

MERO Access Floor Type 2 wood / mineral material

Innovative solutions from one source

Development

Consulting

Planning

Manufacturing

Installation

Access Floor

Hollow Floor

Floor covering and

Installation

Services



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

Floor Systems

MERO access floor for switchgear rooms



Switchgear stations and areas for heavy loads

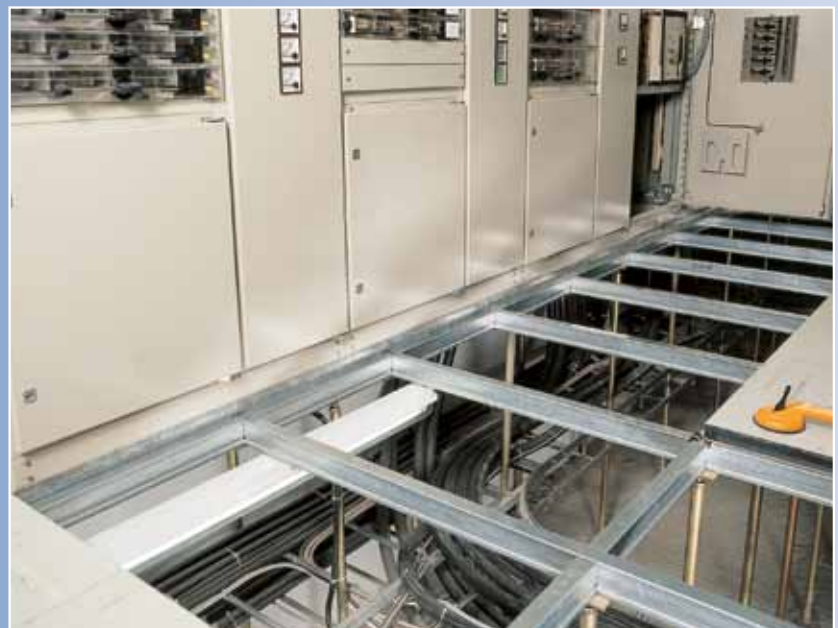
The access floor construction type 2 - which has been designed in cooperation with electrical engineers and power station specialists - has proved its worth in high, medium and low tension switch-gears. On the one hand, the electrical equipment must be protected against electrostatic charges and on the other hand people must be protected against electric shocks. At the same time the system must comply with high standards regarding loading capacity.

Fields of application

- High, medium and low tension switch-gear stations
- Battery rooms and emergency plants
- Computer centers, production plants, laboratories and power plants
- Platform for fork-lift traffic

Advantages

- Protection of electrical equipment against electrostatic charging
- Protection of people against electric shocks
- Easy work on the panel material
- Good sound insulation
- Preventive fire protection properties
- Suitable for the application of a wide range of floor coverings



Frame area with installed switchboards



Walking area with open frames for the installation of robots



Construction principle

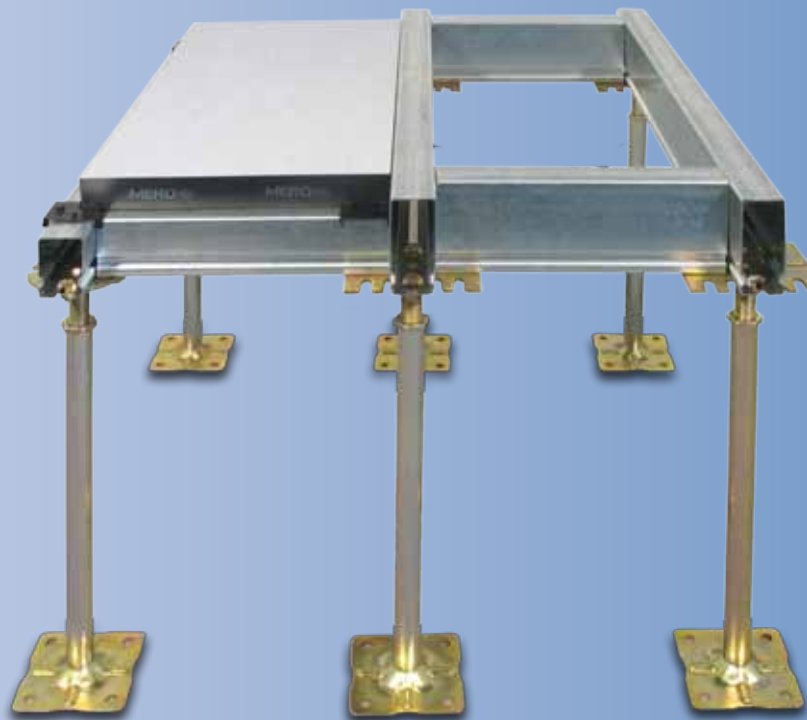
Substructure

The module of the standard substructure is 600 x 1200 mm. For heavier loads substructure in module 600 x 600 mm is available too.

The precision steel pedestals are adjustable in height. Even under heavy loads pedestal is secured against vertical shifting. All pedestals are protected against corrosion by galvanization and passivation.

The pedestal base plates are stably glued to the subfloor and can additionally be dowelled on request. The frame and walking areas are nearly on the same level in order to facilitate the installation of the switchboards. The switchboards are mounted and fixed on frame constructions accurate to size. Temporarily unused spare areas are provided with cover plates.

The choice of the c-profiles is depending on the loads respectively on the module of the substructure.

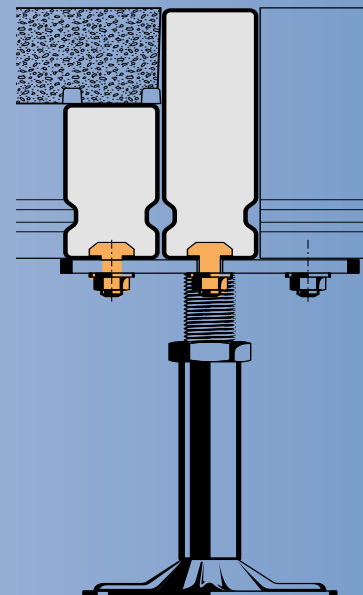


Construction principle frame area/walking area

Flexible and exact installation

The advantages of the MERO system with c-profiles and hammerhead bolts compared to other systems on the market (e.g. systems with self-tapping screws, glued systems, clip systems) are as follows:

- Static rigid and force-fit connection between pedestal and frame construction
- Acceptance of tensile and shear forces as well as of bending moments
- Permanent screwing secured by toothed lock washer
- Disassembly and reassembly without affecting quality
- The pressing force of the hammerhead bolt onto the c-profile improves the static behavior (horizontal and vertical forces of the profiles)
- Steady surface evenness as profiles cannot jam





Type 2 wood

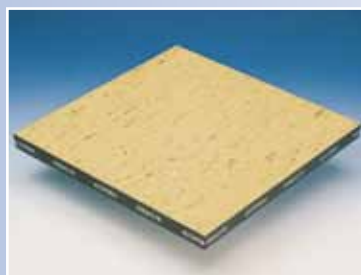
The type 2 panel consists of high density chipboard of emission class 1 which is reinforced by galvanized steel sheet by advanced backing procedure.

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

- ASTM D 5116-97 (American Emission Test). This norm comprises the „Green Label, Hong Kong“ and refers as well to the requirements of LEED (=Leadership in Energy and

Environmental Design).

- ISO 16000: worldwide approved emission test.
- AgBB/DIBT: Test of the product emission which is applied in Germany.



An all-round synthetic edge trim protects the panel edges from mechanical damages and humidity.

Type 2 mineral material

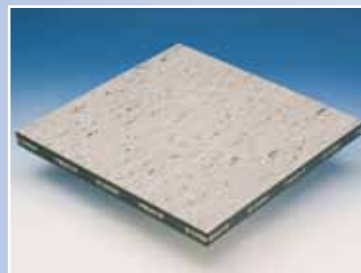
The MERO floor panel type 6 consists of fibre-reinforced calcium sulphate of the building material class A2 (DIN 4102, part 1) and A1 (European Norm DIN EN 13501)

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Panel bottom can be provided with galvanized steel sheet for heavy load requirements.

The panel surface of both panel types are provided with access floor suitable floor coverings at factory. The panels are loosely laid on c-type stringers and fixed by means of synthetic gaskets. Requirements regarding Phela or electric arc protection guidelines are met by screwing the panels and other structural measures.



Ideal access: MERO access floor panels can easily be removed

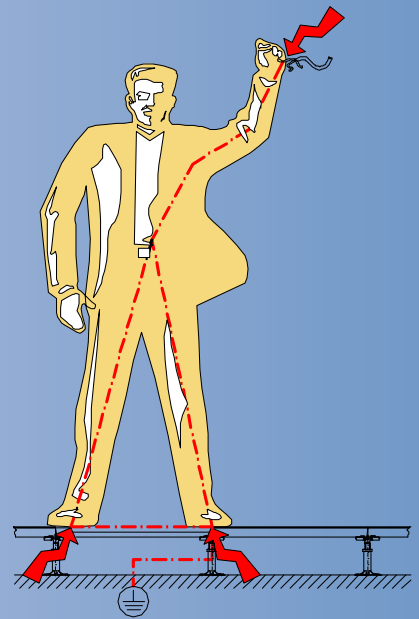
Optimal protection for people and equipment

Earth continuity - Characteristics of the construction

On the one hand, the electrical equipment must be protected against electrostatic charges and on the other hand people must be protected against electric shocks. Therefore, floor coverings like PVC, linoleum, caoutchouc or laminate are used which can also be finished acid, base and chemical resistant on request.

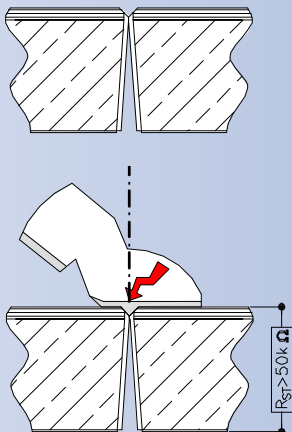
However, the best floor covering is losing its protecting ability if dirt particles or humidity make contact with the conductive edge trim of the floor panels.

Thus, people become conductors and can suffer electric shocks. Therefore, the panels are provided with a non-conductive edge protection which does neither affect nor change the protecting ability of the floor covering. The necessary conductivity for the protection of the equipment is obtained by structural measures directly through the glue of the floor covering and the panel. Thus, an optimal protection for people and equipment is given.



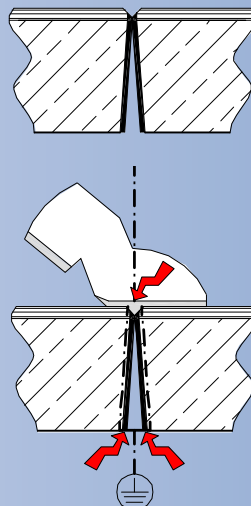
MERO type 2 construction

non-conductive edge trim



Other constructions

conductive edge trim



Conductive contact bridges:

- shoes
- humidity
- dirt



Technical data: * : Type 2 / wood and mineral material

Accessories: (see pamphlet)

Cover plates for unused spare areas
Cable raceways
Phela screwing
Electric arc safety
Bracings
Air outlets
Air conditioning panels
Fascias
Bridgings
Stairs, ramps, railings
Floor coverings

*For further technical data

please ask for our product data sheets.

Panel	Chipboard panels	Mineral material panels
Module:	600 x 600 mm	600 x 600 mm
Panel thickness: (no covering)	30 - 39 mm	30 - 39 mm
Panel bottom side:	<ul style="list-style-type: none"> galvanized steel sheet aluminium foil 	<ul style="list-style-type: none"> galvanized steel sheet aluminium foil without coating
System weight: (without floor covering, floor height 1000 mm)	~ 31 - 42 kg/m ²	~ 59 - 80 kg/m ²
Panel weight:	~ 8 - 11 kg/unit	~ 18 - 22 kg/unit
Substructure		
Module:	600 x 600 mm or 600 x 1200 mm	600 x 600 mm or 600 x 1200 mm
Material:	galvanized steel	galvanized steel
Floor height (without floor covering)		
• System 2-600:	~ 175 - 2500 mm	~ 175 - 2500 mm
• System 2-1200:	~ 215 - 2500 mm	~ 215 - 2500 mm
Supporting profile system 2-600		
• C-profile walking area:	30 x 40 mm	30 x 40 mm
• C-profile frame area:	72,5 x 40 mm	72,5 x 40 mm
• C-profile for area of heavy loads		50 x 40 mm
Supporting profile system 2-1200		
• C-profile walking area	72,5 x 40 mm	72,5 x 40 mm
• C-profile frame area	115 x 40 mm	115 x 40 mm
Load values:		
Concentrated load		
• Acc. to DIN EN 12825:	Class 1 - 6	Class 1 - 6
• Nominal load:	2.000 - 6.000 N	2.000 - 20.000 N
• Ultimate load:	> 4.000 - 12.000 N	> 4.000 - 40.000 N
Electrostatic		
Depending on system and floor covering	> 10 ⁵ Ohm	> 10 ⁵ Ohm
Fire protection		
Building material class acc. to DIN EN 13501 T1:	flame resistant	A1
Fire resistance class acc. to DIN 4102 T2:	F30 possible	F30 possible
Thermal conductivity		
Base material:	~ 0,13 W/mk	~ 0,44 W/mk



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