MERO Access Floor Type 3 / Steel

Innovative solution from one source

Development Access floor
Consulting Hollow floor

Planning Floor covering and

Manutacturing Installation Services





Floor systems

Stability under load The strong access floor of steel



In addition to high strength and fracture resistance of access floors, extremely robust material properties are required in production areas, clean rooms, data centers or measuring rooms.

At the same time, there are high demands for flexibility to meet the requirements of new technologies or the reconfiguration of rooms. Furthermore, it is necessary to accommodate different service lines damage-free and to adapt them to any modification without great effort. The steel access floor of MERO-TSK has proven itself in many fields. The floor panels can be combined with a variety of different floor coverings.

Application

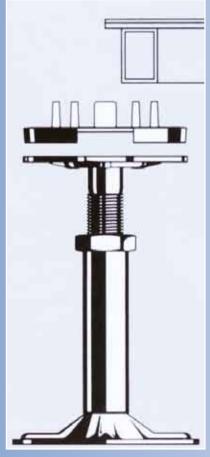
The MERO access floor type 3 / steel is suitable for

- production areas, laboratories
- clean rooms, measuring rooms
- data centers
- print shops
- floors with laminar air flow ventilation

Advantages

- high loading capacity and fracture resistance
- · extremely robust material properties
- high flexibility
- easy installation of additional equipment
- variable construction heights, more than 1,000 mm on request
- huge installation plenum
- suitable for the application of various floor coverings

The MERO access floor systems are tested acc. to DIN EN 12825 and certified by independent institutes.



Construction principle

Floor panel

The floor panel type 3 / steel consists of a steel tubing frame provided with a high-grade steel cover plate. The conductive powder coating protects against abrasion and corrosion.

As the size processing of the floor covering and the steel cover plate is carried out in one step, highest possible edge accuracy is guaranteed.







Construction principle

Substructure

The substructure can be used for all panel types.

The precision steel pedestals are adjustable in height and protected against corrosion by galvanization and passivation. The pedestal base plates are glued to the subfloor and can be dowelled on request.

For installation the pedestal heads are provided with sound dampening and conductive gaskets which fix the panel. If high frequency shielding is required gaskets can be supplied with metal rivets.

The use of galvanized stringers increases the load bearing capacity as well as the horizontal stability of the whole system so that the access floor is forming a self-supporting construction even without being connected to the wall. The stringers can also be installed afterwards.

The screwing of stringers on the pedestal head avoids frequency interferences. The stringers are available as U-type or M-type stringer for lateral stability and as C-type stringer for increased loads and lateral stability.

Planning instructions

Flexibility

To guarantee high flexibility, panels with factory applied floor coverings should be used. Thus, elements with built-in units can easily be exchanged against standard panels.

Floor coverings

The system type 3 can be provided with many different floor coverings.

Elastic floor coverings such as PVC, linoleum and rubber as well as laminate can be applied at factory.

Textile floor coverings can be firmly applied or loosely laid. The suitability of firmly applied floor coverings must be tested. MERO has many years of experience and can test the suitability of new floor coverings in their own laboratories.

Perforated steel panels in combination with air permeable carpets can also be used for laminar air flow ventilation.

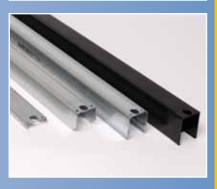
Built-in units

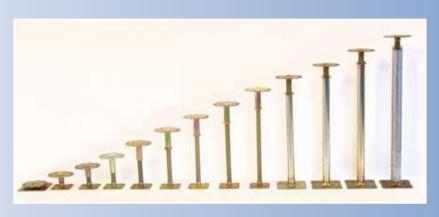
Cutouts for built-in units as power supply units, air outlets or similar can be carried out at the factory and on site.

Connections to the wall

Connections of the access floor systems to the wall or rising construction parts are carried out by special self-adhesive foam tapes which avoid impact sound transmission and seal the connection joints.









Technical data*: Access Floor Type 3 / Steel



Accessories: (see brochure)

Cutouts

Special wall connections

Power supply units

Air outlets

Air conditioning panels

Fascias

Bridgings

Expansion joints

Stairs and ramps

Additional impact sound insulation

MERO floor coverings

*For further technical data please ask for our product data sheets.

Panel

Dimensions:

Panel thickness: (without floor covering)

System weight:

(without floor covering, floor height 1000 mm)

Panel weight:

Panel material:

14 - 22 kg/pc

600 x 600 mm

45 - 67 kg/m²

28 - 44 mm

steel construction, powder coated, screwed

on request

Substructure

Module:

Pedestal material:

Construction height: (without floor covering)

Recommendation:

600 x 600 mm galvanized steel ~ 70 - 1.800 mm

Stringers should generally be used at a

height of > 500 mm, e.g. u-type stringers

Load values

Concentrated load:

acc. to DIN EN 12825

nominal load

ultimate load

 \geq 6,000 - 14,000 N \geq 2,0

Concentrated load up to 20,000 N is possible by changing the substructure.

Electrostatic

(depending on system and floor covering)

> 10⁵ Ohm

Class 3 - 6

3,000 - 7,000 N

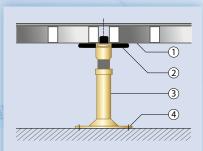
Fire protection

Building material class acc. to DIN 4102 T1: A1

Thermal conductivity

Base material:

~ 50 W/mk



- Floor panel
- Gasket 2.
- 3. Tube

Base plate glued to the subfloor 4. (dowelled on request)







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