

MUFLOOR

TM

August 2008

Access Flooring Systems



Introduction



High Performance, Sustainable Building Solutions

With the 21st century being called the "Age of environment," the solution to environmental issues holds the key to sustainable development of humankind in the future. Mufloor, is committed to provide innovative, integrated, high-performance and cost-effective solutions. Its core messages are synonymous with green building qualities: systems integration, energy efficiency, optimal indoor air quality (IAQ), and cost effectiveness.



"Focus on your customers, not your competition"

"Lots of companies get so caught up in what their competition is doing that they spend more time looking over their shoulders than looking ahead. Focusing all your energies on what your competition is doing simply means that you're overlooking your greatest source of competitive advantage: your customers. Companies that are successful today, are those that can get closest to their customers' needs."



Mufloor Production System (MPS)

Our factory is the one of the largest Asian company dedicated solely to the development, production and marketing of raised access floor systems. Our factory is an ISO9002 Quality Assurance System Certified company since 1994. Mufloor is committed to deliver high quality products to customers.

MANUFACTURING FACILITIES

Mufloor™ raised access floor system is manufactured in China. We are specialized in the manufacturing of raised access floors with the production capacity of over 600,000 square meters per year. We have been manufacturing and exporting raised access floors for more than 16 years. With excellent quality and fully competitive price, most of our products are exported to overseas markets and they enjoy high reputation among our business partners and customers.



PRESS LINE



PAINT LINE



BONDING LINE



Powder Coating



Packaging



Warehousing



Despatching

Company Profile

1. Year of Established : 1986
2. Area:
 - Land: 60,000m²
 - 2 factories for manufacturing woodcore panel & steel panel
3. Daily Manufacturing Capability:
 - 2,000 m² panels
 - 10,000 pieces of pedestals
4. People :
 - Management and Technical Staffs : 46 peoples
 - Workers : 260 workers
5. Location: North East Region, China.

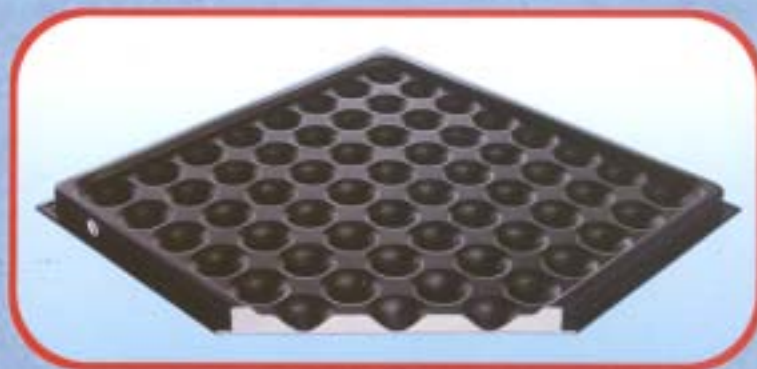
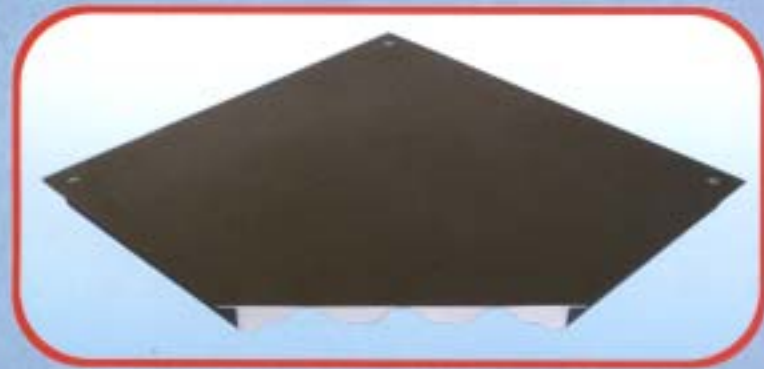


**CEMENTITIOUS INFILL & OA
RAISED ACCESS FLOOR SYSTEMS**

CEMENTITIOUS INFILL STEEL ACCESS PANEL

- Designed specifically for office building
- Excellent rolling load performance
- Superior ultimate load performance
- Interchangeable panel strengths
- Electrodeposition cathodic epoxy paint finish for life time protection
- Light weight cementitious fill makes panels solid and quiet
- Completely non-combustible
- Excellent grounding* and electrical continuity
- Class A flame spread and smoke development rating
- All-steel pedestals provide excellent impact load performance.

▲ Trunking



CORNER LOCK SYSTEM (600x600 mm)

- Designed for traditional office building
- Engineered positive engagement between panel and pedestal
- Easy and quick accessibility
- Excellent seismic proof performance

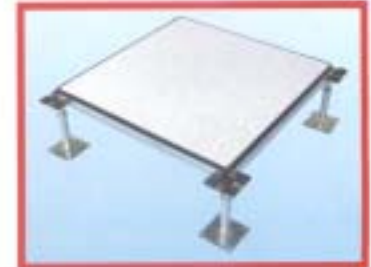


PEDESTAL & STRINGER (80~1200 mm)



BOLTED STRINGER SYSTEM (600x600 mm)

- Designed for Underfloor Air Distribution office building
- Customized trapeziform PVC taped stringer provide excellent Air Leakage Rate performance
- Excellent seismic proof performance
- Improved static load performance



DESIGNER HPL/VINYL LAMINATES

Designer laminates are available in many different finishes all of which have been thoroughly tested.

TOP SET TRIM OR TRIMLESS PANELS

Mufloor's top set trim provides a protective edge that is mechanically locked and glued to the panel's surface.

CONDUCTIVE & DISSIPATIVE HPL/VINYL TILE

Homogeneous solid HPL/Vinyl tile with conductive elements is available in many colors and has an electrical resistance range of 2.5×10^4 to 1×10^6 ohms or 1×10^6 to 2×10^{10} ohms (when tested at 20% RH).

PERFORMANCE SELECTION CHART

| MUFLOOR™ FS800/ FS1000/ FS1250 & OA Raised Access Floor System | | | | | | | | | | |
|--|-------------|-----------------|----------------------|----------------|--------------|--------------------------------|----------------|-----------------|-----------------|---|
| Panel Type | Panel Grade | Dynamic Load kN | Concentrated Load kN | Impact Load kG | Panel Weight | Uniform Load kN/m ² | Rolling Load | | Fire Protection | General Construction |
| | | | | | | | 10 Passes (kN) | 1000 Passes(kN) | | |
| FS800 | Medium | 3 | 3.6 | 50 | 12.5kg | 12 | 3560 | 2670 | Non Combustible | Cementitious Infill Steel Panel 33.5 / 35mm |
| FS1000 | Heavy | 4.5 | 4.5 | 50 | 13.5kg | 20 | 4450 | 3560 | Non Combustible | Cementitious Infill Steel Panel 33.5 / 35mm |
| FS1250 | Extra Heavy | 5.5 | 5.5 | 60 | 14.5kg | 30 | 5560 | 4430 | Non Combustible | Cementitious Infill Steel Panel 33.5 / 35mm |
| OA500 - FS800 | Medium | 3 | 3.6 | / | 9kg | 12 | / | / | Non Combustible | Cementitious Infill Steel Panel 28mm |
| OA500 - FS1000 | Heavy | 4.5 | 4.5 | / | 10kg | 20 | / | / | Non Combustible | Cementitious Infill Steel Panel 28mm |

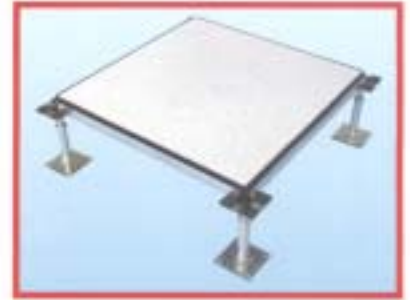
| MUFLOOR™ PRODUCT PROPERTY REQUIREMENTS | | | | |
|--|----------------|--|---------------------------|------------------------|
| Flatness | Size Tolerance | Electrostatic resistance | Pedestal bearing capacity | Fire resistance |
| ≥0.75mm | 0 - 0.25mm | 2.5 x 10 ⁴ - 10 ⁶ Ω (PVC) 1 x 10 ⁶ - 2 x 10 ¹⁰ Ω (HPL) 0 - 10Ω (Panel to understructure) | ≥25kN | Fully Comply BS 476 |



**HOLLOW STEEL
RAISED ACCESS FLOOR SYSTEMS**

HOLLOW STEEL ACCESS FLOOR

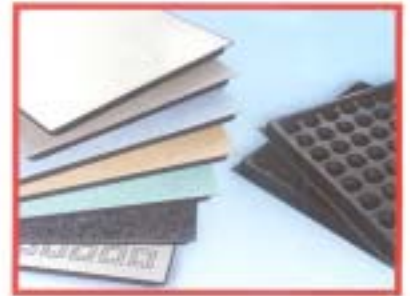
- Excellent rolling load performance
- Superior ultimate load performance
- Interchangeable panel strengths
- Electrodeposition cathodic epoxy paint finish for life time protection
- Welded steel construction and an enclosed formed bottom make panels rigid and light weight
- Completely non-combustible
- Excellent grounding and electrical continuity
- Class A flame spread and smoke development rating
- All-steel pedestals provide excellent impact load performance
- Wide range of finishes available



RIGID DRID SYSTEM (600x600mm)

- Designed for computer & equipment room
- PVC taped stringer provide excellent **Air Leakage Rate** performance
- Excellent seismic proof performance

PEDESTAL & STRINGER (80~1200mm)



DESIGNER HPL/VINYL LAMINATES

Designer laminates are available in many different finishes all of which have been thoroughly tested.

TOP SET TRIM OR TRIMLESS PANELS

Mufloor's top set trim provides a protective edge that is mechanically locked and glued to the panel's surface.

CONDUCTIVE & DISSIPATIVE HPL/VINYL TILE

Homogeneous solid HPL/Vinyl tile with conductive elements is available in many colors and has an electrical resistance range of 2.5×10^4 to 1×10^9 ohms or 1×10^5 to 2×10^{10} ohms (when tested at 20% RH).



PERFORMANCE SELECTION CHART

| MUFLOOR™ FS800H/ FS1000H/ FS1250H Raised Access Floor System | | | | | | | | | | |
|--|-------------|-----------------|----------------------|----------------|--------------|--------------------------------|----------------|------------------|-----------------|-----------------------------------|
| Panel Type | Panel Grade | Dynamic Load kN | Concentrated Load kN | Impact Load kG | Panel Weight | Uniform Load kN/m ² | Rolling Load | | Fire Protection | General Construction |
| | | | | | | | 10 Passes (kN) | 10000 Passes(kN) | | |
| FS800H | Medium | 3 | 3.6 | 50 | 9.5kg | 12 | 3560 | 2670 | Non Combustible | Hollow Steel Panel 33.5 / 35mm |
| FS1000H | Heavy | 4.5 | 4.5 | 50 | 10.5kg | 20 | 4450 | 3560 | Non Combustible | Hollow Steel Panel 33.5 / 35mm |
| FS1250H | Extra Heavy | 5.5 | 5.5 | 60 | 11.5kg | 30 | 5560 | 4430 | Non Combustible | Hollow Steel Panel 33.5 / 35mm |

MUFLOOR™ PRODUCT PROPERTY REQUIREMENTS

| Flatness | Size Tolerance | Electrostatic resistance | Pedestal bearing capacity | Fire resistance |
|----------|----------------|---|---------------------------|------------------------|
| ≥0.75mm | 0 ~ 0.25mm | $2.5 \times 10^4 \sim 10^6 \Omega$ (PVC) $1 \times 10^6 \sim 2 \times 10^{10} \Omega$ (HPL) 0 ~ 10 Ω (Panel to understructure) | ≥25kN | Fully Comply BS 476 |

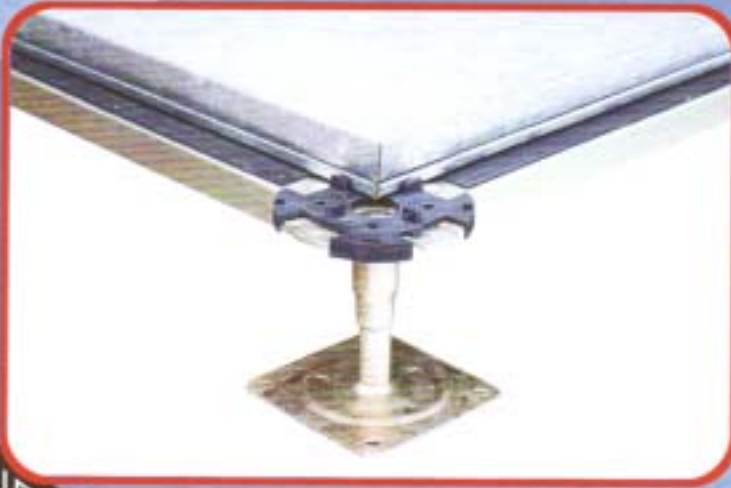


**WOODCORE & PERFORATED PANEL
RAISED ACCESS FLOOR SYSTEMS**

WOODCORE ACCESS PANEL

The modular square access panel consists of the following parts:

- 30mm thickness particle board panel
- Particle board panel is encapsulated by 2 pieces of steelplates on top and bottom, 4 pieces of black PVC strips along the side of the panel
- Covering: Naked, Steelplate, HPL, Vinyl, Rubber, Linoleum, Carpet, Ceramic Tile

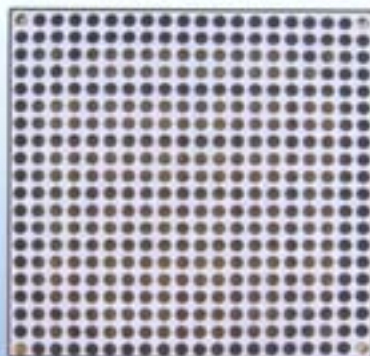


PERFORATED PANEL

- Perforated panels provide optimum laminar airflow, without turbulence.
- Optional chamfered perforations provide superior particulate control with 25% to 40% airflow rate
- Damper optional



25% Perforation



36% Perforation



40% Perforation

RIGID GRID SYSTEM (600x600mm)

- Designed specifically for computer room, office building
- Excellent acoustics performance

PEDESTAL & STRINGER



Woodcore Panel With Corner Lock System



DESIGNER HPL & VINYL LAMINATES

Designer laminates are available in many different finishes all of which have been thoroughly tested.

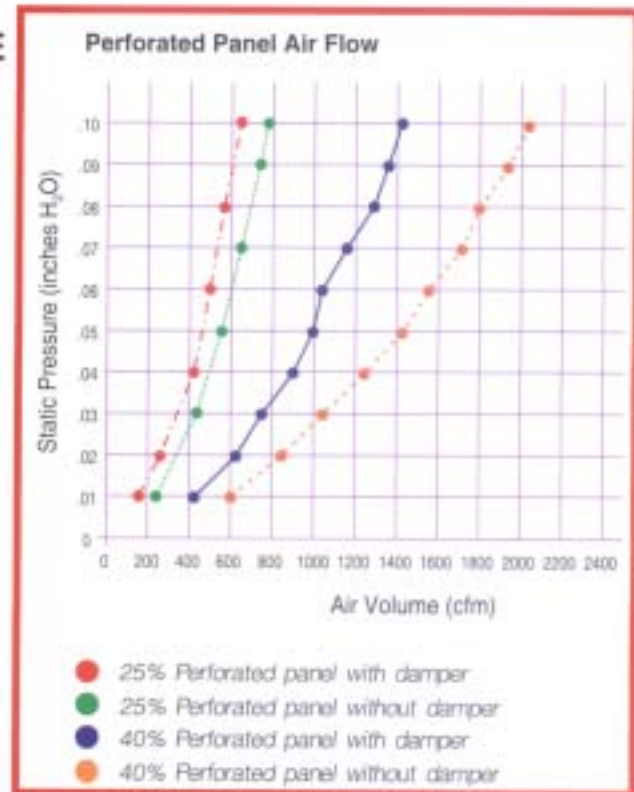
CONDUCTIVE & DISSIPATIVE HPL/VINYL TILE

Homogeneous solid HPL/Vinyl tile with conductive elements is available in many colors and has an electrical resistance range of 2.5×10^4 to 1×10^5 ohms or 1×10^6 to 2×10^{10} ohms (when tested at 20% RH).

PERFORATED PANEL

Perforated panels provide optimum laminar airflow without turbulence.

Optional chamfered perforations provide superior particulate control with 25% to 40% airflow rate



PERFORMANCE SELECTION CHART

| MUFLOOR™ WC800 / WE800 / WC1000 / WE1000 Raised Access Floor System | | | | | | | | | | |
|---|-------------|-----------------|----------------------|----------------|--------------|--------------------------------|----------------|------------------|-----------------|--------------------------------|
| Panel Type | Panel Grade | Dynamic Load kN | Concentrated Load kN | Impact Load kG | Panel Weight | Uniform Load kN/m ² | Rolling Load | | Fire Protection | General Construction |
| | | | | | | | 10 Passes (kN) | 10000 Passes(kN) | | |
| WC800 / WE800 | Medium | 3 | 4 | 50 | 10 | 16 | 3560 | 2670 | Class "0" | Chipboard Panel 30 / 38 / 40mm |
| WC1000 / WE1000 | Heavy | 4.5 | 5.5 | 50 | 11 | 20 | 4450 | 3560 | Class "0" | Chipboard Panel 30 / 38 / 40mm |

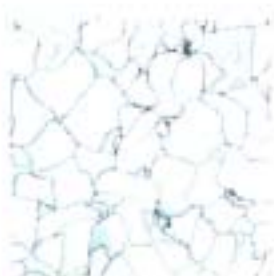
| MUFLOOR™ PRODUCT PROPERTY REQUIREMENTS | | | | | |
|--|----------------|--|--|---------------------------|---------------------|
| Flatness | Size Tolerance | Electrostatic resistance | | Pedestal bearing capacity | Fire resistance |
| ≥0.75mm | 0 - 0.25mm | 2.5 x 10 ⁴ ~ 10 ⁶ Ω (PVC) 1 x 10 ⁶ ~ 2 x 10 ¹⁰ Ω (HPL) 0 ~ 10Ω (Panel to understructure) | | ≥25kN | Fully Comply BS 476 |

FINISHES FOR RAISED ACCESS FLOORS

VINYL

ESD - Control Vinyl
2.0 - 3.0 mm

Electrical resistance:
 $2.5 \times 10^4 - 1 \times 10^6$ ohm



VINYL6101



VINYL6101



VINYL6111



VINYL6081



VINYL6071



VINYL6131

Antistatic

Antistatic HPL
1.0 - 3.2 mm
Electrical resistance:
 $1 \times 10^8 - 1 \times 10^{11}$ ohm



HPL2010



HPL2010-6



HPL2103



HPL2158



HPL2208



HPL2069

ACCESSORIES



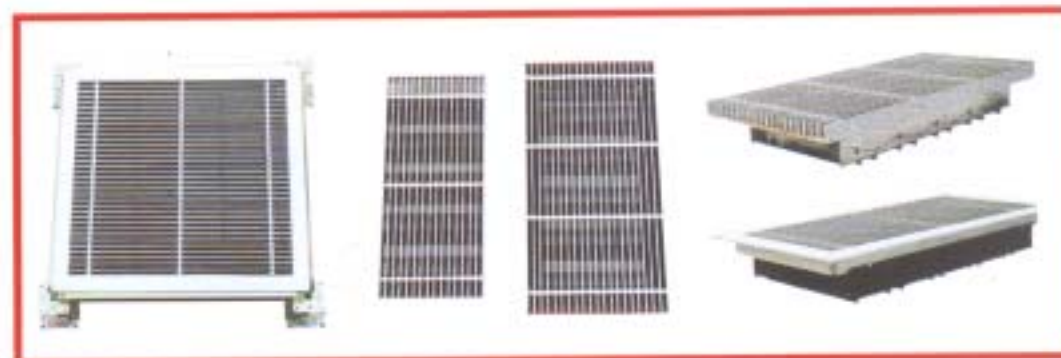
* Floor Service Outlet Box



Panel Lifting Device *



* Cable Outlet Grommet

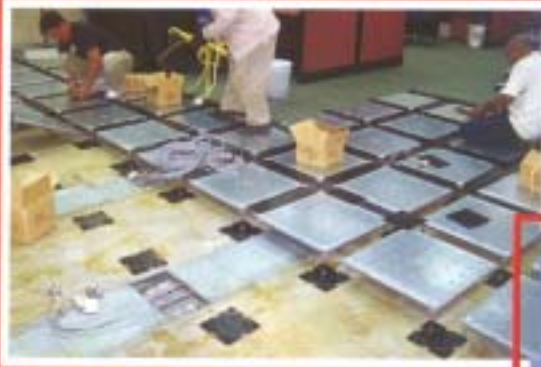


Aluminum air grill
with damper *

Project Reference



Shanghai stock Exchange (Shanghai)
Year of completion : 2003
Total Qty : 2,000M²



Saudi British Bank (Saudi Arabia)
Year of completion : 2003
Total Qty : 3,000M²



Taiwan Sony Building (Taiwan)
Year of completion : 2001
Total Qty : 8,000M²

*Please visit our web site : <http://www.mufloor.com> for more projects details

Specifications

Section 10270

Part I - General

1.01 Work Included

Access floor contractor shall provide submittals, materials and installation of the access floor system as shown on the contract drawings and as specified in this document.

1.02 Related Work Not Included

A. General contractor shall provide clear access, dry secure storage, and a clean sub-floor area which is free of construction of the and other trades during installation of the access floor system. Area to receive the access floor shall be enclosed and be maintained at a temperature range of 40° to 90°F and a humidity range of 20% to 70% relative.

B. Concrete sealer shall be compatible with access floor pedestal adhesive, see Division 3.

C. Electrical contractor shall provide necessary material and labor to electrically connect the access floor to the building, see Division 16.

1.03 System Description

A. Access floor system shall consist of interchangeable square panels selected to meet

specific load requirements. Panels shall be supported by adjustable pedestal assemblies which positively locate, engage and secure panels and which accommodate horizontal grid members when specified.

B. Finished floor height of the system above the subfloor shall be as shown on the contract drawings.

1.04 Shop Drawings and Product Data

A. Submit drawings showing complete access floor system including floor panel layout and all accessories that are a part of the system.

B. Submit details and descriptive notes for finishes of components, anchoring, edge details, and interfaces with adjoining work.

1.05 Related Work Not Included

Submit for approval one full size floor panel with finished surface and understructure components for each type of access floor system being supplied.

1.06 Quality Assurance

Submit certified laboratory test data for approval which indicates that the supplied system complies with the performance indicated herein.

A. Test Methods:

1. Test methods for concentrated, ultimate, rolling, overturning moment, and axial loads shall be in accordance with the "Recommended Test Procedures for Access Floors" as published by Cisca, the Ceilings and Interiors Systems Construction Association.

2. Test Method for Impact Load

Panel without floor covering shall be supported on actual understructure. An impact load is applied to the panel via a one square inch indenter which is stuck by a predetermined load dropped from a height of 36". The panel shall be loaded at its weakest point. Weakest point to be determined by an independent test lab.

3. Test Method for Electrical Resistance

The electrical resistance of the access floor system shall be tested in accordance with NFPA 99. The test is modified for access floors where one electrode is placed on the floor surface covering and the other electrode is attached to the understructure.

Part III - Installation

3.01 Installation

A. Qualification

Floor system and accessories to be installed by the manufacturer's authorized representative to maintain the integrity of the completed installation.

B. Inspection

1. Examine subfloor for unevenness, irregularities and dampness that would affect the quality and execution of the work.
2. Do not proceed with installation until subfloor surfaces are clean, dry, clear of other trades and ready to receive access flooring.

C. Preparation and Installation

1. The access floor to be prepared and installed in accordance with the access floor manufacturer's instructions covering preparation, layout, alignment and installation.
2. Installed access floor shall be level within plus or minus 0.060 inches in 10 feet, and plus or minus 0.10 inches over the entire area. Floor to be rigid and free of rocking panels.

D. Adjust and Clean

1. Remove access floor installation debris as work progresses, maintaining area under finished floor in a clean condition.
2. The general contractor is to protect the finished access floor from damage and misuse.

MUFLOOR™

Access Flooring Systems

Distributor :

