



BENNER ACCESS FLOOR SYSTEM



**The Best Quality of High Efficiency
& Low Maintenance Materials**



Global Economy. Global Solutions.

Best Benner Building

(787) 962-3419

STEEL CEMENTITIOUS PANEL



50 OA PANEL



Structure

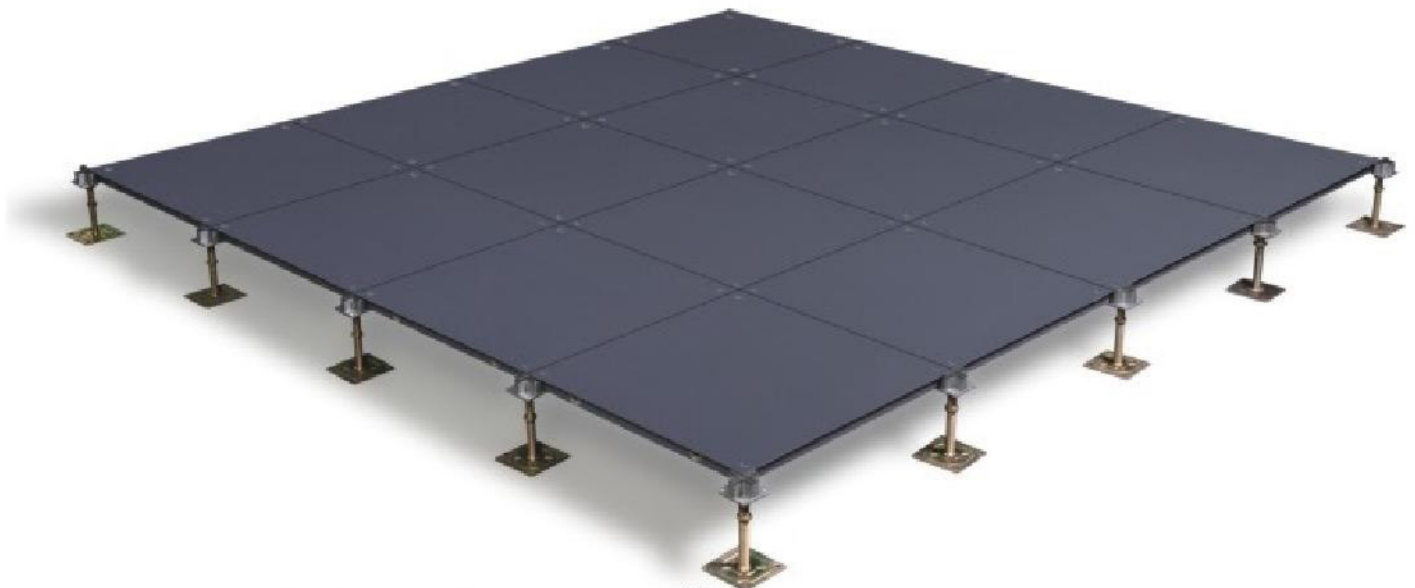
50 OA panel is made of steel plate, top to be SPCC material, bottom to be ST14 material, after pan formed and joined together by resistance welding, the panel is coated with epoxy paint, then infilled with light cement.

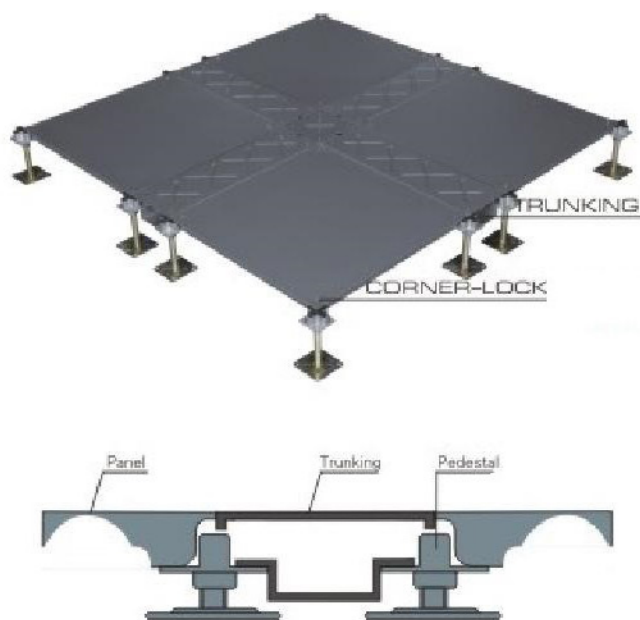
Size

500mm×500mm

Feature

- All-steel structure, nice loading capacity
- Excellent fire resistance ability
- Good dimension accuracy, panel can be interchangeable

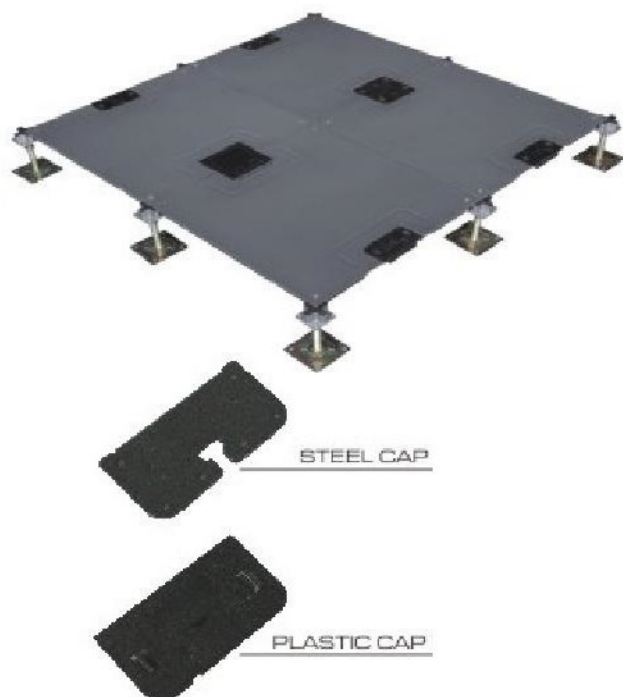




50-A-C5 PANEL

Wire Trunking System

A workstation can be easily and quickly relocated with cable management without disruption. Convenient for connecting wire at any point without cutting floor. Suitable for all kinds of plug socket terminals. Adjustable wire-connected location.



50-C2 PANEL

Feature

OA access floor system effectively reduces energy cost and improves inside air quality, makes it to be green office environment.



50



50



50-C2



50-C2

Type		Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load		Remarks
International		mm	N	N	N	NMF	10	10000	(CISCA)
OA668	HDG500 28QG	500 × 500 × 28	≥2990	670	≥8890	≥12500	2215	1548	
OA800	HDG500 28QG	500 × 500 × 28	≥3596	670	≥10799	≥19796	2959	2215	
OA1000	HDG500 28BG	500 × 500 × 28	≥4498	670	≥13494	≥23294	3596	2959	

STEEL CEMENTITIOUS PANEL



50-B PANEL

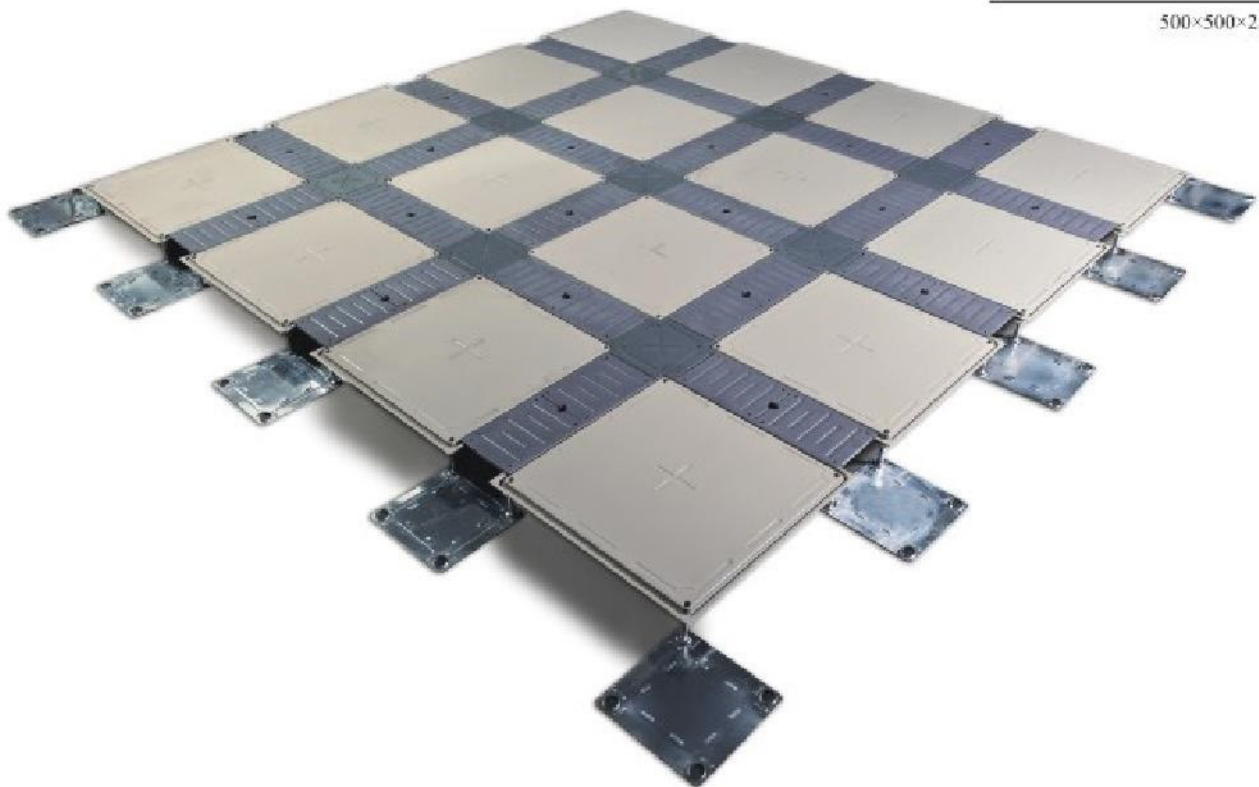


Structure

50-B panel is elevated innovation and breakthrough, comparing with traditional access floor system. The new 50-B series has the same advantage of 50 panel, but more convenient, environmental protected.

Size

500×500×25mm



Product Description

50-B panel is supported by 4 pedestals and flank cap and central cap.



Center Cap

Feature

- Environmental protected, economical and recyclable.
- Light weight, 1/2 to 2/3 of common access floor.
- Good conductivity and air leakage, flexible trunks for wires and cables.
- Specially designed for low finished flooring height



Flank Cap



Trunking



Outlet box



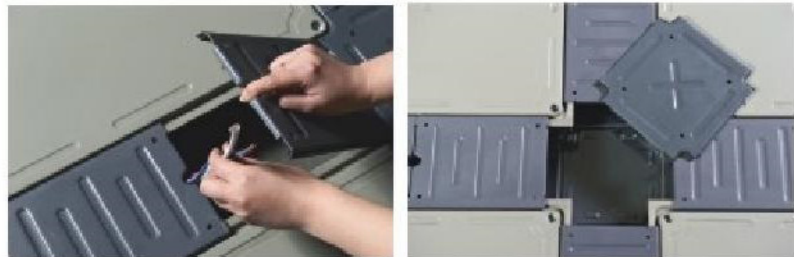
Base Connector



Screw Pedestal

Trunking

Trunking for wires is one of the advantages of trunking floor. Cover flank covers on basic panel edges after lying wires in trunks. Each panel stands separately, making it very convenient to lie flank cover before or after wires.



Type		Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load		Remarks
International		mm	N	N	N	N/M ²	10	10000	(CISCA)
QA668	HDG500 25QG	500 × 500 × 25	≧2990	670	≧8890	≧12500	2215	1548	
QA800	HDG500 25QG	500 × 500 × 25	≧3596	670	≧10799	≧19796	2959	2215	
QA1000	HDG500 25BG	500 × 500 × 25	≧4498	670	≧13494	≧23294	3596	2959	

STEEL CEMENTITIOUS PANEL



60 OA PANEL



Structure

60 OA panel is made of steel plate, top to be SPCC material, bottom to be ST14 material, after pan formed and joined together by resistance welding, the panel is coated with epoxy paint, then infilled with light cement.

Size

600×600×35mm

Feature

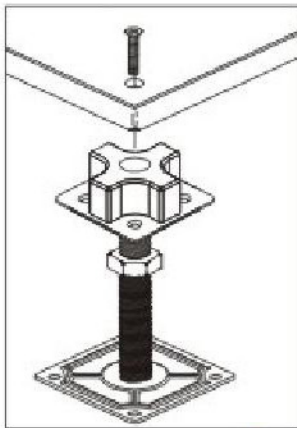
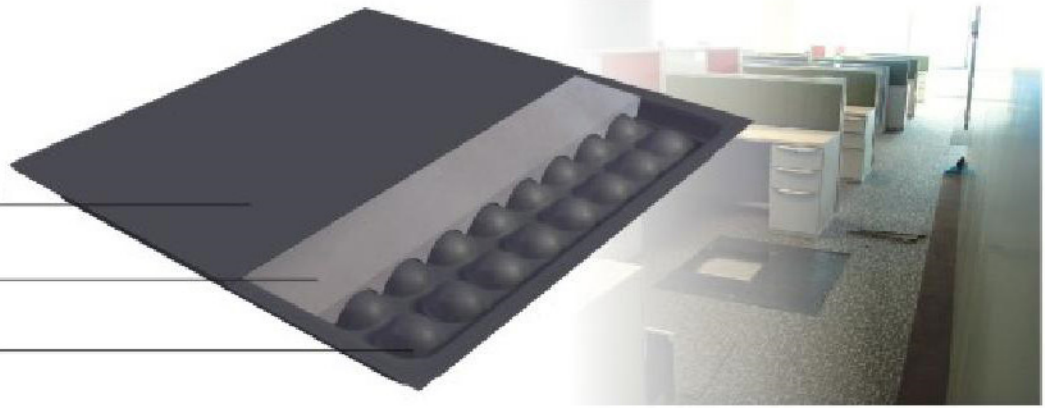
Embossment structural. Enhance the concentrated load capability.



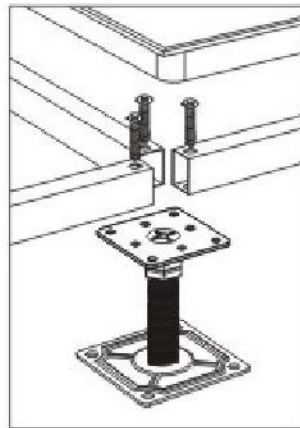
SPCC steel

Light cement

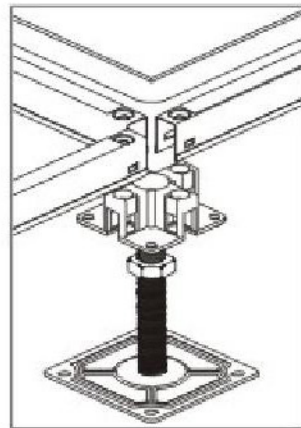
ST14 steel



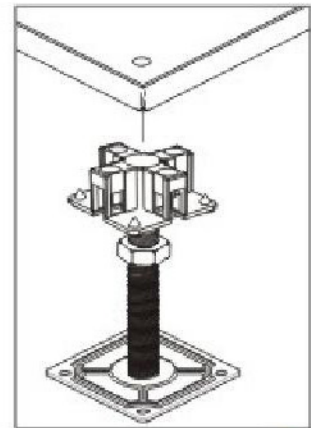
CORNER LOCK SYSTEM



BOLT-ON STRINGER SYSTEM



SNAP-ON STRINGER SYSTEM



FREE STANDING SYSTEM

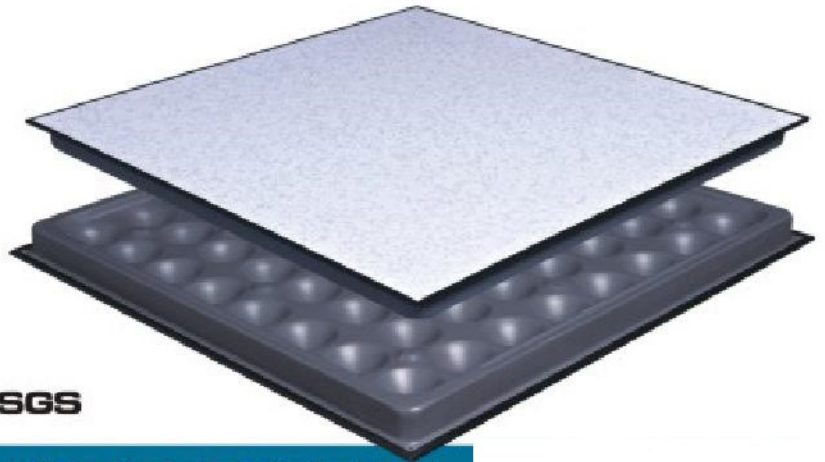
Structure

- Screw down design supports the system effectively and makes the installation easily and stable.
- The load is transferred directly onto the center of pedestal column.
- Different types of understructures are available for install OA panel system.



Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	Remarks	
International	mm	N	N	N	NM ²	10	10000	
SC668	HDG600 350G 600 × 600 × 35	≧ 2990	670	≧ 8890	≧ 12500	2215	1548	(ICISCA)
SC800	HDG600 300G 600 × 600 × 30	≧ 3596	670	≧ 10799	≧ 19796	2959	2215	
	HDG610 35BG 610 × 610 × 35							
SC1000	HDG600 35ZG 600 × 600 × 35	≧ 4498	670	≧ 13494	≧ 23294	3596	2959	
	HDG610 35ZG 610 × 610 × 35							
SC1250	HDG600 35ZG 600 × 600 × 35	≧ 5595	670	≧ 16797	≧ 33084	4498	3596	
	HDG610 35ZG 610 × 610 × 35							
SC1500	HDG600 35ZG 600 × 600 × 35	≧ 6693	670	≧ 20090	≧ 42581	5595	4498	
	HDG610 35ZG 610 × 610 × 35							
SC2000	HDG600 35ZG 600 × 600 × 35	≧ 8898	670	≧ 26685	≧ 49784	6693	5595	
	HDG610 35ZG 610 × 610 × 35							
SC2500	HDG600 35ZG 600 × 600 × 35	≧ 11093	670	≧ 33290	≧ 58280	8898	6693	
	HDG610 35ZG 610 × 610 × 35							

STEEL CEMENTITIOUS PANEL



LAMINATE PANEL



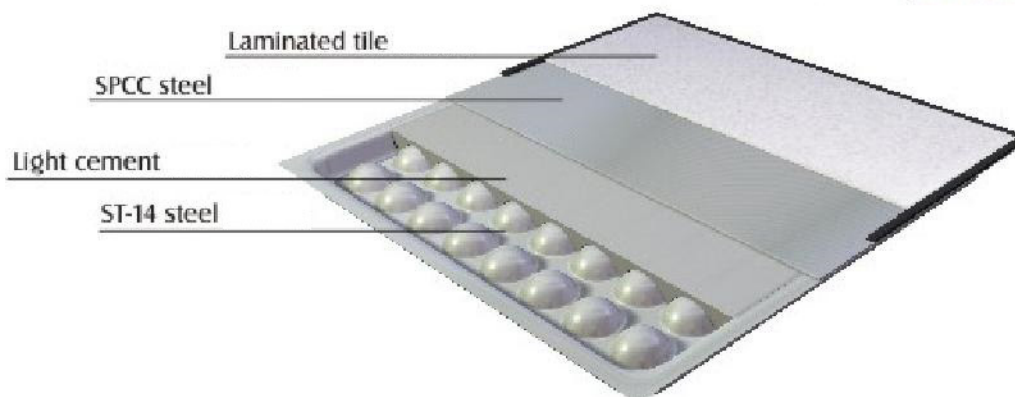
Feature

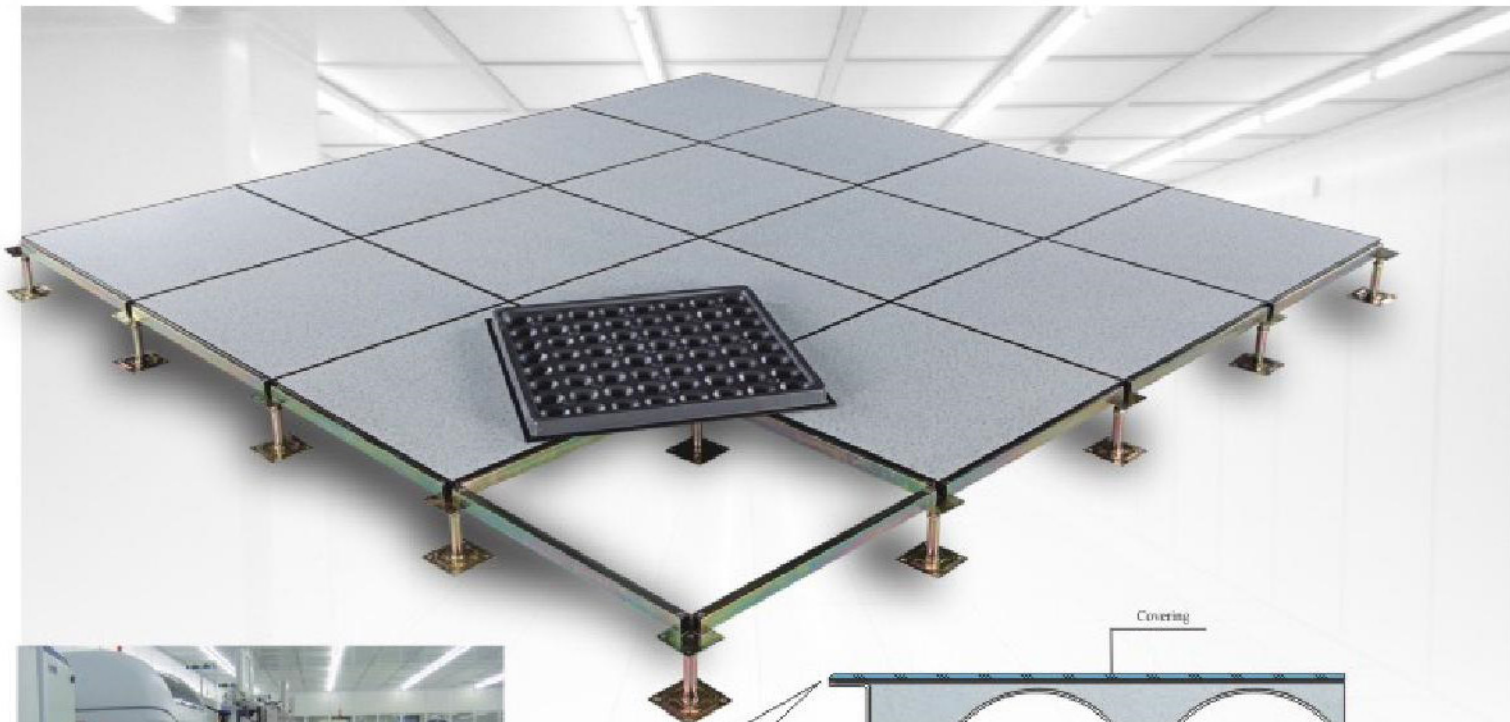
- Used for computer room, data center and communication center
- Excellent rolling load & ultimate load performance
- Light weight cement makes panels solid and quiet
- Black/grey epoxy paint finish for long time protection
- Class A flame spread and smoke development rating
- Convenient installation supplies an excellent solution for office integrity, wiring and data cable service



Wide range finishes available

- High Pressure Laminate
- Conductive vinyl tile
 - Ceramic
 - Carpet tile
 - Linoleum
- Granite/Marble
- PVC

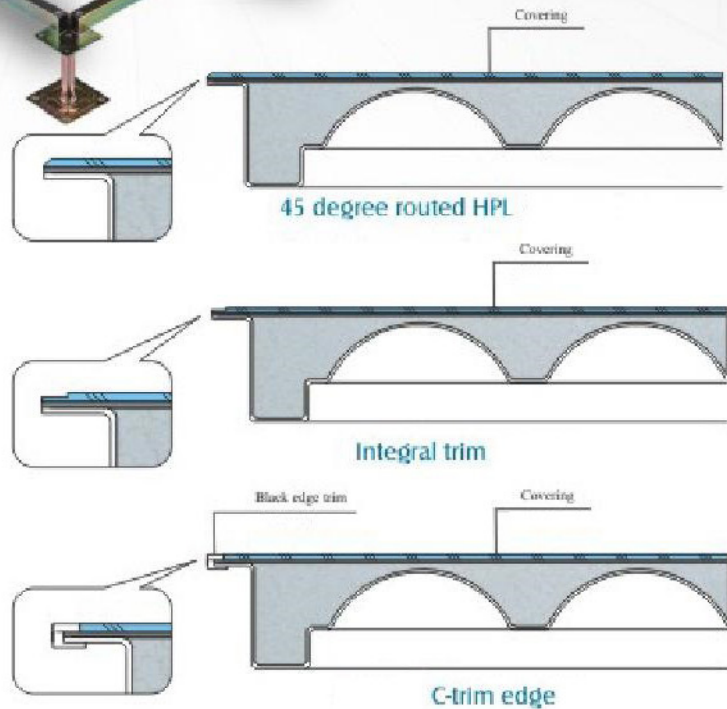




Control center

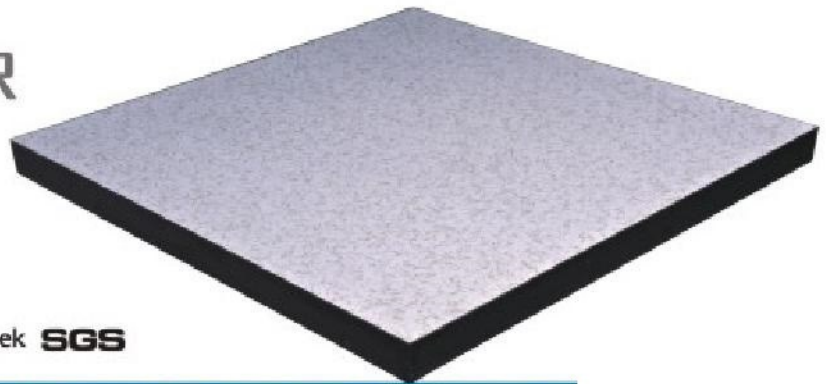


Communication center



Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	Remarks
International	mm	N	N	N	N/M ²	10 10000	
SC668	HDG600 35QG 600 × 600 × 35	≈ 2990	670	≈ 8890	≈ 12500	2215 1548	Floor system resistance 1 × 10 ⁶ –1 × 10 ⁷ ≥ 60mm
SC800	HDG600 30QG 600 × 600 × 30	≈ 3596	670	≈ 10799	≈ 19798	2959 2215	
	HDG610 35BG 610 × 610 × 35						
SC1000	HDG600 35ZG 600 × 600 × 35	≈ 4498	670	≈ 13494	≈ 23284	3596 2959	
	HDG610 35ZG 610 × 610 × 35						
SC1250	HDG600 35ZG 600 × 600 × 35	≈ 5595	670	≈ 16797	≈ 33084	4498 3596	
	HDG610 35ZG 610 × 610 × 35						
SC1500	HDG600 35ZG 600 × 600 × 35	≈ 6693	670	≈ 20090	≈ 42581	5595 4498	
	HDG610 35ZG 610 × 610 × 35						
SC2000	HDG600 35ZG 600 × 600 × 35	≈ 8898	670	≈ 26685	≈ 49784	6693 5595	
	HDG610 35ZG 610 × 610 × 35						
SC2500	HDG600 35ZG 600 × 600 × 35	≈ 11093	670	≈ 33290	≈ 58280	8898 6693	
	HDG610 35ZG 610 × 610 × 35						

WOODCORE ACCESS FLOOR

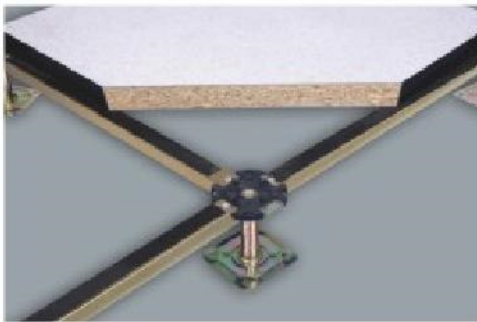


PVC SEALED PANEL



Structure

Woodcore access floor consists of high-density(720Kg/m³) chipboard. Galvanized steel sheet/aluminum foil is bonded to the bottom of the chipboard. HPL or PVC is stuck to the top of the chipboard, four edges are sealed with PVC edging strip.

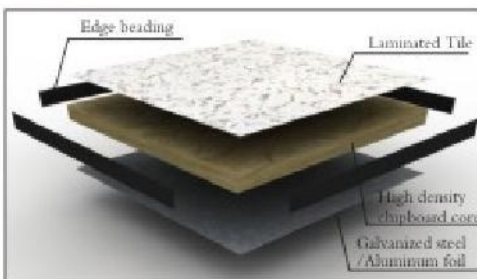


Size

600×600×40mm
600×600×30mm

Feature

- Light weight, small noise when working
- Dimension accuracy with nice interchangeability.
- Strong loading capacity, fire resistance B2 and excellent anti-static properties.
- Good sealing and water-proof.



Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	
International	mm	N	N	N	N/M ²	10	10000
Light duty	600 × 600	≥2990	670	≥8890	≥12500	2215	1548
Medium duty	800 × 600	≥3596	670	≥10799	≥19796	2959	2215
Heavy duty	800 × 600	≥4498	670	≥13494	≥23294	3596	2959

WOODCORE ACCESS FLOOR



ENCAPSULATED PANEL

Structure

Floor panel is encapsulated to provide full steel encasement, steel to be high quality galvanized steel sheet as top and bottom. High density chipboard as the core.



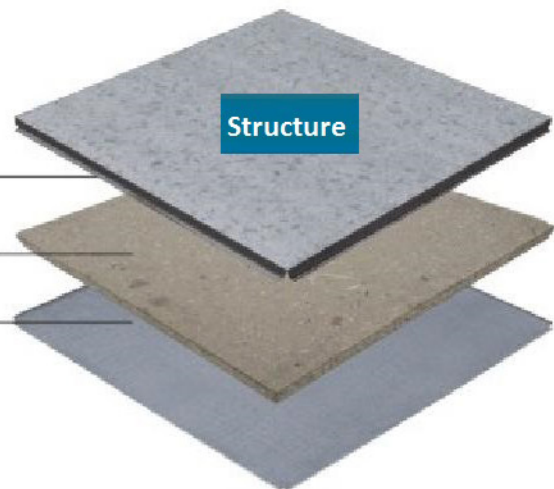
Size

600×600×30mm
600×600×25mm

Galvanized steel

Chipboard core

Galvanized steel



Application

- Woodcore panel is widely used in high-grade rooms, such as banks, telecommunication centers, smart offices and computer rooms.
- This panel is particularly suitable for areas of high humidity.
- High dimension accuracy and environmental proof.

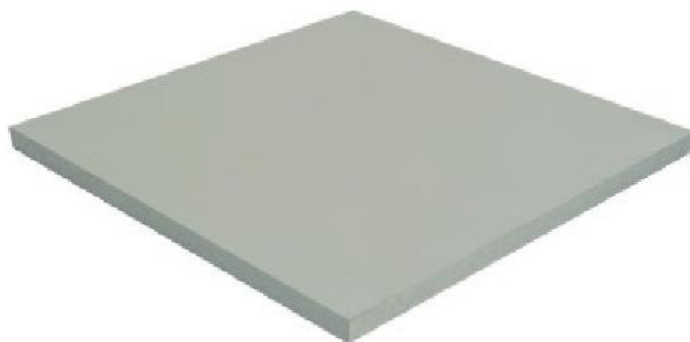


Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	
International	mm	N	N	N	N/M ²	10	10000
Light duty	600 × 600	≥ 2990	670	≥ 8890	≥ 12500	2215	1548
Medium duty	600 × 600	≥ 3596	670	≥ 10799	≥ 19796	2959	2215

CALCIUM SULPHATE ACCESS FLOOR



ENCAPSULATED PANEL



Structure

Encapsulated with high density fiber calcium sulphate core.

Size

600×600×30mm



Feature

- Full steel encasement and good sealing.
- Constituted by all steel sheet, good loading capacity.
- High dimension accuracy and excellent interchangeability.
- Water-proof, fire-proof, antiseptis and sound insulation.
- Elaborated made and good decorative effect.

Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	
International	mm	N	N	N	NMF	10	10000
Heavy duty	600 × 600	≥4498	670	≥13494	≥23294	3596	2959
Extra Heavy duty	600 × 600	≥5595	670	≥16797	≥33084	4498	3596

CALCIUM SULPHATE ACCESS FLOOR



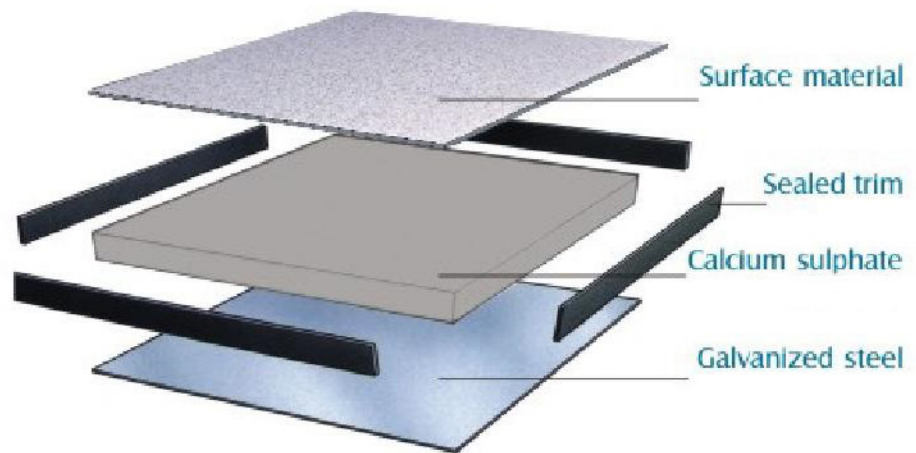
PVC SEALED PANEL

Size

600×600×30mm

Structure

Floor panel is encapsulated to provide full steel encasement, steel to be high quality galvanized steel sheet as top and bottom. High density calcium sulphate as the core.

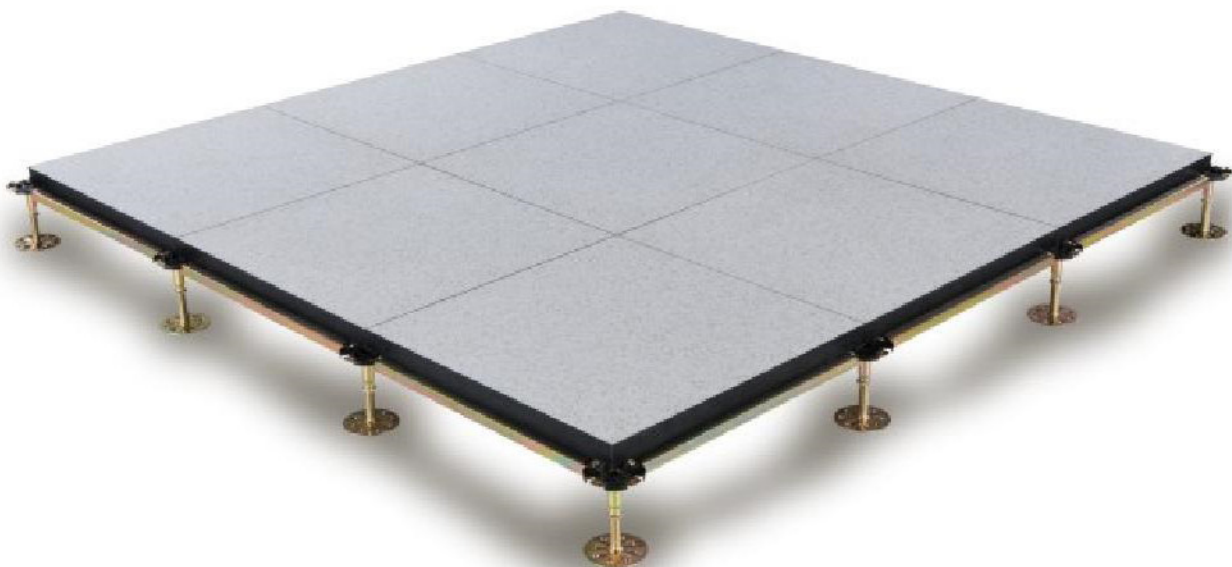


PVC panel

Floor consists of calcium sulphate core. Galvanized steel sheet/aluminum foil is bonded to the bottom. HPL or PVC is stuck to the top, four edges sealed with PVC edging strip.

Application

Anti-static calcium sulphate raised floor is widely used in telecommunication room, power station, computer room, factory clean room and other anti-static requiring places.



INORGANIC CEMENT FLOOR



INORGANIC CEMENT FLOOR

Size

500×500×25mm



Structure

FRC access floor is made of silicate, inorganic fiber, mineral fiber, quartz sand, etc, once - molded after high pressure.

The panel has no volatile toxic chemicals and radiation, and can be decomposed completely. Its service time is the same as the building.

Each panel has hole for wires, four corners supported by pedestals, with no stringers.

Good flatness and solid feeling. Finishes can be laminate flooring, PVC, carpet, etc.

Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	
International	mm	N	N	N	NMF	10	10000
Heavy duty	500 × 500x25	3000	3000	≥ 9000	≥ 12500	2215	1548
Extra Heavy duty	500 × 500x25	5000	5000	≥ 15000	≥ 28598	4121	3210

INORGANIC CEMENT FLOOR

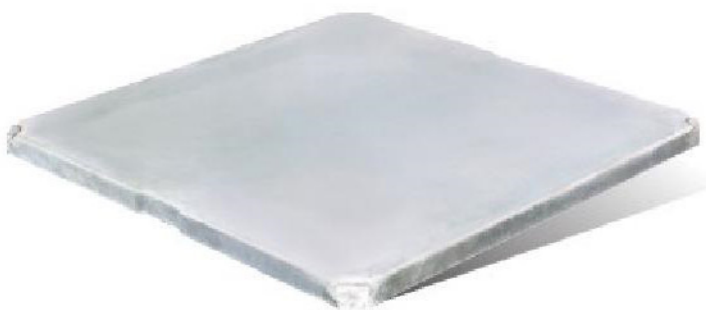


INORGANIC CEMENT FLOOR

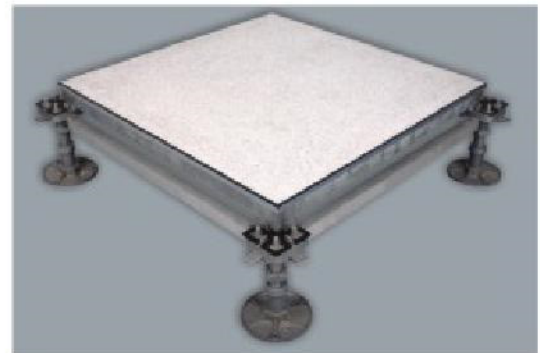
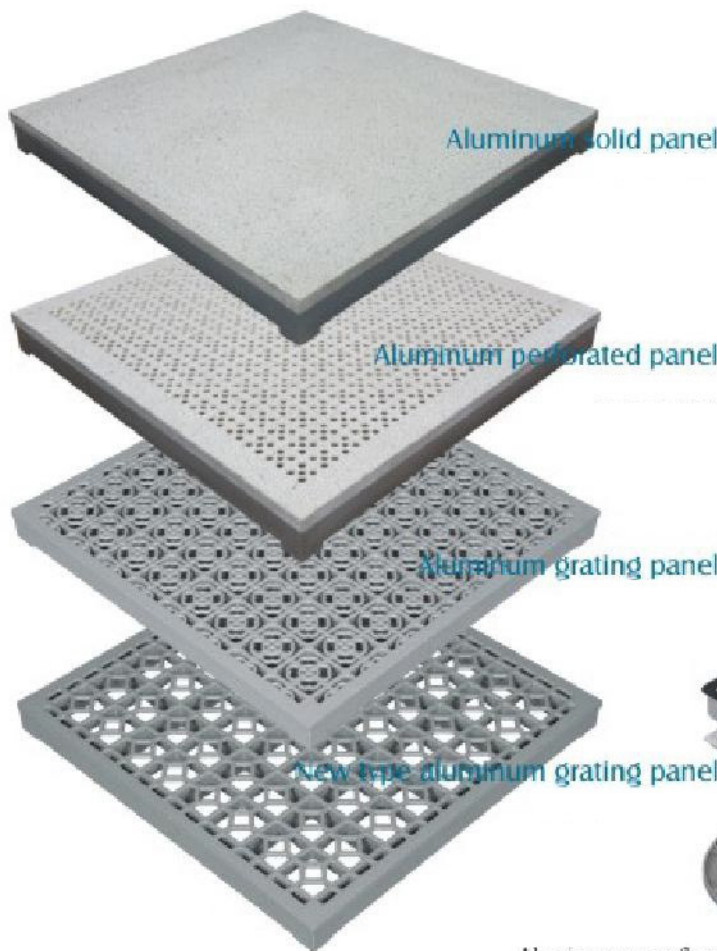


Feature

- Full steel encasement and good sealing.
- Constituted by all steel sheet, good loading capacity.
- High dimension accuracy and excellent interchangeability.
- Water-proof, fire-proof, antiseptis and sound insulation.
- Elaborated made and good decorative effect.



ALUMINUM ACCESS FLOOR



Size
600×600×50mm

Feature

Aluminum access floor is die-casting with aluminum ingot which is light and anticorrosion. Aluminum access floor is widely used in the Aerospace Center, Military Command Headquarter, Data Center and Clean Room.

Type	Size	Concentrated	Impact Load	Ultimate Load	Uniform Load	Rolling Load	
International	Material	mm	N	N	N	N/M ²	10 10000
A1000	ACD-12	600 × 600	≥4498	670	≥13494	≥23294	3596 2959
A1500	ACD-12	600 × 600	≥6693	670	≥20090	≥42581	5595 4498

UNDER STRUCTURE



Stringers

Stringers provide lateral resistance to heavy rolling loads & seismic loading.

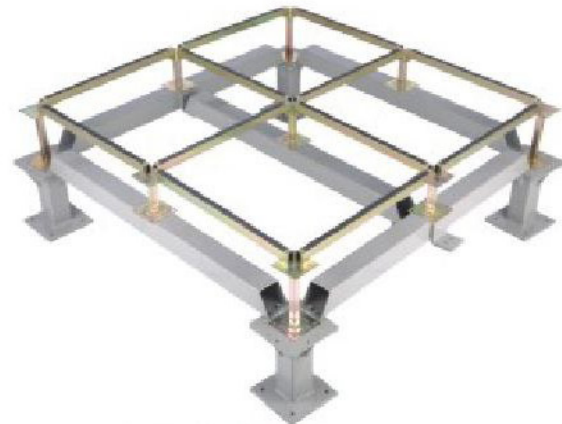


Heavy pedestal



C01 C02 C03 C04

Cross head pedestal



Seismic pedestal



F06 F01 F02 F05

Flat head pedestal



W03 W05 W07 W09

Round head pedestal

Finished flooring height (FFH) from 80mm to 2,000mm is available, with high loading strength.



Ramp pedestal

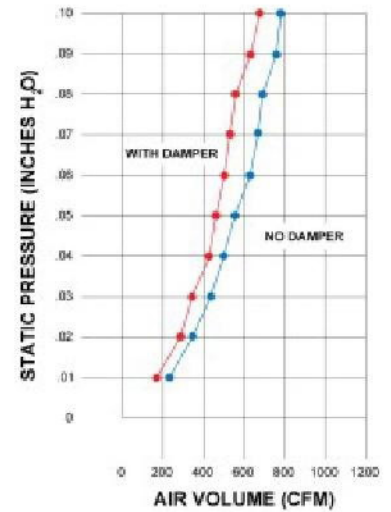
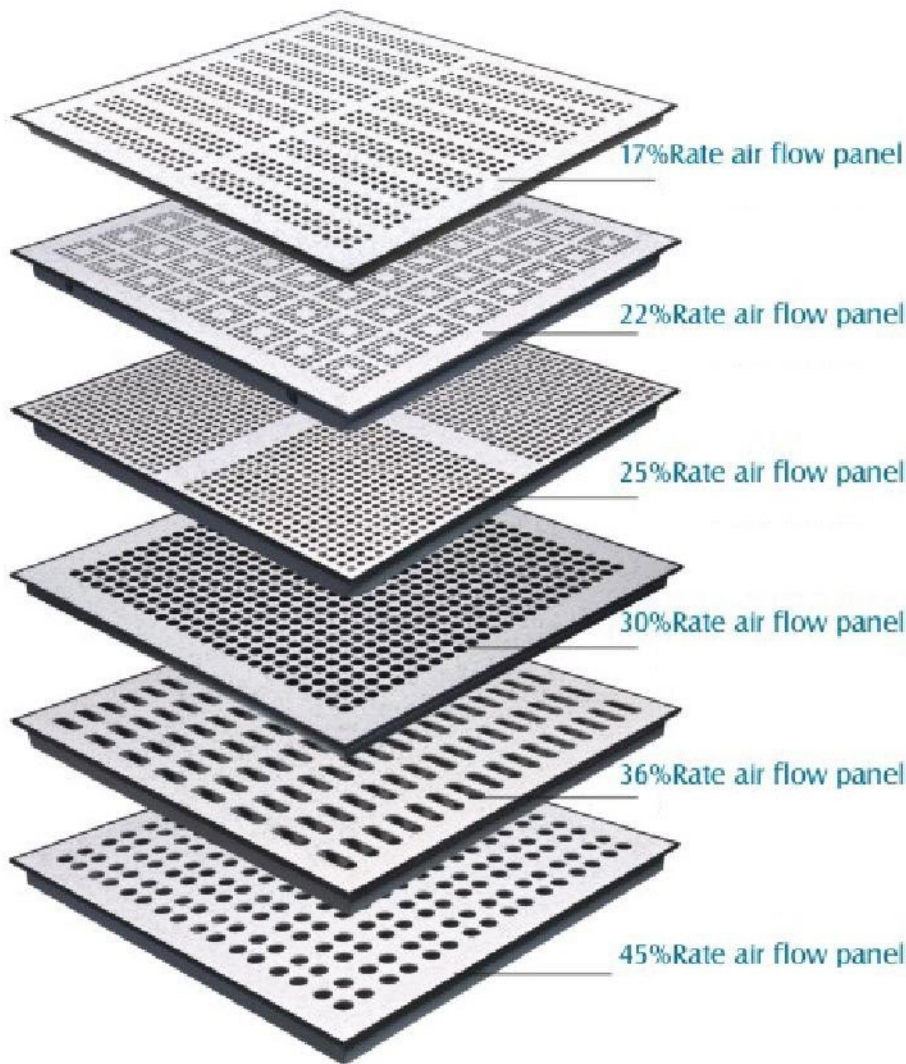
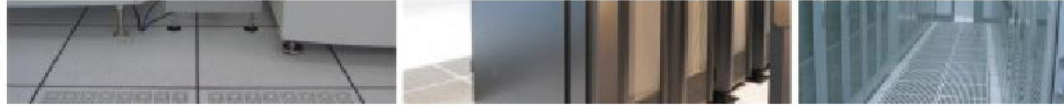
Pedestal bracing



Φ38 Φ32

Bracing clamp

AIR FLOW SYSTEM



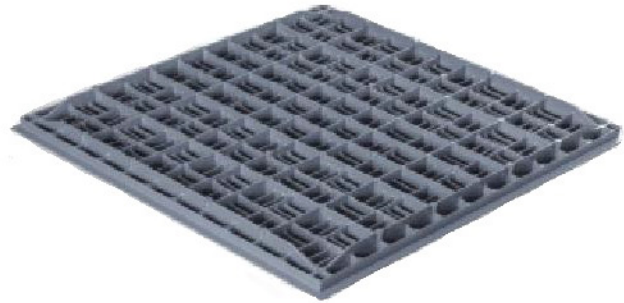
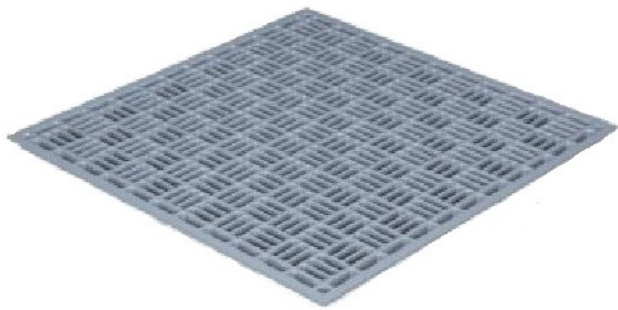
Size

600 × 600 × 35mm
610 × 610 × 35mm

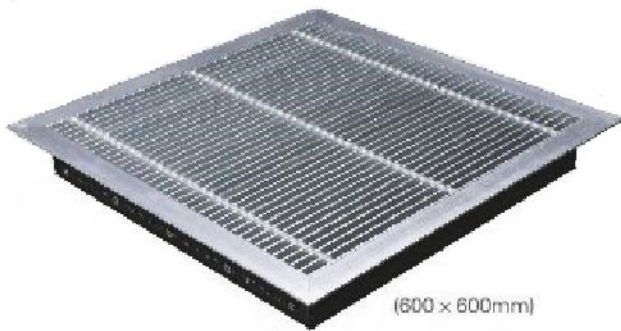
Steel perforated panel is specially designed to allow air flow through the access floor up to the equipment.

Feature

Provide superior cooling for managing heat loads in mission critical facilities. Available with top surface adjustable dampers. The steel perforated panels are same size and finish as the solid panel, so they are available with High Pressure Laminates, Vinyl and rubber floor coverings interchangeable with woodcore panel/calcium sulphate panel.



56% Opening Rate Die-Casting aluminum grate panel
(interchangeable with steel panel)



(600 × 600mm)



(600 × 300mm)

Aluminum Grille



Air Diffuser



Sliding Damper



Round Damper



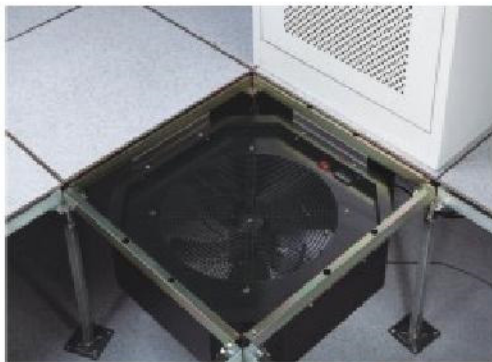
Opposite Open Damper
(for aluminum grate panel and air grille)

AIR FLOW SYSTEM



Temperature Control VAV damper

FLOOR underfloor temperature control VAV damper is used to provide sufficient air to accommodate the peak energy demands of the rack, resulting in wasted bypass air and over-cooling during all less than peak conditions. The damper measures the incoming air temperatures at the face of the rack and adjusts the VAV damper to control the air flow and ensure that the temperature at the face of the rack is never above the maximum allowable set point provided by the user.



Temperature Control Fan System

FLOOR Air boosted Power Fan Unit is designed to provide a blast of cooling through an individual directional airflow panel. The temperature controlled fin units are available quad fan models. The fan has multiple control options to automatically turn on when conditions require additional cooling. This powerful solution is ideal for solving the toughest hot spots in a data center.

Fan Unit

Performance Characteristics

- Zero maintenance
- Installation can be carried out by IT staff
- Multiple control options for both models available
 - VN – client sensor network
- High Precision, Quick Response Temperature Measurement
 - User programmable set point
- Viewable Peak Temp for walkthrough check of each rack
- Infinitely variable fan speed from 0–100% for precise airflow control
 - Easily installs into either 24" or 60cm raised floor systems



Four-Fan Unit

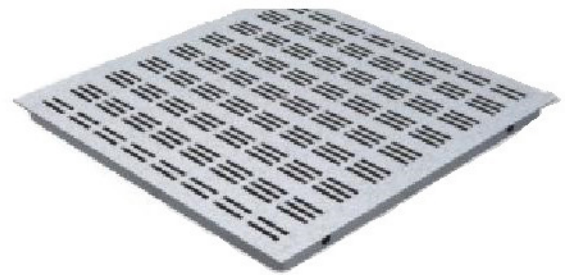
Product Overview

Directional Perforated Access Floor Panels to angle the air toward the equipment achieving a 93% Total Air Capture (TAC) rate by a standard server rack. This means 93% of the airflow delivered through the airflow panel is entering the face of the server rack, providing more capacity and energy efficiency of any other perforated airflow panel on the market.

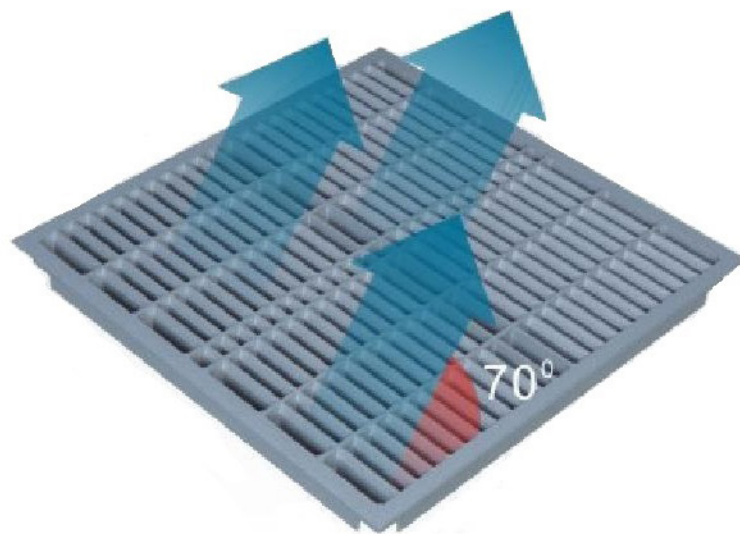


- 20% open area delivers 640m³/h at 25 Pa when installed without a damper.
- Directional air flow achieves a 93% total air capture.
- Cools over 8kW per rack.
- Over 40% annual fan energy savings.
- Reduces capital expenditures on cooling infrastructure by 40%.
- Available in 3 concentrated load ratings 800, 1000 and 1250 lbs.
- Easily integrates into an existing 24" raised floor system

20% Rate Directional Perforated Access Floor Panels



68% Directional Grate Panel



FLOORING ACCESSORIES



extensive choices of accessories, including electrical boxes, grommets, panel lifters and air diffuser and so on.



Round brush grommet



Surface brush grommet



Split integral grommet



Diameter 15cm

Diameter 19.5cm

Round Grommet



Square Grommet



Integral grommet



Single/Double cup lifter



Outlet box B



Outlet box C

Covering Material



High Pressure Laminate(HPL)



8192



8193



8194



8191



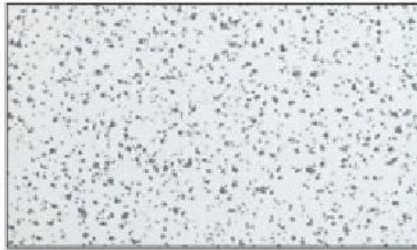
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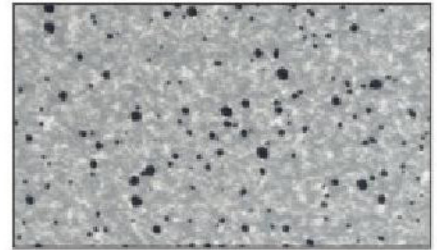
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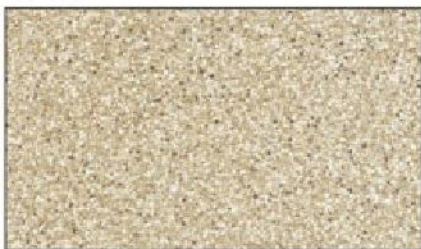
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8144



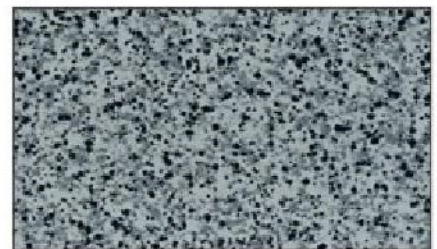
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8137



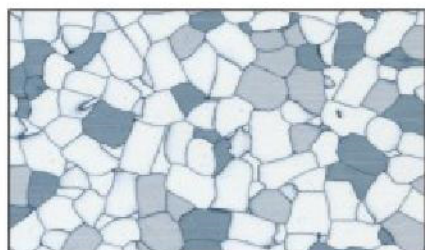
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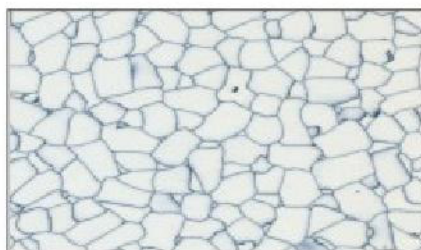
8117

Covering Material

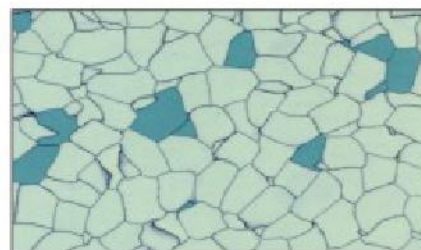
Conductive PVC tile



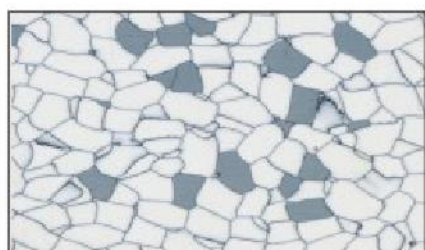
ZT-1101



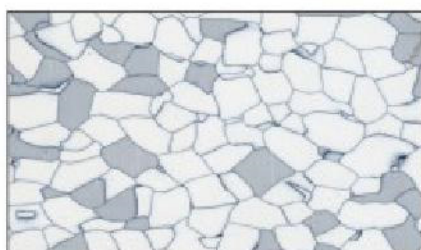
ZT-1103



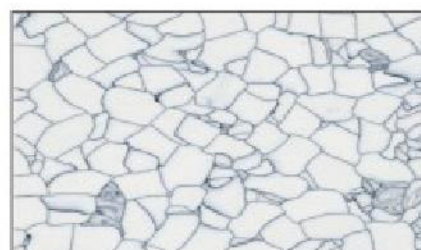
ZT-02



ZT-04

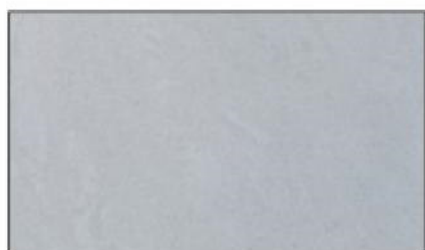


ZT-909



ZT-9022

Ceramic tile



Homogeneous vinyl



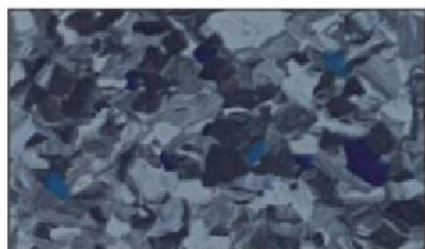
2058



2062



2070



2051



2060



2066

Covering Material



2073



2072



2050

Linoleum



3881



3882



3856



3858



3872



3876



3846



3825



3870

Granite



G665

Comparison of Different Panel

Performance		Steel cement panel	Steel hollow panel	Woodcore panel	Calcium Sulphate panel	Die-casting aluminum panel
Ultimate load		A	B	C	D	E
Safety factor		A	B	C	D	E
Overload protection		A	B	C	D	E
Fire rating		A	B	E	A	E
Panel size		B	B	B	B	A
Panel weight(bare finish)		C	A	A	E	A
Bare panel sound insulation		C	C	B	A	E
Walking feeling		A	B	A	A	B
Recycled content		B	B	D	A	E
*Support for Green building certificate		B	B	D	A	E
Cost efficiency		A	D	D	B	E
Cutting ease and cost		B	A	A	E	C
Application	Office	A	B	A	A	E
	Data center	A	B	D	B	B
	Education	A	D	A	B	E
	Casino	A	E	D	A	B
	Industrial cleanroom	B	E	E	E	A
	Library	A	C	B	A	E