

# MERO Access Floor Type 7 Aluminum

## Innovative solutions from one hand

Development

Consulting

Planning

Manufacturing

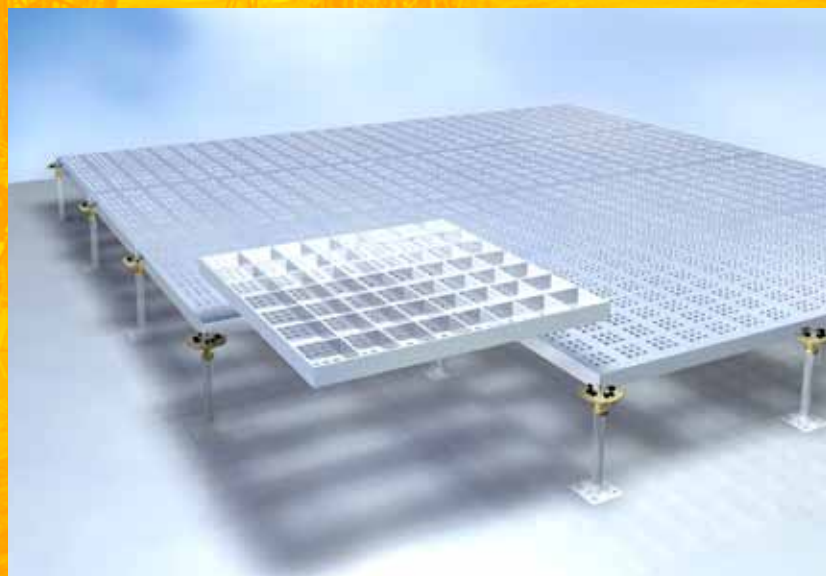
Installation

Access floor

Hollow floor

Floor covering and  
installation

Services



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

**Floor systems**

# The floor type for special use



In some fields of application the weight plays a major role, in others flexible assembly, dust-free space and electrostatic safety have priority. In these areas, access floors of aluminum have proven particularly useful.

## Fields of application

MERO access floor type 7 / aluminum is suitable for

- Clean rooms
- Vessels
- Offshore platforms such as oil or gas production facilities

## Advantages

- High dimensional accuracy
- Light panel and system weight
- High load capacity
- High flexibility
- Electrostatic safety
- Easy handling of the panel material during hook-up
- Easy retrofitting
- Variable construction heights, on request of more than 1.000 mm
- Huge installation cavity

The MERO access floor type 7 / aluminum is tested according to DIN EN12825.

## Specific requirements for offshore platforms

The MERO aluminum floor panels of high load bearing capacity guarantee a virtually torsion-free floor construction with very low system weight. Therefore, they are an ideal solution for vessels and offshore platforms, where every kilogram counts.

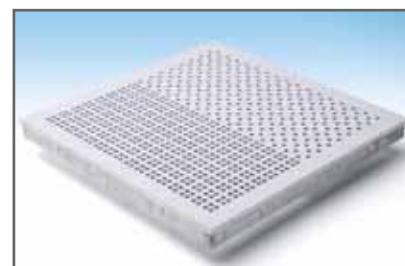
This enabled MERO-TSK to realize an order of 1000 m<sup>2</sup> access floor on a floating platform with a system for liquefaction of natural gas in Cadiz/Spain. For the equipment of the switch and control facilities the special type 2-600 construction with light-weight aluminum panels had been chosen. Today, the platform is at its final location and is the heart of the only exporting gas liquefaction plant in Europe in front of the island Melkoya near the Norwegian Hammerfest.

## Cleanroom requirements

The MERO aluminum floor panels allow the construction in cleanrooms in every size and shape.

Perforated ventilation panels allow turbulence free extraction of air through the floor cavity. Crucial for the functioning of the ventilation concept is the variability and flexibility of the free air flow.

The relevant factors are size and type of the perforation which allow the adaption to the different air conditioning concepts







### Construction principle - floor panel

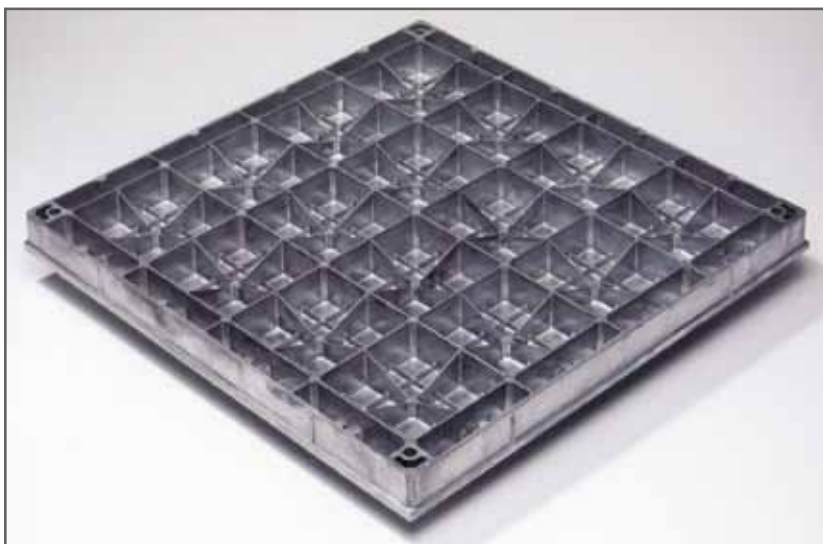
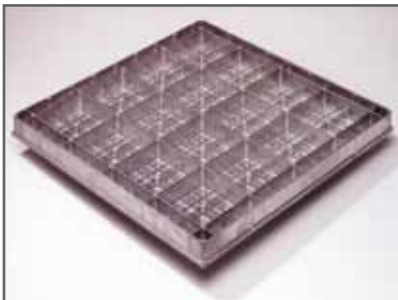
The bottom side of the floor panel type 7 / aluminum has a patented corrugated structure. Point loads are distributed over the surface so that the deflection is very low even at the highest point loads. A number of hole patterns with different outlet is available.

### Construction principle - substructure

The MERO substructure can be used for all floor types. The precision steel pedestals are adjustable in height and protected against corrosion by galvanization and passivation. Other surface treatments are possible on request.

The pedestal base plates are glued to the raw concrete floor, additional dowelling is possible. During installation pedestal heads are provided with sound absorbing and electrically conductive gaskets which fix the panel. If high frequency shielding is required gaskets can be delivered with metal rivets.

The use of galvanized stringers increases the load bearing capacity as well as the lateral stability of the whole system so that the access floor is forming a self-supporting construction even without being connected to the wall. To avoid frequency interferences stringers can be screwed to the pedestal head. The stringers are available as u-type stringer for lateral stability and as c-type stringer for heavy duty and lateral stability.



# Technical data\*: Type 7 / Aluminum

## Accessories: (see brochure)

Cutouts  
 Special wall connections  
 Ventilation panels  
 Fascias  
 Bridgings  
 Expansion joints  
 Stairs and ramps  
 Additional sound insulation  
 MERO floor coverings

## \*For further technical data

please ask for our product data sheets.

Dimensions: 600 x 600 mm  
 Panel thickness (without covering): ~ 44 mm  
 System weight: ~ 28 kg/m<sup>2</sup> (without covering, floor height 250mm)  
 Panel weight: ~ 9,1 kg/piece  
 Panel material: diecasting aluminum

## Substructure

Module: 600 x 600 mm  
 Pedestal material: galvanized steel  
 Construction height: ~ 180 - 1800 mm  
 Recommendation: stringers should generally be used from a finished floor height of > 500 mm; e.g. u-type stringer

## Load values

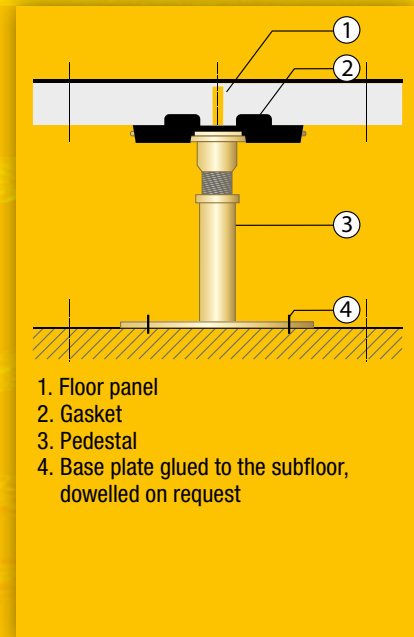
Point load: • acc. to DIN EN 12825: class 6  
 • nominal load: 7.000 N  
 • ultimate load: > 14.000 N

## Electrostatic

Depending on system and floor covering: > 10<sup>5</sup> Ohm

## Thermal conductivity

Base material: ~160 W/mk



1. Floor panel
2. Gasket
3. Pedestal
4. Base plate glued to the subfloor, doweled on request



TÜV certified since 1997



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