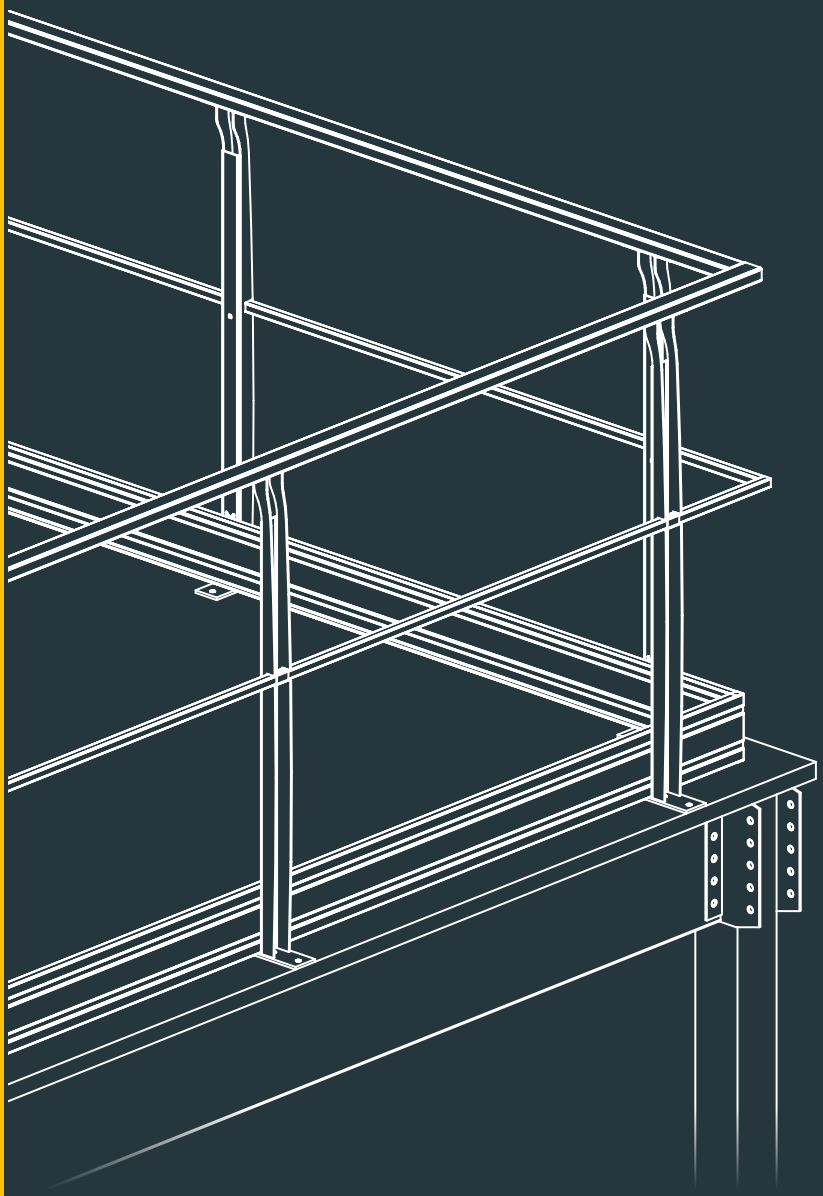
MEZZASTAIR ERP H.3

Railings designed in accordance with NF P01-012/013, it includes all the safety elements for use in a public places.

Surface-mounted on the beam.

MEZZASTAIR H.1

- Floor- or surface-mounted railings.
- 1,100 mm high.
- Handrail 50 x 30 mm tube.
- Intermediate safety tube 20 x 20 mm.
- Galvanised floor trim, height: 150 mm.
- NF EN ISO NF EN ISO 14122-1 to 3 and NF E 85-015



MEZZASTAIR + H.2

NF
EN ISO

MEZZASTAIR ERP H.3

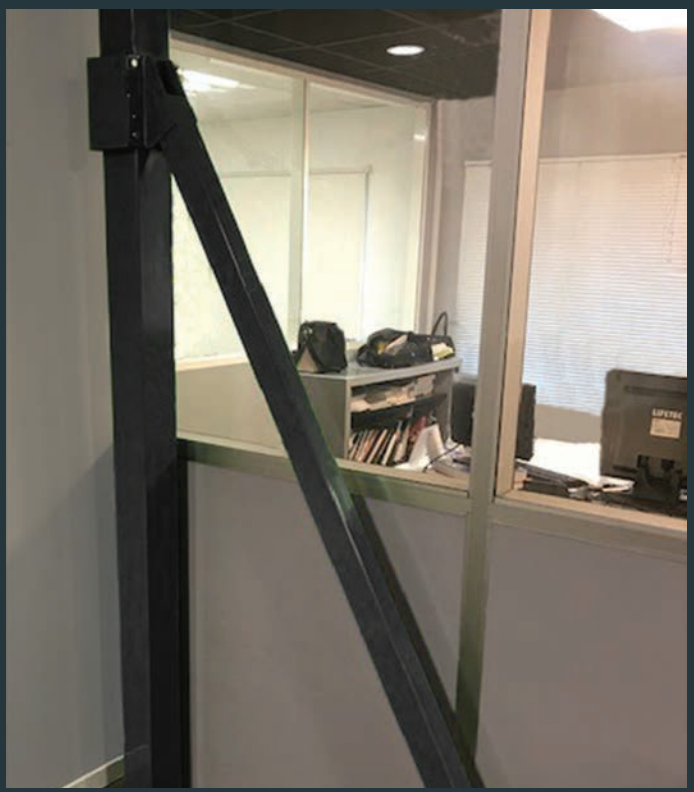
NF
EN ISO

ACCESSORIES

Depending on use and requirements, a range of accessories is available for the Mezzaman mezzanine.

UPRIGHT PROTECTORS

- To protect the mezzanine against impact from trolleys.
- Prevents weakening of the structure.
- Meets FEM standards.
- Required if rolling machinery is used beneath the mezzanine.



STRUT-BRACE J

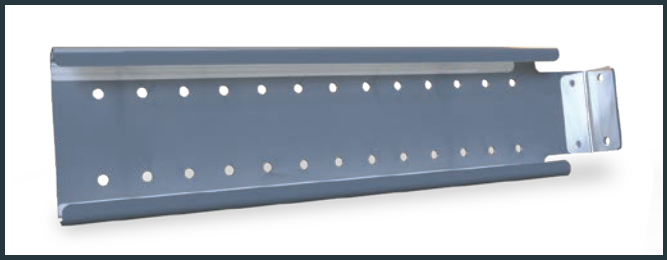
- An alternative to the cross brace, designed to allow free passage between the mezzanine uprights.

SAFETY GATE

- A safe and effective system for handling pallets on the mezzanine level,
- Protects against falls,
- Fully compatible with the safety handrails.

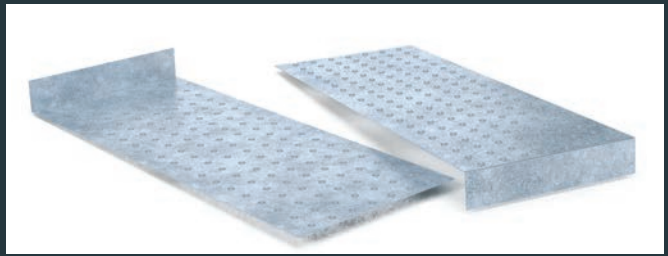
HYDRAULIC GATE

- Ideal for getting a pallet onto the mezzanine and keeping users safe,
- The doors of the gate are closed automatically by two hydraulic cylinders.



ADJUSTABLE BEAM

- Designed to optimise the surface area taken up by the mezzanine on difficult sites.
- Adjustable by ± 200 mm.



UNLOADING PLATE

- Protects the floor from pallet unloading.
- Perforated anti-slip steel sheet plate with front lip guard.

CONFIGURATIONS BY USE

The various mezzanine structures adapt to all sorts of environments and uses.
Below are 3 configuration examples.

WAREHOUSING/STORAGE

This type of mezzanine use:

- Optimises storage space and saves m^2 in your building.
- Allows storage on and under the structure.
- Allows safety and accessibility fittings to be added.

The structure is scalable. It supports the development and dynamics of your business.

And last but not least, it is quick and easy to install.

OFFICE/WORK SPACE

This configuration is recommended to increase work space by using the available height in buildings.

Special attention is paid to user comfort.

An adapted design, a tailor made manufacture, plus the wide range of staircases, handrails, floors, and so on contribute to the agile organisation of your work spaces.

BUSINESSES/PUBLIC SPACES

The Mezzaman mezzanine is also designed to fit easily into its environment and contribute to its valorisation. It is a solution that is both functional and stylish.

The requirements that this mezzanine meets make it perfect for showrooms, retail spaces, dealerships, sports halls, etc.

Product benefits:
- Quickly increase space without any particular restrictions.
- An economical solution that adapts to any environment or need.

Product benefits:
- Load capacities are designed to adapt precisely to the intended use.
- Compatible with the installation of modular partition walls on or under the structure.
- Creating a rest or dining area or quickly setting up a dedicated production zone becomes quick and simple.

Product benefit:
- The features of this mezzanine meet the requirements of specific markets, for instance buildings open to the public.

TAILOR-MADE

The solutions presented in this brochure are just a few examples of what can be accomplished with our systems. Drawing on the expertise and experience of our in-house design office, we are able to design configurations that best meet each user's specific requirements.

We know that special cases are becoming ever more frequent! Product managers, R&D and the design office work together to create unique and exceptional installations.

Apart from technical and dimensional constraints, the sky's the limit where your project is concerned! Let's take the time, together, to bring it to fruition!

SAFETY AND CONVENIENCE CE

Mezzaman installations are calculated and designed in compliance with the EUROCODE III standards and FEM 10.2.02 recommendations.

Tests and calculation methods are certified by the NORISKO/DEKRA monitoring agencies. Standards and recommendations are used to validate the manufacture of products in accordance with the design and durability criteria specified.

MANUFACTURE

Sturdiness, safety and style are the three pillars of our commitment to product quality.

DELIVERY

We offer an efficient delivery service as part of our overall commitment.

Mezzanines are delivered within 3 to 4 weeks (faster if possible) from receipt of order and final plans.

COLOUR

The ManOrga colour chart contains the various RAL shades available* for the Mezzaman mezzanine range.

STANDARD FINISH

**RAL references in stock. Other colours not listed here are possible, but production times will be longer.*