

# MERO Access Floor Type 6 / Calcium sulfate

## Innovative solutions from one source

Development

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Installation

Access floor

Hollow floor

Floor covering and

Installation

Services



**MERO®**  **TSK**  
MERO-TSK International GmbH & Co. KG

**Floor systems**

# Multifunctional and flexible: Access floor of calcium sulfate



Office areas as well as lecture halls, surgeries, assembly halls or other commercially used space require more and more flexible use. The rapid development of the modern communication technology and the frequent reconfiguration of commercial space require quick and easy access to the free plenum under the floor for the installation of additional equipment and supply lines. This flexibility is given by an access floor system which surface can be provided with many different floor coverings.

## Application

Fields of application of MERO access floor type 6:

- office areas
- areas with required increased static loads, in lecture and assembly halls, meeting rooms, surgeries and treatment rooms, construction offices
- as industrial floor in storage spaces, work-shops with light operation, libraries
- computer centres

The access floor is available in different types and systems to meet user's requirements, e.g. reinforced systems for industrial plants and factories with heavy duty.

## Advantages

- high flexibility
- easy installation of additional equipment and supply lines
- variable construction heights, more than 1.000 mm on request
- huge installation plenum
- easy handling of the panel material
- good fire protection properties
- good sound absorption values
- 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.

## Floor panel

The MERO floor panel type 6 consists of fibre-reinforced calcium sulfate of the building material class A2 acc. to DIN 4102, part 1 and classified A1 acc. to the European standard DIN EN 13501.

The emission tests are carried out acc. to international requirements (system tests = panel + pedestal):

- ASTM D 5116-97 (American Emission Test). This Standard includes the Green Label, Hong Kong and refers to LEED (=Leadership in Energy and Environmental Design) requirement
- ISO 16000: worldwide approved emission test
- AgBB/DIBT: product emission test. This method is applied in Germany.

The panel edges are chamfered milled and protected all round by synthetic trim against mechanical damages and humidity. The surface and/or bottom side of the panel can be provided with galvanized steel sheet or aluminium foil by advanced backing procedure. The panel is available in different qualities, thicknesses and dimensions.

MERO-TSK is using only environmental-friendly materials for their production. The material can be recycled or disposed without any problem for the environment.





## Substructure

The MERO 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 stably glued to the subfloor and can additionally be dowelled on request.

During installation pedestal heads are provided with sound absorbing and electrically conducting gaskets which fix the panel. The gaskets can also be delivered with metal rivets if high frequency shielding is required. The use of galvanized stringers increases the load bearing capacity as well as the lateral stability of the whole system so that the MERO access floor is forming a self-supporting construction even without connection to the wall. The stringers can also be installed afterwards. To avoid frequency interferences stringers can be screwed to the pedestal head. The stringers are available as U or M type stringer for lateral stability or as C-type stringer for heavy duty and lateral stability.

## Planning instructions

### Flexibility

To guarantee high flexibility panels with applied floor covering should be used. This allows, e.g. to replace panels with mounting units by standard panels.

### Partition walls

For an unlimited use of the access floor cavity partition walls should always be installed on the access floor system. Only fire section walls or walls between different working areas

should be installed directly on the subfloor. Partition walls with fire resistance requirements can stand on the floor system and supplemented with fire fascias under the access floor on request.

### Floor coverings

The access floor system type 6 can be provided with many different floor coverings.

Elastic floor coverings like PVC, linoleum, rubber as well as laminate which, however, must be applied at factory. Textile floor coverings can be glued or loosely laid on the floor panels. Bonded floor coverings must be suitable for access floor which can be tested in our own laboratories.

For loosely laid carpet tiles we recommend a system with aluminium or steel sheet on top of the panel. The steel sheet provides better protection during the construction phase and allows the application of magnetic floor coverings as MERO Magnetfloor. If loosely laid floor covering tiles are used please take care that the edge primer does not penetrate the joints to avoid bonding of the panels. Floor covering tiles should always be applied middle over cross to the access floor module.

The gluing of carpet rolls is possible by additional measures which, however, should be avoided as it stands against the flexibility of an access floor system.

Type 6 panels can also be provided with parquet at factory. However, not all parquet coverings are suitable due to their swelling behaviour. For detailed information please contact MERO-TSK.

### Delivery and installation of floor coverings

MERO-TSK has standard floor coverings available on stock or can provide them on short notice. If the floor covering will not be

applied at factory we recommend to have the application done by our expert staff which assures best workmanship and avoids overlaps with other trades on the construction site. Furthermore, it may also avoid needless costs for the contractor or the builder later on.

### Mounting units

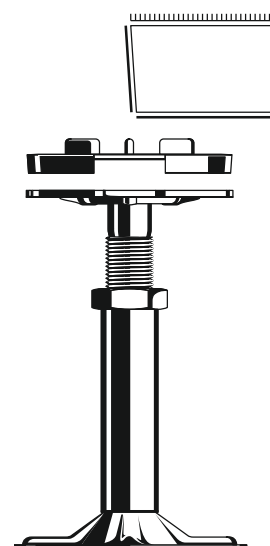
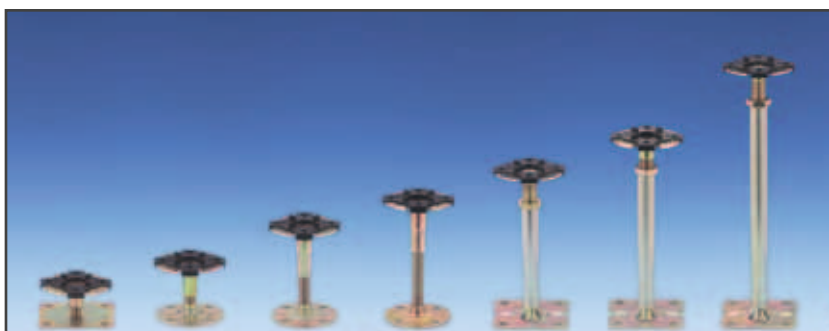
Cutouts for mounting units like sockets, air outlets etc. can either be done at factory or on jobsite. However, step bores for twist air outlets can only be done at factory.

### Wall connections

The connection of the access floor system to walls or rising building parts is done by special self-adhesive foam tape which avoids impact sound transmission. At rigid fixtures like heating tubes etc. a distance of 120 mm should be kept from the wall to allow the installation of system pedestals. They avoid costly and sound transmitting wall supports. The cut edges of access floor panels must always be sealed.

### Special advice

The climate conditions during the time of installation and the later use should be the same.





# Technical data\*: Access floor type 6 / calcium sulfate

## Accessories: (see pamphlet)

Cutouts  
Special wall connections  
Power supply units  
Air outlets  
Air conditioning panels  
Fascias  
Bridgings  
Expansion joints  
Stairs and ramps  
Additional impact sound insulation  
MERO-TSK floor coverings

## Renovation:

MERO-TSK has the know-how and the machinery for an access floor renovation. Worn floor coverings will be removed and new ones applied by expert staff.  
For the refurbishment of old buildings with limited finished floor heights MERO-TSK offers a low-height access floor system (see pamphlet).

## \*For further technical data

please ask for our product data sheets.

## Panel

Dimensions: 600 x 600 mm  
Panel thickness: (without covering) ~ 23 - 39 mm  
Panel surface:  
• without coating  
• galvanized steel sheet  
• aluminium foil on request  
• galvanized steel sheet  
Panel bottom:  
• without coating  
• galvanized steel sheet  
System weight: ~ 43 - 70 kg/m<sup>2</sup>  
(without covering, floor height 1000 mm)  
Panel weight: ~ 14,5 - 23 kg/unit  
Panel material: fibre-reinforced calcium sulfate

## Substructure

Module: 600 x 600 mm  
Pedestal material: galvanized steel  
Construction height: (without covering) ~ 55 - 1800 mm  
Recommendation: Stringers should generally be used from a finished floor height of > 500 mm

## Load values

Concentrated load:  
• acc. to DIN EN 12825 Class 1 - 6  
• Nominal load 2.000 - 6.000 N (higher loads on request)  
• Ultimate load > 4.000 - 12.000 N

## Electrostatic

(independant from system and covering) > 10<sup>5</sup> Ohm

## Fire protection

Building material class acc to DIN 4102 T1: A2  
Building material class acc. to DIN 13501 T1: A1  
Fire resistance class acc. to DIN 4102 T2: F30 oder F60 (depending on system and covering)

## Thermal conductivity

Base material: ~ 0,44 W/mk

## Acoustic values

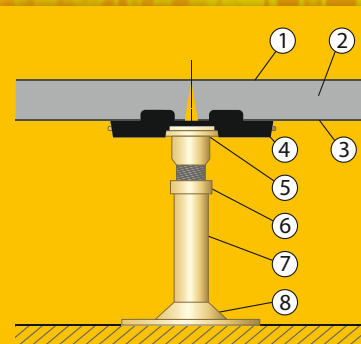
Sound reduction index R<sub>L,w,P</sub> 52 - 58 dB  
Normalized impact sound pressure level L<sub>n,w,P</sub> 63 - 40 dB  
Improvement of sound pressure level red. Δ L<sub>w,P</sub> 18 - 35 dB

New denomination acc. to DIN EN

Normalized flank level difference D<sub>n,f,w,P</sub>

Normalized flank impact sound pressure level L<sub>n,f,w,P</sub>

Improvement of sound pressure level reduction Δ L<sub>w,P</sub>



1. Floor covering / steel sheet
2. Floor panel
3. Steel sheet or aluminium foil
4. Gasket
5. Pedestal head
6. Hexagonal nut
7. Tube
8. Base plate glued to the subfloor, can be dowelled on request



TÜV certified since 1997



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