



# MERO Floor Systems / Program survey

## 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

## Working environment on the move



Nowadays, office buildings and manufacturing plants are subject to permanent reorganization and frequent change of use. The development of communication technology is subject to rapid progress, organizational structures are changing continuously. Even lighting and air conditioning systems are becoming more and more extensive.

Therefore, existing service lines often have to be replaced or supplemented and new utilities are added. The planning of buildings must allow quick, easy and cost-saving adaption to arising needs.

MERO-TSK develops, manufactures and tests system floors. Furthermore, we plan, project, and install our floor systems.



### MERO access floor

MERO access floor offers huge installation space allowing fast and easy access to the underlying service lines anywhere and at any time.

### MERO hollow floor

MERO hollow floor allows a comprehensive wiring from opening to opening as well as the installation of additional functions. It creates an even and nearly seamless base layer.

### Heating and cooling

A further advantage of the access and hollow floor for the building technology is the combination with a underfloor heating/cooling.

### The advantages of the MERO floor systems at a glance:

- easy installation of the building communication technology
- quick access to the entire installation plenum
- economical solution for interior fitting
- avoidance of specific supporting structure for wiring, pipes, aggregates etc.
- problem-free additional installation possible

### The benefits of MERO for planner and user:

- experience and competence
- quality and reliability
- freedom of planning and design
- systems for different needs
- approved acc. to the latest regulations
- complete service from one source
- avoidance of coordination problems between planner and user

## More space: Access floor



**Access floor systems are the most flexible of all floor systems. A MERO access floor offers an installation plenum of 95%.**

Additional measures such as pedestal dwelling or installation of stringers are possible.

### The advantages of the MERO access floor at a glance:

- access to the installation space anywhere and anytime, without noise and dust and without disturbance of the working process
- sufficient space for retrofitting
- installation of all kind of outlets, e.g. retrofitting of additional power supply units is possible
- panels with mounting units can be relocated and reinstalled at any other place allowing easy adaption to reconfigurations
- dry construction for immediate use after installation
- suitable even with low ceiling heights, e.g. in the renovation of old building.
- controlled and consistent quality
- all floors are tested according to DIN EN 12825



### Construction principle

The MERO substructure can be used for all floor panels.

It consists of threaded steel pedestals, which can be accurately adjusted in height. By default the pedestals are glued to the raw concrete slab, the pedestal head is provided with a conductive and sound absorbing gasket. Floor heights from 40 mm to 2000 mm.



# Access floor types and accessories meet all requirements



A variety of customer needs can be implemented by default by the combination of system components.

## MERO System accessories

For a smooth construction process a range of accessories and additional services are available such as:

- stringers
- pedestal dowelling
- cutouts
- power supply units
- air outlets
- cable raceways
- ventilation panels
- fascias (fire/sound/air)

- special connections to the wall
- bridgings, expansion joints
- stairs, ramps
- additional impact sound insulation
- and much more

## Floor coverings

Depending on the floor covering and demands on the use, floor coverings can be factory-applied to the access floor panels or to be laid loosely on the site. Used are PVC, rubber, linoleum, laminate, natural stone, ceramic, parquet, needle felt or carpet.

## Access floor renovation

For the maintenance of value of an access floor system, the right care and maintenance is crucial. The condition of the floor covering affects not only the appearance but also the functional capability. Instead of changing panels with worn or outdated floor coverings, we recommend to renovate the access floor. The old surface layer will be gently removed by special machines and the new textile covering is applied with special adhesive on the clean panel. Refurbishment instead of renewal is a benefit for the environment and the budget: the refurbishment of a surface area of 1,000 m<sup>2</sup> saves 40 to 70 tons of panel material, that would be expensive to dispose.

	Type 2	Type 3	Type 5	Type 6	Type 7	Type 8
<b>Panel</b>	wooden material calcium sulphate	welded steel panels, powder coats	wooden material	calcium sulphate	aluminium die cast	glass
<b>Substructure</b>	galvanized steel pedestals with steel grid made of c-type profiles incl. frame construction for switchboards	galvanized steel pedestals	galvanized steel pedestals	galvanized steel pedestals	galvanized steel pedestals	galvanized steel pedestals
<b>Concentrated load acc. to DIN EN (N)</b>	2.000 – 15.000	5.000 – 7.000	2.000 – 5.000	2.000 – 6.000	5.000 – 7.000	5.000
<b>Fire resistance</b>	F30 possible	F30 stability	F30 possible	F30 / F60 possible		
<b>Building construction class</b>	flame resistant and A1 possible	A1	flame resistant possible	A1	A1	
<b>Heating and cooling</b>				possible		
<b>Low construction (old buildings)</b>			possible	possible		
<b>Ventilation and laminar airflow</b>	possible	possible	possible	possible	possible	
<b>Usage</b>	- electrical room - switchgear station - computer centre - battery room - emergency plant - vehicular traffic - production plant	- computer center - cleanroom/ measuring room - laboratory print shop - vehicular traffic - production plant - test plant	- office, administration - computer center - library	- office, administration - computer center - library - battery plant	- cleanroom measuring room - test plant	- office, administration

## Smooth area: MERO hollow floor



The smooth base layer of the MERO hollow floor is mounted on the pedestals so that the systems and service lines installed on the raw concrete slab can be overbuilt. Removable panel rows or inspection openings allow access to the cavity under the floor for new and later installation of supply lines.

### The advantages of MERO hollow floor at a glance:

- access to the installation plenum by removable access floor panel rows or inspection openings
- huge plenum for retrofitting
- retrofitting of all kinds of outlets, e.g. additional power supply units
- dry construction possible
- nearly seamless surface
- consistent quality control
- all floors are tested acc. to DIN EN 13213

### Construction principle

A MERO hollow floor consists of:

- threaded steel pedestals which are continuously height adjustable. By default, the pedestals are glued to the raw concrete slab and to the bottom of the panel
- Option 1 - Dry construction: panels with tooth milling edges are glued together
- Option 2 - a calcium sulphate floating screed is applied on a mineral dead sheathing

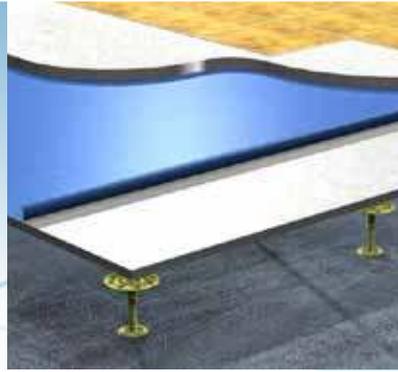
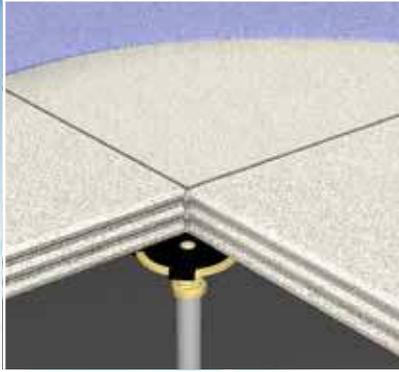
### MERO System accessories

Similar to the raised floor area MERO-TSK also offers a variety of additional services for the hollow floor:

- casings with openings
- fascias (fire, sound, air)
- special wall connections
- bridgings
- expansion joints
- avoidance of impact sound transmission
- thermal insulation
- moisture seal
- and much more



# Hollow floor types with different qualities: Combi T and Combi A



## Type Combi T

The key advantage of the MERO hollow floor Combi T is the dry construction. Therefore, the system is preferred where a nearly seamless and smooth surface must be used or processed immediately after its installation. The floor panels of the MERO hollow floor Combi T consist of one or two-layer, non-combustible fibre reinforced calcium sulphate panels. The tooth milling edges of the panels are glued together. The panel thickness can be varied according to requirements.

- non-combustible panel materials
- dry construction, no humidity in the building, immediate application of floor covering possible
- compatible with all floor systems
- high load capacity
- height adjustment possible
- maximum installation plenum
- smooth surface
- down-grade installation possible
- two-layer system suitable for heavy duty
- relatively low weight
- integration of floor heating/-cooling possible



## Type Combi A

The most cost effective type of a system floor is the „wet“ hollow floor Combi A. A uniformly thick base layer of floating calcium sulphate screed provides a consistent drying behavior and excellent sound insulation values.

- cost-effective system
- non-combustible materials
- high sound insulating properties
- easy integration of pipe systems due to flexible pedestal spacing
- quick and consistent drying due to smooth thickness of the screed
- due to height adjustable substructure different thicknesses not required
- substructure is conditioned walkable even before application of the base layer can also be used for complex layouts (eg, round building) without loss of installation space
- integration of floor heating and cooling possible

	Combi T		Combi A
Construction type	Dry construction one-layer	Dry construction two-layer	Wet construction multi-layer
Panel	calcium sulphate	calcium sulphate	casing calcium sulphate anhydrite screed
Substructure	galvanized steel pedestals	galvanized steel pedestals	galvanized steel pedestals
Concentrated load acc. to DIN EN in (N)	2.000 – 10.000	up to 15.000	2.000 – 5.000
Fire resistance	F30 possible	F30 possible	F30 possible
Building material class	A1	A1	A1
Heating and cooling	possible	possible	possible
Low construction (old buildings)	possible		
Usage	- office, administration - libraries	- vehicular traffic - production area - heavy load area	- office, administration

# Heating and cooling with MERO floor systems



In the era of energy efficiency and energy saving MERO-TSK has extended the proven floor systems with the components heating and cooling. In cooperation with the market leader for surface heating / cooling, Uponor, EnEV-compatible complete systems were developed. These systems are tested by independent institutes and confirmed by DIN CERTCO with the certificate „DIN geprüft“ (DIN-tested).

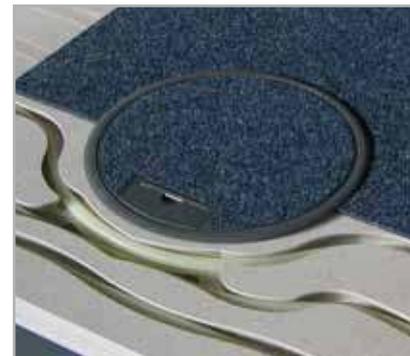
## Construction principle

The MERO Thermo substructure consists of height adjustable steel pedestals which are installed in the grid of 600 x 600 mm and glued to the subfloor. The MERO Hollow Floor Combi T Thermo has been developed especially for the use of heating/cooling in dry construction floor systems while the MERO Combi A Thermo allows to install the usual heating and cooling pipes in the wet floating screed at any time.

As for Thermo Access Floor Type 6 the heating/cooling pipes are clipped in loosely lying thermal insulation boxes. Thus, the complete system can be removed without being damaged.

## Advantages of the MERO floor heating/-cooling

- planning reliability
- best quality, all components are tested
- EnEV-compatible
- prevention of coordination problems



	Hollow floor Combi A Thermo	Hollow floor Combi T Thermo	Access floor type 6 Thermo
Construction type	multilayer wet construction	one or two-layer dry construction	dry construction
Operation with low temperature	possible	possible	possible
Heating	yes	yes	yes
Cooling	yes	yes	yes
DIN CERTCO certificate	available	available	available
Scope of services	incl. piping up to distributor	incl. piping up to distributor	incl. piping up to distributor
Plastic pipe PE-Xa	airproof	airproof	airproof
Installation grid	different installation grids can be combined	different installation grids can be combined	
Planning with assistance of competent partner	yes	yes	yes
Access to the void	inspection opening and wireways	inspection opening and wireways	possible everywhere
Warranty	up to 10 years on heating components possible	up to 10 years on heating components possible	up to 10 years on heating components possible
Usage	office, administration, libraries	vehicular traffic, production plant, heavy load area	office, administration

# MERO floor systems for any purpose

## Overview of access and hollow floors

Summary of each type. Further information can be found in the separate brochures as well as in our product data sheets which will be provided on request.

For further information please contact our website: [www.mero.de](http://www.mero.de)

	Access Floor						Hollow floor dry	Hollow floor wet
	Type 2 chipboard/calcium sulphate	Type 3 steel	Type 5 chip-board	Type 6 calcium sulphate	Type 7 aluminium	Type 8 glass	Combi T	Combi A
Office and administration buildings			yes	yes		yes	yes	yes
Building services room and switchgear	yes							
Computer centres	yes	yes	yes	yes				
Cleanrooms, measuring rooms, test plants		yes			yes			
Laboratories, print shops		yes		yes			yes	
Libraries			yes	yes			yes	
Battery rooms	yes			yes				
Emergency units	yes							
Public areas with vehicle traffic (also dynamic loads)							yes	
Production areas with fork lift traffic	yes	yes					yes	
Heating and cooling				yes			yes	yes
Low construction (old buildings)			yes	yes				
Loads > 6KN	yes	yes			yes		yes	
System with air conditioning/ventilation	yes	yes	yes	yes	yes			



TÜV certified since 1997



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