NETFLOOR®

www.net-floor.biz

FreeMount®
FM500

Environment Friendly - 100 % re-usable

non pollution, no damage to sub-floors
locking & adjusting - above the access floor

FreeMount FM500

User-Friendly and Environment Friendly

FreeMount FM500 system is designing and developing especially for high-rise new office buildings, as well as for renovation and upgrading in old office and school, where efficient cable management, and environment protection are concerned.
The patented FM500 system comprises of special design FM-panel and FM-pedestal. For installation, the FM-pedestals are locked at corners of four FM-panels. There is no need to glue the pedestals on the sub-floor. By using of FM-pedestals, all locking and height adjustment are operated above the access floor. FM500 is a system of environment friendly and user-friendly, which provides easy cable management, non-pollution to subfloor, and cost-saving solution to the modern office and education applications.

(1) Corner-locking FM-Panels to FM-Pedestals

(2) 8 mm diameter opening formed automatically

(3) Hexagon key-wrench stretching from top to adjust height

(4) Hexagon key-wrench fastening from top by mechanical tool

Environment Friendly ---

- **100 % re-usable --** non glue to the sub-floors, all components are re-usable.
- **non pollution / no damage** to sub-floors

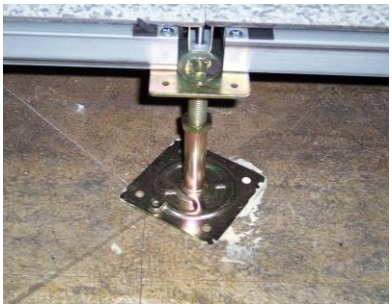
Cost-Saving --

- **Labor-Saving --** adjusting height and fastening from top of access floor.
- **Suitable to install on all type of hard-surface, or resilient sub-floors --**
  The special FM-pedestal isn't limited to be installed on concrete slab. The system is suitable to install directly on old PVC tile, sheet vinyl, ceramic tile, marble, granites, and wood.

Problems of conventional access floor systems

Designing concept of access floors was originated from applications in computer/control room and factory, which requires high loading property, precise leveling, big capacity for running large pipes/cables, or under-floor air distribution. However, many of the standards set because of factories or laboratories are not needed in the offices, and, some may become disadvantages.

1. **Pollute the sub-floors**
   To secure the access floor structure, base-plate of pedesta have to adhere to the grounds. Adhesives applied on sub-floors are necessary step in installation. Pollution on sub-floors becomes inevitable.



Adhesive pollutes sub-floor

2. **Damage sub-floor when removing pedestals**
   In the event of re-location or renovation, pedestal shall be removed. Old PVC tile or slab will be damaged

The adhesives damage sub-floors when removing pedesta

Comparison

	Netfloor FreeMount FM500	**Conventional access floor systems**
Fire Safety	Non-combustible	Non-combustible
Environment protection: Re-usable Pollution to sub-floors Damage to sub-floors	 100% re-usable no no	 85 ~ 90% re-usable yes yes
Height adjustment	above the access floor	under the access floor
System locking	above the access floor	under the access floor
System weight	avg. 36 ~ 38 kg / m^2	avg. 36 ~ 46 kg / m^2
Easy and quick installation	yes	fair
Re-location cost	low	high
Loading property	light to medium traffic, good for general office and school	light to heavy traffic, good for factory, office and school

The System

1. FM-panel (FM501)
Steel cementitious access panel of 4 mm radius notch at four angles. The hollow structure FM-Panel is steel welded form with 4 locking holes at corners to allow corner-locking by FM-pedestal. After completion of corner-locking, 8 mm diameter opening formed automatically.

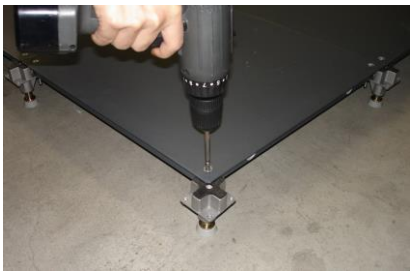
2. Outlet panel (FM502): steel cementitious access panel with 2-side openings for cable extension. The 2-side openings are concealed by FM-lids which allow cables exit from the openings, and as protector to cables.

aluminum head-set: Factory assembled head-set consists of rubber-pad with round opening at top, socket-set-screw embedded underneath rubber-pad at inside top, to allow locking to pedestal-set.

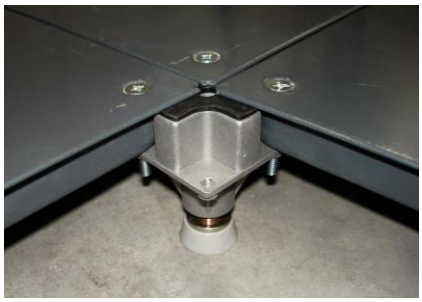
aluminum
head-set

steel column-set

column-set: factory assembled column-set. composed of steel stud, plastics buffer, and steel bottom-screw. Spin column-set onto headset to form pedestal set. Available for installation at finish floor height 75 ~ 200 mm



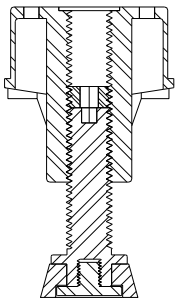
(1) Corner lock access panels onto pedestal headset by mechanical tool



(2) 8 mm diameter opening formed

(3) install FM-pedestal at field

3. FM Pedestal for field installation:
Consisted of aluminum head-set and column-set. After corner-locking to the FM-Panels, height adjustment (using 5 mm hexagon key-wrench) and final fastening (using 6 mm hexagon key-wrench) are made through the opening at top of the pedestal.



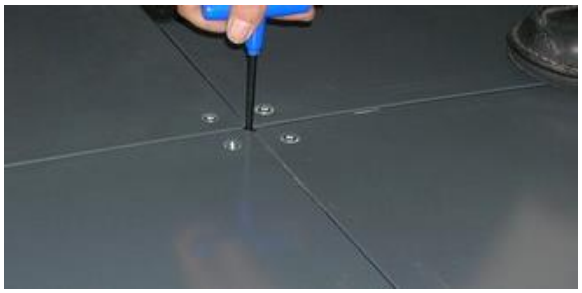
FM-pedestal details

FM-pedestal

4. **FR-Pedestal:** for perimeters and as supporter. When using at starting row, conceal FR-pedestal under FM501 and locking from top. When using as supporter under cutting pieces, adhere FM-pedestal under cutting panels by double-side foam tape.

FR-pedestal

(4) Continuous installation at field



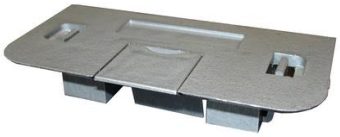
(5) 5 mm hexagon key wrench for height-adjustment and final check-up, clockwise upward, counter-clockwise downward. Turn pedestal until feeling gently grounding at the sub-floor.

(6) FR-pedestal installed at perimeter

(7) Last step to fasten by 6 mm hexagon key wrench

Cable Extension

FM502 outlet panel is designed for easy cable exit from the 2-side opening. The FM-lids conceal 2-side openings of the outlet panel. To exit data / power cables, remove the cable protector, cut carpet to size of the cable protector, fix protector upward to allow cable exiting.



FM-lid

single exit

Each outlet panel has two openings at two sides, which concealed by two FM-lids. Turn opening to nearest location of workstation, remove cable protector, cut carpet to allow cable exiting from the access floors. For large amount cable exit, remove FM-lid (opening 23 mm X 26 mm)

cut carpet for single FM-lid exits up to 5 ~ 6 data wires

dual exit

When a workstation needs 2 power cables plus more than 2 data wires, install FM502 outlet panels by same direction to compose dual exit (see pictures at right). For large amount exit, remove both FM-lid (opening 46 mm X 26 mm).

for dual exit

dual exits for power cables and data wires

Utility Floor Box

(1) SB90 floor box: power 220 volts
3 ~ 4 compartments
cover plate size 350 mm x 215 mm

(2) SB603 box: power 110 volts
3 data jacks, 2 power sockets
cover plate size 247 mm x 154 mm

SB603 floor box

SB90 floor box

Cut FM501 panel to required size at side. Cut carpet tile to fit base floor box base-tray. Install base-tray, then fasten face cover on base-tray. Bond top of FR-pedestals by double-side foam tape to install and bond underneath cutting borders as supporter.

(3) FM500 also accommodates all type of locally available floor box

Specifications -- FM500

FreeMount FM500 system comprises of FM-501 access panel, FM-502 outlet panel, FM-Pedestal, FR-Pedestal, and all necessary accessories.

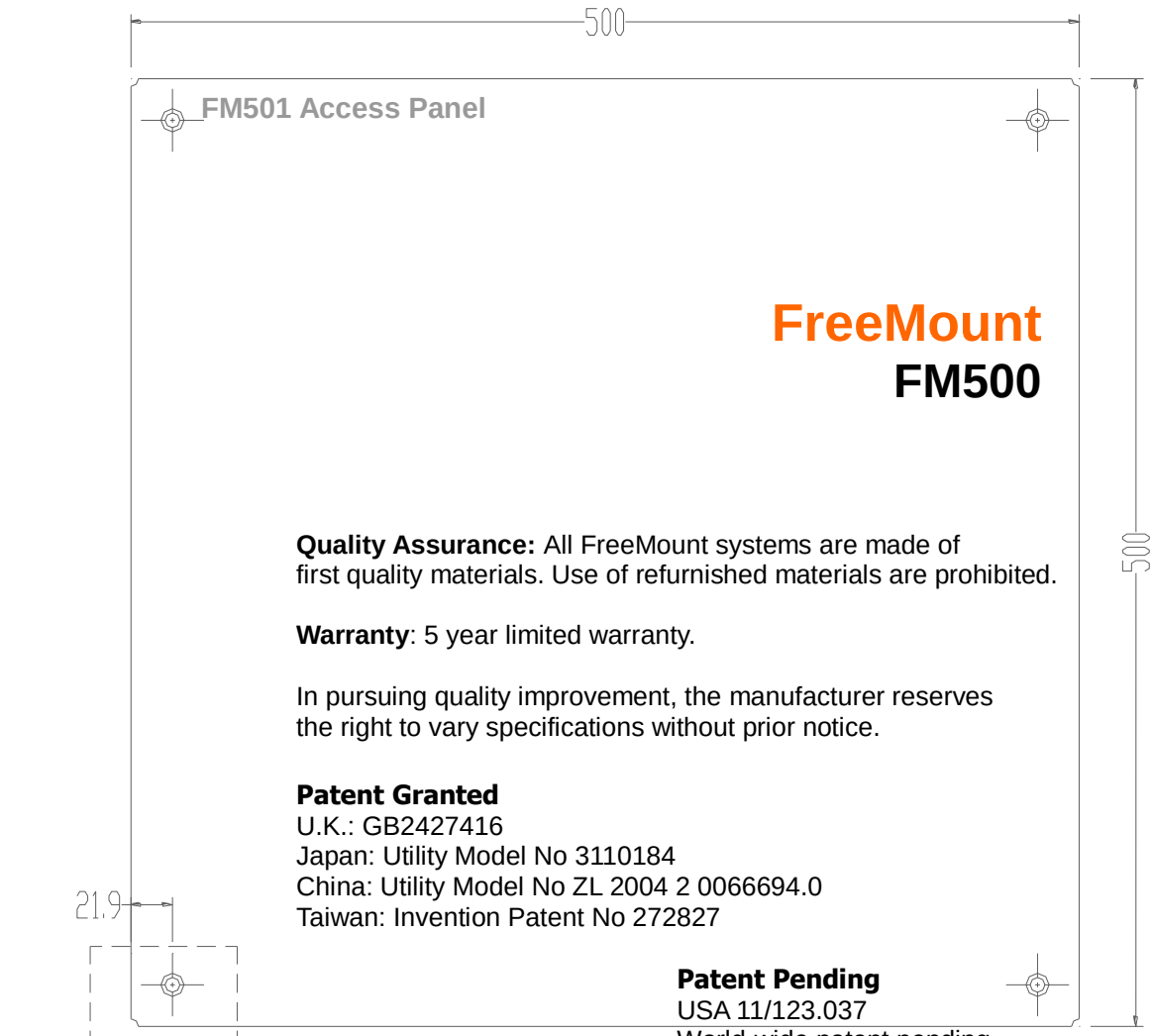
System: Netfloor FreeMount FM500
Module set: 500 mm x 500 mm
System height: 75 mm ~ 200 mm
System weight: avg. 36 ~ 38 kg / per sq. meter
Flammability: non-combustible
Loading property

	Concentration load	Concentrate ultimate load	Uniform load
FM500-3000	3.0 kN < 2.5 mm depression	> 6.0 kN	12 kN / m^2
FM500-4500 (Special Run)	4.5 kN < 2.5 mm depression	> 9.0 kN	20 kN / m^2

Main Components:
FM501 access panel: size 500 mm x 500 mm, thickness 28 mm,
Welded form full steel, top plate 0.6 mm thickness, bottom plate 0.6 mm thickness, corrosion resistance treatment by powder-coating. 4 mm radius notch at angles of the panel.
FM502 outlet panel:
size 500 mm x 500 mm, thickness 28 mm, with 23 mm x 26 mm opening at two sides.
Welded form steel cementitious access panel, corrosion resistance treatment by powder coating. 4 mm radius notch at angles of the panel. For office and school application, standard composition of access panels is 9 x FM501 plus 1 x FM502, i.e. one piece FM502 for 2.5 sq. meters.
FM-lid: to conceal openings at 2-sides of FM-502, and as exit for cables extension from access floors.
Made of re-enforced polycarbonate plus ABS. Each FM-lid shall be capable to exit five 5 mm diameter data wires, or two 7 mm diameter power cable.
FM-Pedestal: consists of headset and column-set.
headset: aluminum headset for corner-locking by access panels . Rubber-pad at top, and 6 mm hollow hexagon socket-set-screw embedded at upper inside.
column-set: 16 mm diameter special steel stud, by 5 mm hexagon notch at top of the column. 11 mm height half cone-shape plastics at bottom, holding by flat-head screw which locking onto steel stud at bottom.
FR-pedestal: for perimeters installation, and as supporter under access panel, composed of flat-top aluminum head-set and steel column-set.

Height adjustment: by using 5 mm hexagon key wrench to adjust from top.
System fastening: by using 6 mm hexagon key wrench to fasten socket-set-screw onto column-set mechanically from top.
Accessories:
Utility floor box, PVC trim to seal cutting panel, fastening screw, and all accessories shall be supplied by the manufacturer or approved equivalent.
Applications:
The system shall be light-weight, non-glue to sub-floors, fastening and height adjusting above the access floors, and be suitable to install on all type hard or resilient sub-floors such as concrete slab, PVC tile, sheet vinyl, granite, marble, ceramic tile, and etc.

Environment Protection:
The system shall be non-glue installation, non-pollution to sub-floors. In the event of re-location, the system shall be 100% re-usable, and no pollution, no damage to original sub-floor.
Floor Coverings:
Floor coverings shall be commercial rate modular carpet tile, or commercial rate vinyl tile thickness not less than 4.5 mm.



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Quality Assurance: All FreeMount systems are made of first quality materials. Use of refurnished materials are prohibited.

Warranty: 5 year limited warranty.

In pursuing quality improvement, the manufacturer reserves the right to vary specifications without prior notice.

Patent Granted
U.K.: GB2427416
Japan: Utility Model No 3110184
China: Utility Model No ZL 2004 2 0066694.0
Taiwan: Invention Patent No 272827

Patent Pending
USA 11/123.037
World-wide patent pending

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