

MICROTAC ACCESS FLOOR SYSTEMS

Data Centre Application



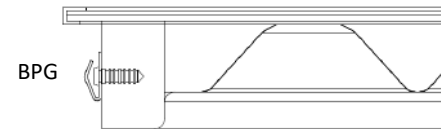
MICROTAC FILLED STEEL (MFS) PANEL FLOOR SYSTEM–

(FOR DATA CENTRE APPLICATIONS)



System Components – Panel

- Type: Steel Panel with Cementitious Infill
- Size: 600 x 600 mm
- Description: Steel shell construction with a non-combustible light-weight cementitious infill
- Corrosion Protection:
 - Epoxy powder coated (External)
 - Phosphate coated (Internal)
- Positive Grounding:
- A brass positive grounding (BPG) point is located at the side of each panel to ensure positive conductive path from top of panel to the understructure system



Panel Loading Specifications

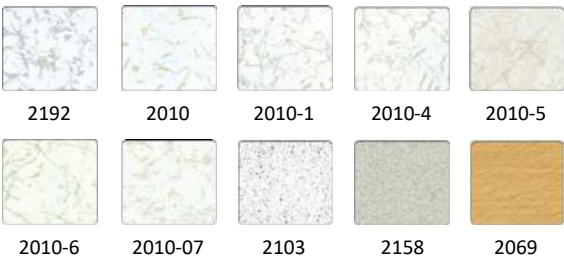
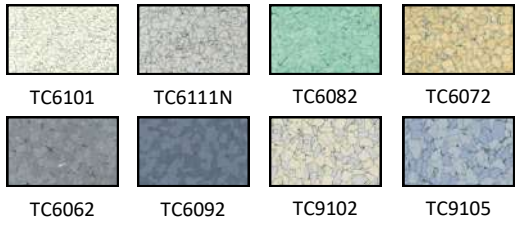
Tested to CISCA Recommended Test Procedures for Access Floors

Panel	Static Load			Rolling Load		Impact Load
	Concentrated	Safety Factor	Uniform	10 Passes	10,000 Passes	
MFS800	3.56 kn	3x	12.0 kn/m ²	3.55 kn	1.78 kn	45 kg
MFS1000	4.45 kn	3x	20.0 kn/m ²	4.45 kn	2.66 kn	68 kg
MFS1250	5.56 kn	3x	22.0 kn/m ²	5.56 kn	3.55 kn	68 kg
MFS1500	6.67 kn	3x	24.0 kn/m ²	6.66 kn	4.45 kn	79 kg
MFS2000	8.89 kn	3x	30.0 kn/m ²	6.66 kn	5.55 kn	79 kg
MFS2500	11.12 kn	2.5x	35.0 kn/m ²	8.90 kn	8.01 kn	91 kg
MFS3000	13.39kn	2.5x	40.0 kn/m ²	12.01 kn	10.68kn	134 kg

- Non-combustible: Certificate of Conformity
British Standard BS 476 Part 4:1970 test standards
- Fire Propagation
Tested to BS 476 Part 6:1970 standards
- Surface Spread of Flame
Tested to BS 476 Part 7:1970 standards
- Singapore Green Building Product Label (SGBPL)– 4 ticks Leader Rating

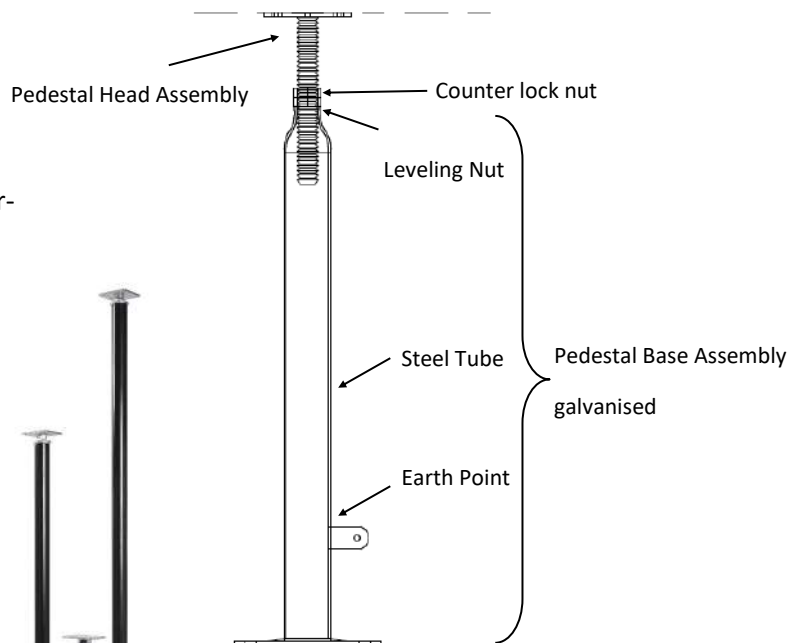


Panel Finishes

Type	Anti-static High Pressure Laminate (HPL)	Conductive/ESD vinyl
Thickness	1.0mm, 1.2mm, 1.5mm, 2.0mm, 2.5mm, 3.0mm	2.0mm, 3.0mm
Electrical Resistance	1×10^8 to $2 \times 10^{10} \Omega$	2.5×10^4 to $1 \times 10^6 \Omega$ (Conductive) 1×10^8 to $2 \times 10^{10} \Omega$ (Anti-static)
Available Colours		

System Components – Pedestal

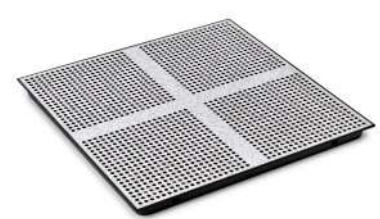
- Pedestal Axial Load: 22.5 - 40kN
- Finished Floor Height: 400 - 1200 mm
- Pedestal Body : Galvanised Steel (zinc whisker-free)




System Components – Stringer

- Dimension: 30mm x 21mm x 1.2mm(T)/1.5mm (T)/2.0mm(T)
- Length: Available in 600mm, 1200mm
- Stringer Body: Galvanised Steel
- Installation: In basket-weave configuration for lateral stability



Airflow Management

Aluminium Grating Panel (DC55)

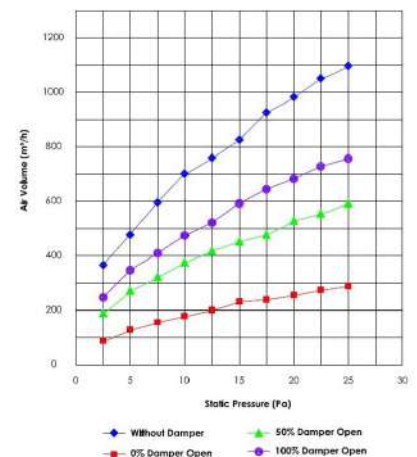
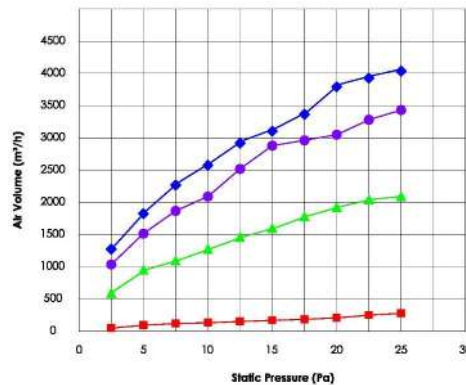
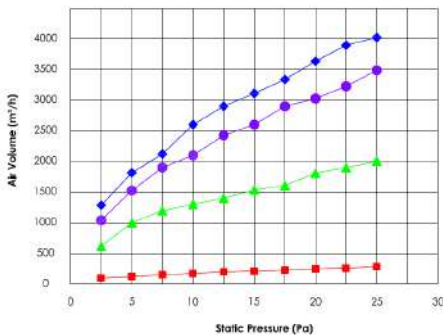
- Panel: 55% open air flow
- Conductive Epoxy powder coated
- Interchangeable with MFS panels
- **Tested to concentrated load of 5.5kn**

Aluminium Grating Panel (DC68)

- Panel: 68% open air flow
- 70° directional air flow
- Conductive Epoxy powder coated
- Interchangeable with MFS panels
- **Tested to concentrated load of 6.68kn**

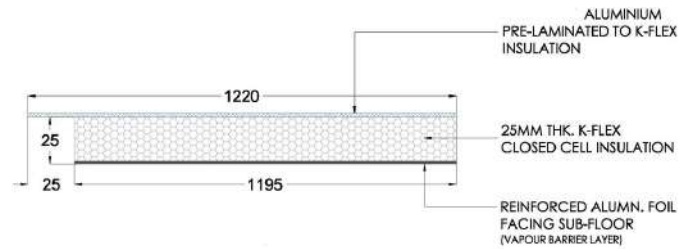
Steel Perforated Panel (MFP25S)

- Panel: 25% open air flow
- Interchangeable with MFS panels
- Available with anti-static HPL or conductive vinyl finish
- **Tested to concentrated load of 4.5kn**





Thermal Insulation

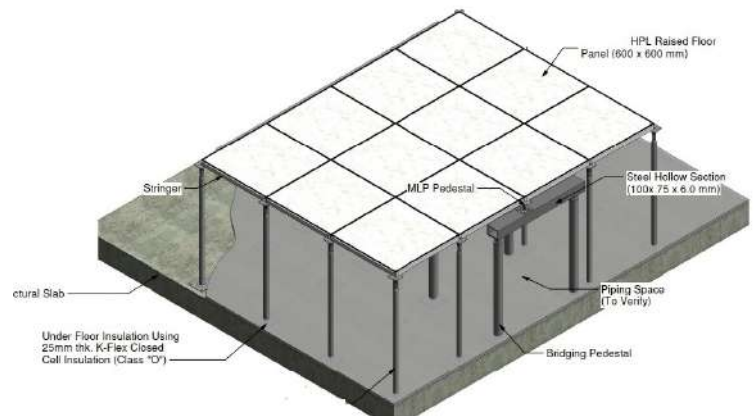


- 25mm thick K-flex thermal insulation foam
- Aluminium sheet on top surface, aluminium foil facing sub-floor
- Thermal Conductivity: $\lambda = 0.034 \text{ W/m.k}$ (above 20°C)
 $\lambda = 0.032 \text{ W/m.k}$ (0°C)
 $\lambda = 0.028 \text{ W/m.k}$ (-50°C)
- Density: 55 kg/m³ (3 lbs/ft²)
- Water Absorption: 1.1%
- Service Temperature Limits: - 45 °C to +85 °C
- Close Cell Content: above 90%
- Flammability: Self extinguishing
- Fire Properties:
- Reaction to Fire: BS476 Pt 5 - Class P
- Ignitability: BS476 Pt 7 - Class 1
- Surface Spread of Flame Fire Propagation: BS476 Pt 6 - Class O
- FM Approved



Bridging System

- Used when the span of underfloor services exceeds the allowable limitation of the raised floor system



 **Accessories**



Air brush grommet




Round brush grommet



Double cup panel lifter



Glass Vision Panel

 **Ramps, Steps and Fascia**



Raised floor steps and fascia



Ramp



Project References– Data Centre

1.	Project:	6-storey Data Centre at Tai Seng
	System:	MFS1500 with HPL Finish
	FFH:	750 mm
	Area:	11,000 sqm
2.	Project:	Data Centre at Paya Lebar
	System:	MFS1000 with HPL Finish
	FFH:	800 mm
	Area:	3,000 sqm
3.	Project:	Data Centre at Jurong
	System:	MFS1000/MFS1500 with HPL Finish
	FFH:	1,000 mm
	Area:	29,000 sqm
4.	Project:	5-storey Data Centre at Marsiling
	System:	MFS1250 with HPL Finish
	FFH:	1,000 mm
	Area:	7,500 sqm
5.	Project:	Data Centre at Pioneer
	System:	MFS1250 with HPL Finish
	FFH:	1,100 mm
	Area:	4,200 sqm
6.	Project:	Data Centre at Serangoon North
	System:	MFS1500 with HPL Finish
	FFH:	650 mm
	Area:	3,650 sqm
7.	Project:	Data Centre at International Business Park
	System:	MFS1500 with HPL Finish
	FFH:	1,000 mm
	Area:	4,000 sqm



We specialize in Installation, Maintenance and Repair Services for all access floor systems



Commercial Building at Rochester Park



Data Centre at Jurong



5 Shenton Way



Research & Commercial Building at Depart Road



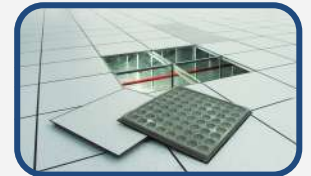
International School at Lorong Chuan

MICROTAC Access Floor System, the complete Raised Floor Solutions for any space:

- General Office
- Auditorium
- Lobby Reception Areas
- Conference & Training Facilities
- Server Room
- Showroom & Display
- Library
- Computer Room
- Data Centre
- Equipment Room
- Fire Command Centre
- Medical Research Lab
- Clean Room
- Schools/Universities



General Office



Data Centre



Auditorium



Museum



University

Distributor for:

