



FLOOR SYSTEMS

## MERO Access Floor Type 3

Clean rooms and heavy-duty areas

Innovative  
all-in-one solution

Development

Production

Consulting

Access Floor

Planning

Coverings

Installation

Hollow Floor

3  
TYPE 3

Areas of application for  
MERO steel access floor Type 3:

- Clean rooms
- Exhibition rooms
- Production areas
- Heavily loaded low-height floors
- Engine test stands



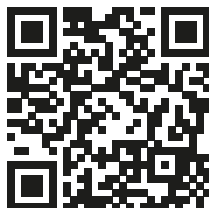
## Stiffened all-steel construction



The MERO Type 3 access floor system consists of powder-coated steel panels and a corrosion-protected, height-adjustable steel substructure.

While in the Type 3 Classic system the panels simply rest on the pedestals, the Type 3 Dynamic system is supplemented by staggered stringers approx. 1,200 mm long, which increase rigidity and load-bearing capacity.

*Link to website*



## From 33 mm load-bearing layer thickness

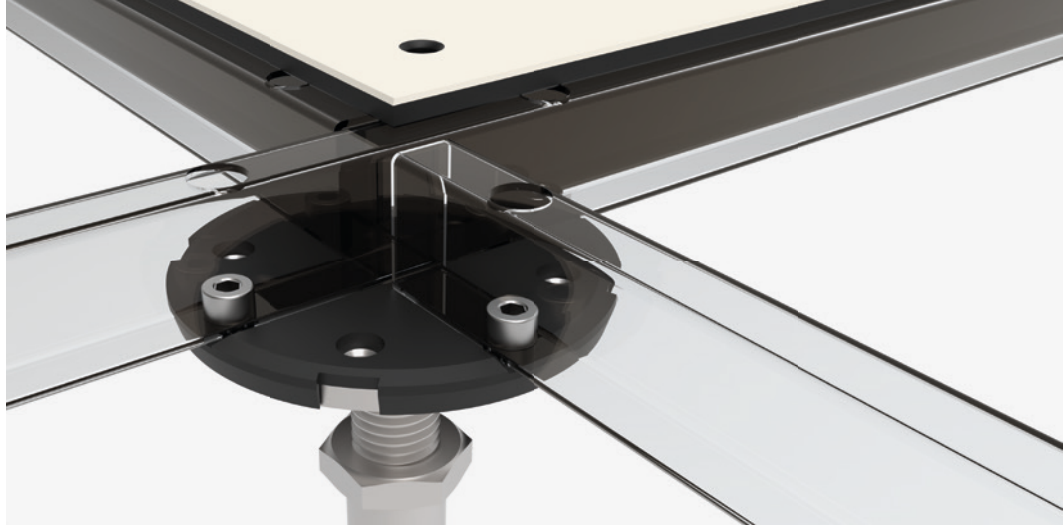
Our slimmest system offers an installation space of 75 mm with a total height of, for example, 110 mm. This system is available as Type 3 RR30-3 Dynamic or Type 3 RR30-3 Classic (without stringers).



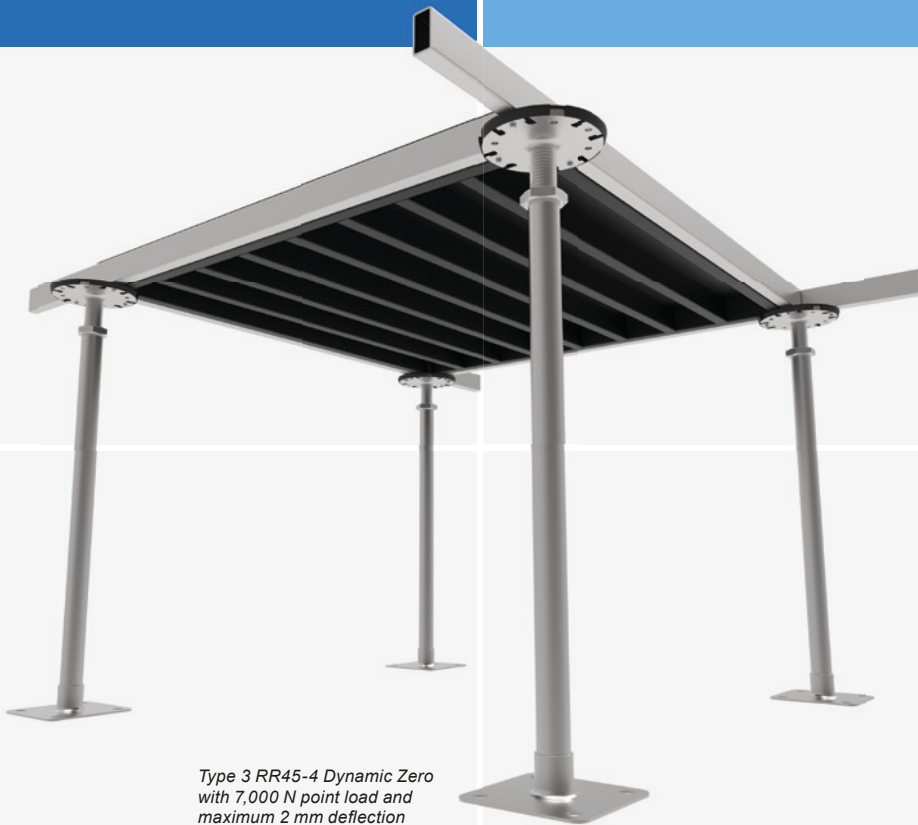
*Type 3 RR30-3 Dynamic  
with 5,000 N point load*

Up to a point load of 12,000 N, the panels can be laid without being screwed down.

Noise when walking on the floor is prevented by conductive plastic pads on the pedestal heads.



## Clean room solutions



*Type 3 RR45-4 Dynamic Zero  
with 7,000 N point load and  
maximum 2 mm deflection*

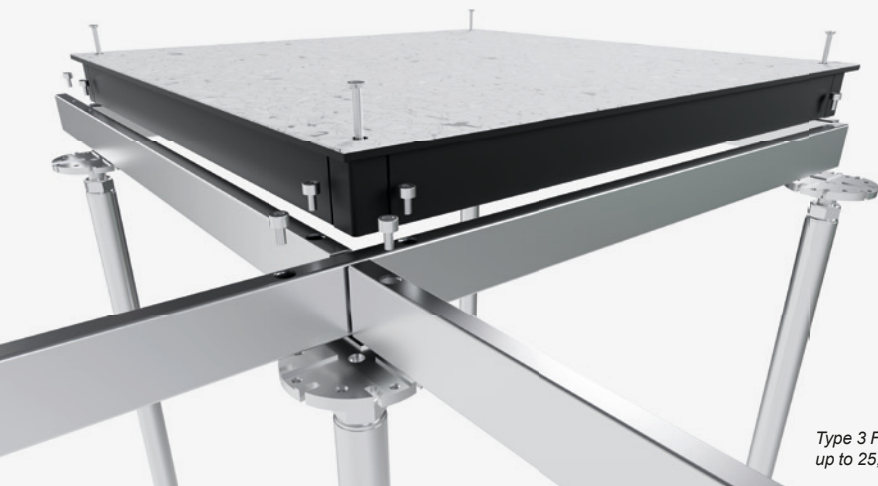
The MERO Type 3 RR45-4 Dynamic Zero system is designed to minimise vertical displacement. Although the panel could bear much higher loads, the system has been limited to a nominal load of 7,000 N. This allows for a maximum deflection of 2 mm, even with perforated panels, and a more economical, slimmer substructure.

## Focus on electrostatics

On request, many of the components can be supplied with a conductive powder coating or in stainless steel.

With a wide range of resilient coverings and matching adhesives, any ESD requirements can be met.

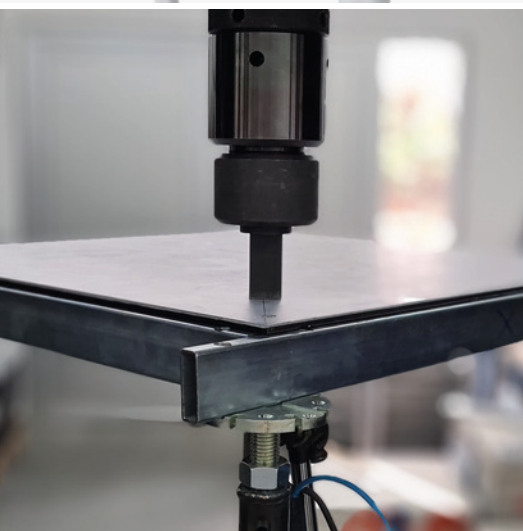




Type 3 FR45-4 Dynamic SX  
up to 25,000 N point load

From a point load of 15,000 N, the panels must be screwed down.

The general use of metric screw connections makes it easy to replace panels or adjust the substructure.



## Heavy-duty systems

Quality control in our in-house laboratory

## Low cavity floor

Special pedestals enable a clear cavity height of approx. 50 mm.

This results in total minimum installation heights of 100 mm for 25,000 N point load.



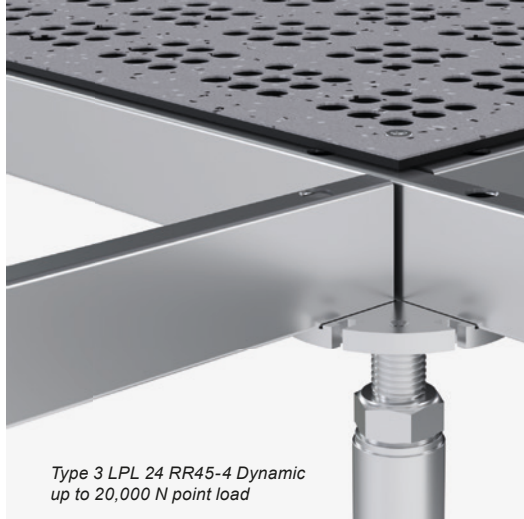
## Low vibration

To minimise any vibration transmission, the system can also be mounted directly on a substructure made of solid steel beams. The pedestals are replaced by 20 mm thick, adjustable steel plates.

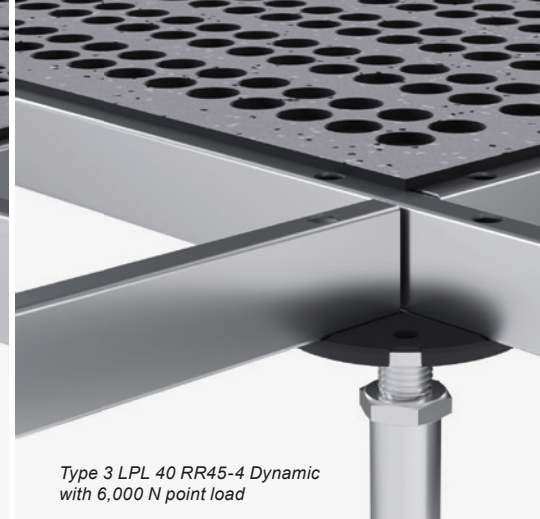
TYPE 3

All Type 3 systems are compatible with four possible perforated panels with 16, 24, 32 or 40% open area, which can be inserted or replaced at any point in the floor area.

They are used for ventilation, cooling or simply for air circulation.



Type 3 LPL 24 RR45-4 Dynamic  
up to 20,000 N point load



Type 3 LPL 40 RR45-4 Dynamic  
with 6,000 N point load

## The perforated panel range



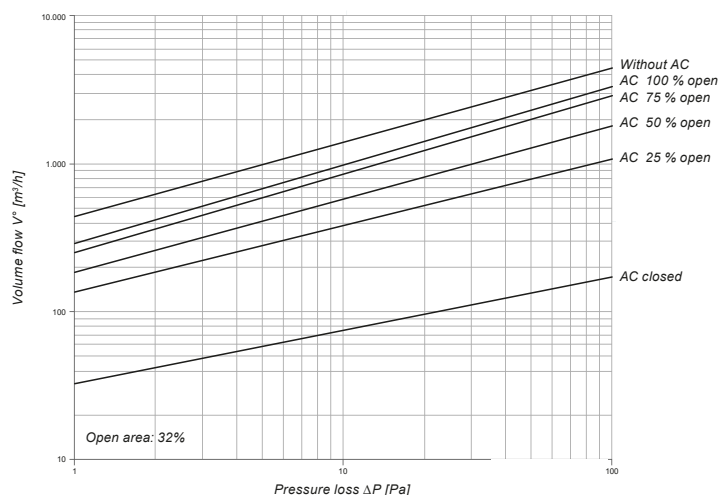
Type 3 LPL 32 RR30-3 Dynamic  
with 5,000 N point load

The optional, infinitely variable airflow control can be easily adjusted from above when installed.



Panel underside with airflow control

The volume flow and pressure loss of the respective open areas with and without airflow control can be found in the diagrams on the respective data sheets.



# Technical data

## Possible surfaces:

R10 powder coating (RAL 7036, platinum grey),  
textile and resilient coverings,  
parquet flooring, aluminium checker plate

## Panel:

Dimensions:

600 x 600 x ~ 33 – 49 mm

Material:

Steel with conductive powder coating

## Substructure:

Pedestals:

Galvanised steel, grid 600 x 600 mm

Stringers:

Galvanised steel, 30 – 45 x 15 mm

Installation height:

~ 110 – 2,000 mm FFL

## Weight specifications:

Panel:

~ 15.9 – 22 kg/panel (without covering)

System:

~ 50 – 68.5 kg/m² (without covering, FFL 250 mm)

## Load values (DIN EN 12825):

Point load:

**5,000 – 12,000 N**

Element class / ultimate load / safety factor:

Class 5 – 6 /  $\geq 10,000$  – 24,000 N /  $\geq 2.0$

Point load SX:

**15,000 – 23,000 N / up to 25,000 N with indenter 50 x 50 mm**

Element class / ultimate load / safety factor:

Class 6 /  $\geq 30,000$  – 50,000 N /  $\geq 2.0$

## Electrostatics: (depending on covering)

Insulation resistance (VDE 0100-600):

$> 5 \times 10^4 \Omega$  or  $> 1 \times 10^5 \Omega$  possible

Electrical resistance

(DIN EN 1081 / DIN EN 61340-4-1):

Conductive, dissipative or special  
ESD requirements possible

## Fire protection:

Classification of the supporting panel  
to its fire behaviour (DIN EN 13501-1):

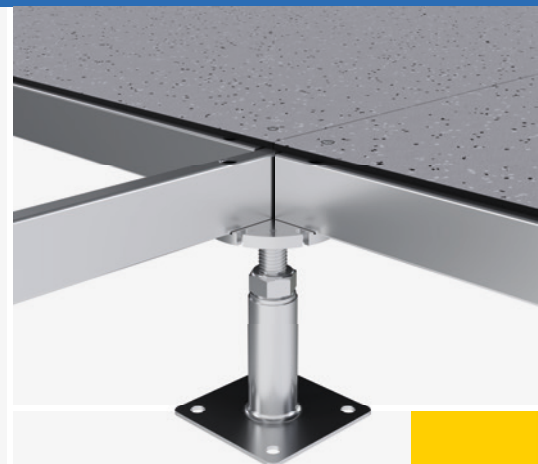
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## Seismic safety:

Project-specific calculation possible  
according to all common standards

## Building certification:

Contribution to BREEAM / DGNB / BNB /  
LEED building certification possible



Type 3 FR45-4 Dynamic SX  
up to 25,000 N point load



## Ventilation panels 16% / 24% / 32% / 40%

### Possible surfaces:

R10 powder coating (RAL 7036, platinum grey),  
textile and resilient coverings

### Ventilation data:

Perforation:

576 – 744 round holes

Open area:

~ 16 % – 40 % (round holes  $\varnothing \sim 11.7$  –  $\sim 24.2$  mm)

Air flow rate:

~ 800 – 1,700 m³/h per panel at a pressure loss of 10 Pa

### Load values (DIN EN 12825):

Point load:

**3,000 – 10,000 N**

Element class / ultimate load / safety factor:

Class 2 – 6 /  $\geq 10,000$  – 20,000 N /  $\geq 2.0$

Point load in SX systems:

**6,000 – 15,000 N / up to 20,000 N**

**with indenter 50 x 50 mm**

Element class / ultimate load / safety factor:

Class 6 /  $\geq 12,000$  – 40,000 N /  $\geq 2.0$

Type 3 LPL 32 RR45-4 Dynamic  
up to 20,000 N point load

## Information about MERO-TSK



Mitglied der  
**DGNB**  
Deutsche Gesellschaft für Nachhaltiges Bauen  
German Sustainable Building Council

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