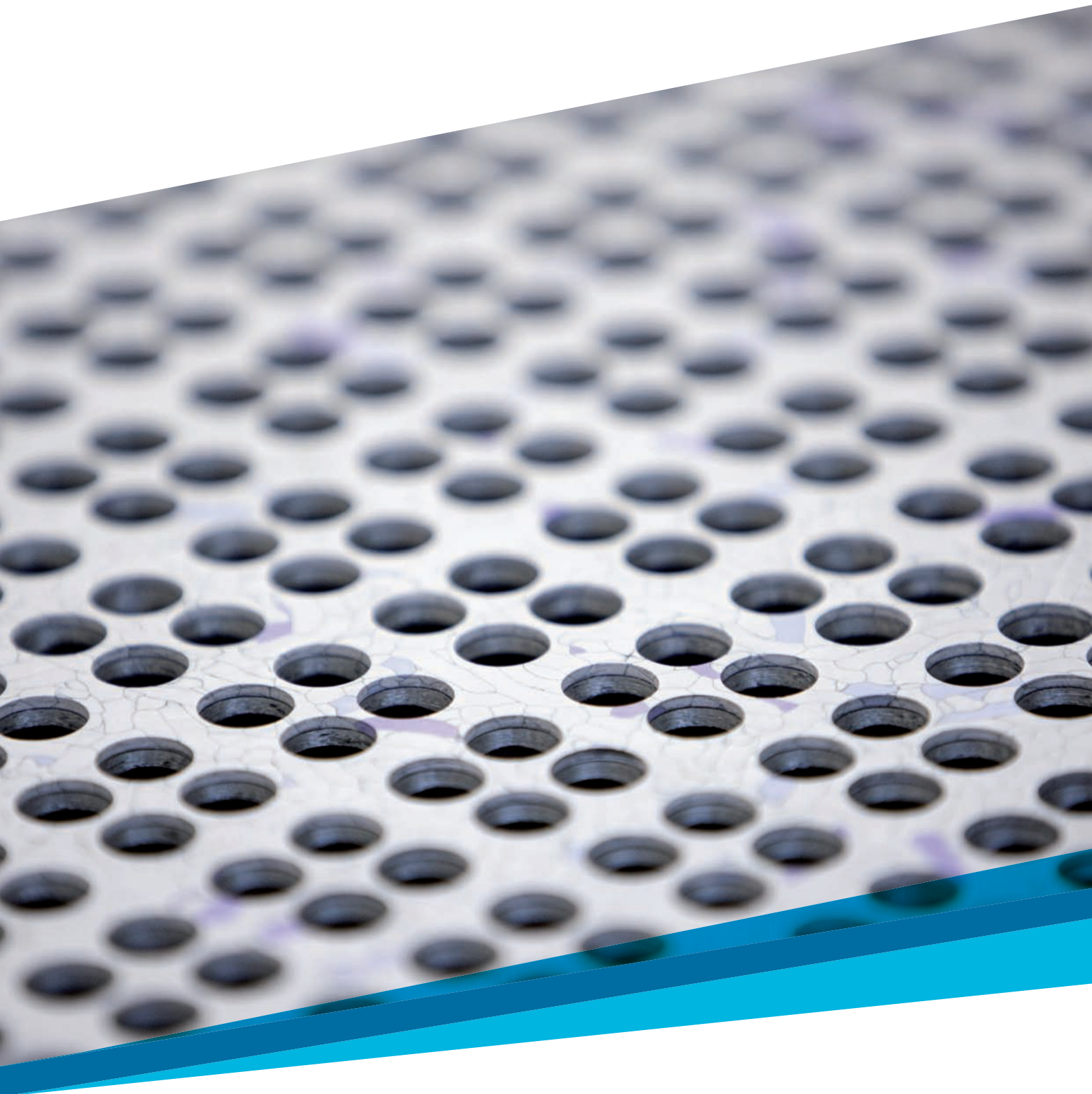




Raised Floor Systems Cleanroom Products

Exyte Technology



Strength and durability ...

Exyte Group at a Glance

With a history of more than 100 years Exyte Group is a global leader in engineering and project management specialized in the delivery of high-technology facilities. Our expertise in controlled and regulated environments is key throughout the facilities, plants, and factories we create.

We serve high-tech industries, including semiconductor, life sciences, and data center – having an outstanding reputation with the world's most technically demanding clients.

The Exyte Group manages projects of all dimensions and offers a full range of services from design to managing turnkey solutions. With our offices worldwide we meet the demands of our clients globally. In 2017, the core of Exyte Group generated sales of 2,5 billion euros with 5,000 highly experienced and motivated employees.

Exyte Technology

Exyte Technology is one of the world's global leading companies for cleanroom technology systems with extensive experiences in highprecision climate-control systems and contamination control in all industries with ultraclean production requirements.

We offer substantial experience in the semiconductor, photovoltaic, flat-panel, life science, automotive, IT, and food industries. Exyte Technology assists customers in every pro-cess phase: from consulting, engineering, manufacturing and commissioning to after sales services.

As a member of the Exyte Group, our worldwide sales and service network is a great advantage to our customers and enables us to support them in every stage of their critical production processes.

... to meet individual customer needs

Raised Floor Systems

Exyte Technology offers Raised Floor Systems which fulfill the high requirements of state-of-the-art cleanrooms with regard to contamination control and tool loads.

The manufacturing of semiconductors and flat panels requires a floor system as an essential part of the airflow concept as well as a reliable base for high static and dynamic tool loads. The aluminum raised floor systems distributed by us combine the advantages of the material aluminum with outstanding manufacturing quality and high productline diversity that meets all the requirements of our customers.

For your cleanroom projects, we can provide not only the right products but also consulting and engineering assistance for installation, tool move-in, hook-up and earthquake requirements of the floor system. We can offer a solution for the whole raised floor package, delivered from one source to avoid typical interface problems.

Floor Finishes

We advise and offer a wide range of floor finishes systems whereby with all we are equally focused on both the process and project needs and on our clients requirements.

Coating for aluminium raised floor system finishes

The possibilities of coating include:

- PVC or Caoutchouc
- Single and double component epoxy coating
- Conductive or non-conductive

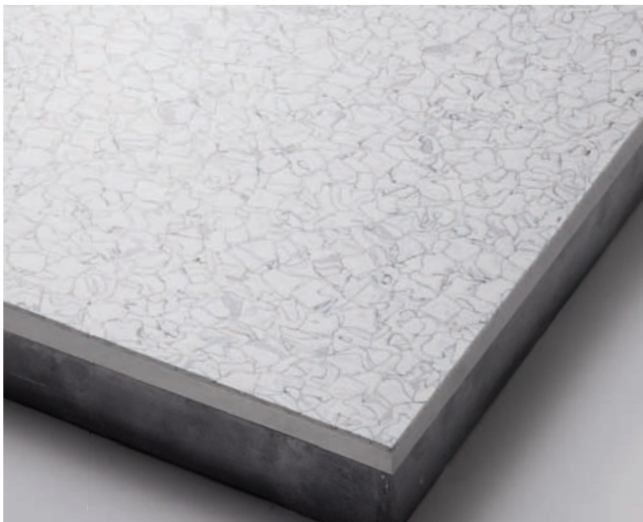
Coating for GMP suitable floor

- PVC or Caoutchouc
- Ceramic or stone ware
- Single and double component epoxy coating
- Pharma Terrazzo
- Conductive or non-conductive



Blind (Solid) Panel

For use in areas where extremely heavy loads are to be placed. The unique lattice structure of these solid panels enables weight to be distributed in an optimum way so as to support manufacturing equipment. The precision afforded by each panel allows for excellent accessibility and interchangeability when needed – yet they are durable and strong enough to withstand the concentrated loads found in semiconductor cleanrooms and other manufacturing environments.

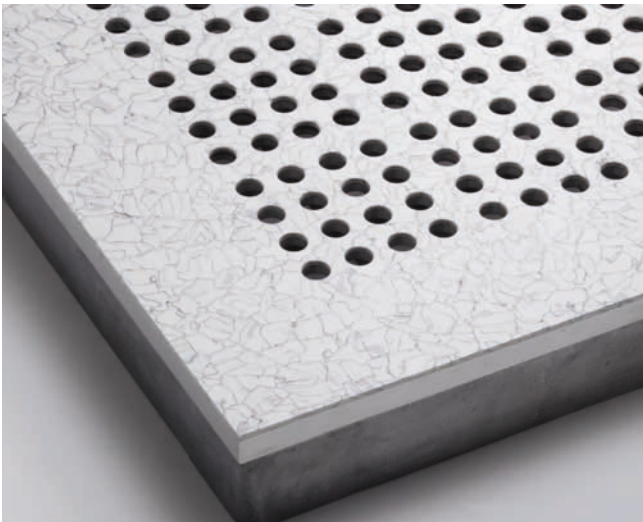


Advantages

- Precise manufacturing allows for excellent mobility and interchanging of panels
- Class A1 building material (non-combustible)
- Wide variety of finishing materials
- Unique manufacturing process provides high-quality yet low-cost components
- High load-bearing capacity with low deflection
- Easy-to-use material for subsequent cut-outs
- Long life cycle for economical usage
- Excellent electrical conductivity

Perforated Panel

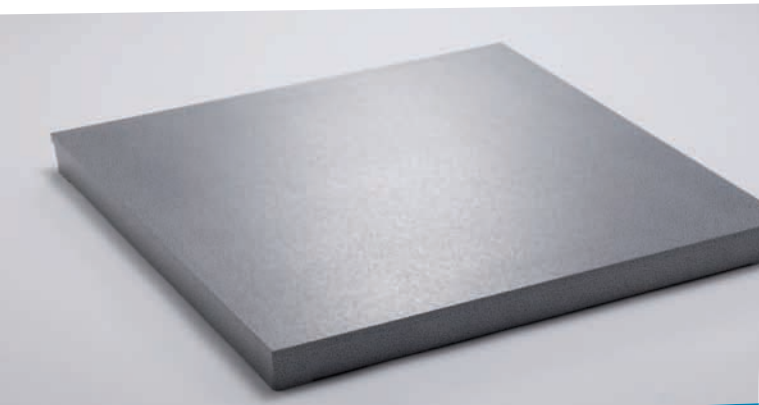
The perforated panel provides all the features and available options of our solid panel with the addition of either 1,296 or 1,024 chamfered holes to provide a nominal 18 ~ 38% open area in a non-directional pattern for airflow requirements in both computer rooms and cleanrooms. Completely interchangeable with solid and grating panels.



Advantages

- Existing solid panels can be refitted to perforated panels by applying ventilation openings with standard drilling equipment
- Manufactured with the highest precision
- Class A1 building material (non-combustible)
- Precisely drilled holes with chamfered edges

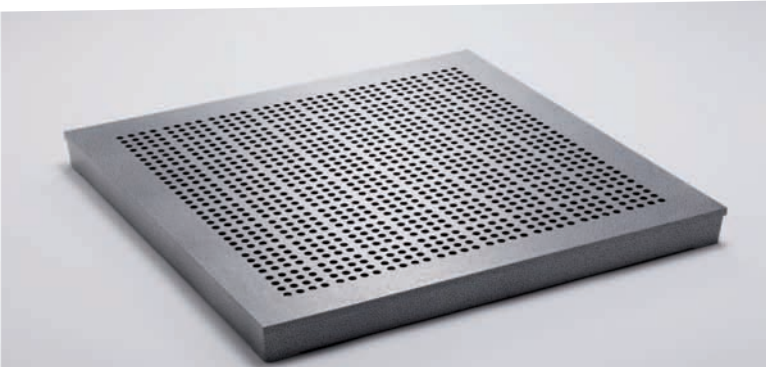
Solid Panel



Solid Panel



Perforated Solid Panel



Perforated Solid Panel



Grating Panel

Patented die-cast aluminum gratings provide excellent concentrated and rolling load performance and are available with electrical conductive coatings and platings resistant to chemicals and abrasion. The non-directional grating pattern offers unrestricted airflow through a nominal 49 ~ 54 % open area required in return air chases and ballroom design sub-micron cleanroom facilities. The bare grating weight of 12.50 kg is available in a size of 600 mm and is nominally 49 – 51 mm thick. The grating is completely interchangeable with solid and perforated panels for maximum room configuration and air-balancing flexibility.



Advantages

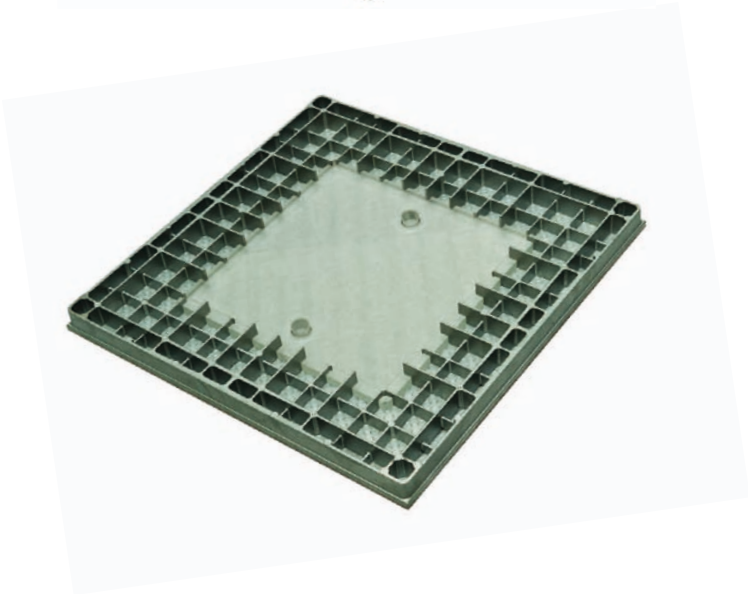
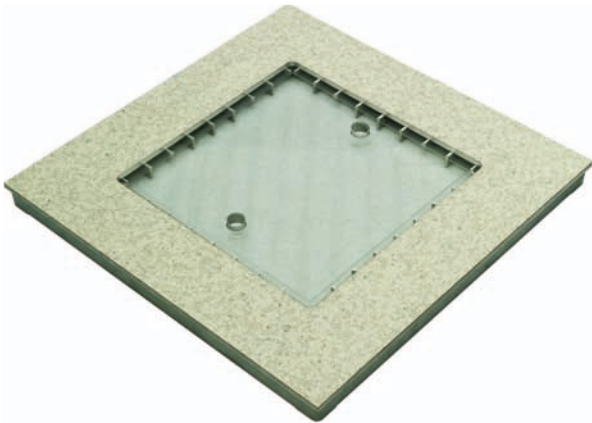
- Free space in cross section: 49 – 54 % (grid size 600 x 600)
- Manufactured with the highest precision
- Class A1 building material (non-combustible)
- High load capacity with low deflection
- Easy-to-use material for cut-outs
- Long life cycle for economical usage
- Excellent electrostatic discharge
- Can be combined with the perforated panel system
- Can be powder-coated in a wide variety of electrical conductive colors

Damper

Perforated and grating panels can be fitted with dampers. This unique damper system allows uniform balancing of air throughout the room or around workstations and manufacturing tools. All adjustments are made from above using a flat head screwdriver.

Acrylic Cover

All panel types can be fitted with an acrylic cover to enable quick and handy access to equipment devices located under the raised floor.



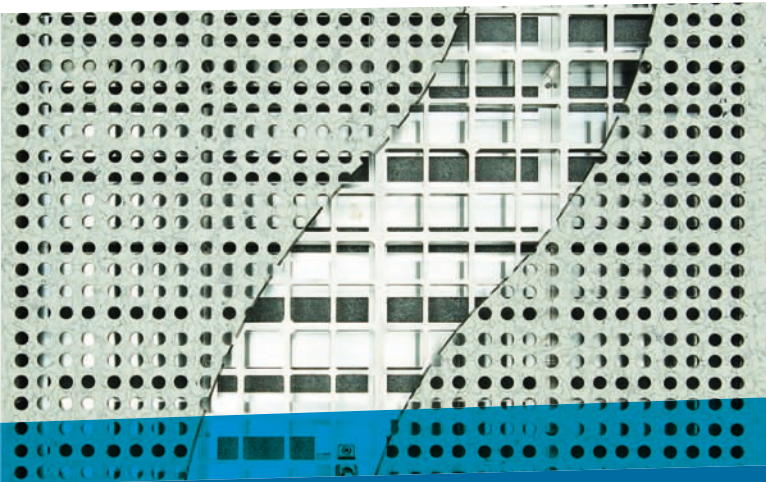
Grating Panel



Grating Panel



LC opening with Damper topside



LC bottom side with Flat Damper



Substructure – Pedestal Systems

Pedestal Systems

- Compatible with solid, perforated and grating floors
- Pedestals available for all seismic environments
- Head assembly finishes: bare aluminum or e-coat
- Tube finishes: bare aluminum, e-coat or epoxy powder coat
- Base finishes: bare aluminum, e-coat or epoxy powder coat
- Axial load performance of pedestal assembly is 5,000 – 11,000 kg
- Available in a module size of 600 mm
- Finished floor heights from 160 – 1,800 mm

Aluminum Pedestal

The aluminum pedestal is used in applications where a non-ferrous material is required. The pedestal assemblies are compatible with all of our flooring products including solid, perforated and grating panels. The type of pedestal is chosen based on seismic zone, finished floor height and floor loading conditions.

The aluminum and aluminum / steel pedestals can be mixed in the same flooring without affecting the panels.

Advantages

- Non-ferrous material
- Can be easily cut onsite

Aluminum / Steel Pedestal

For other applications where an all aluminum pedestal is not needed, projects with a tight budget or sensitive cleanroom projects, a mixed aluminium / steel solution can be used. It consists of an aluminum head with steel stud and steel tube that works with a steel base plate assembly designed for highly seismic locations, high floor heights and heavy loading.

The aluminum and aluminum / steel pedestals can be mixed in the same flooring without affecting the panels.

Advantages

- For high area loads
- For extreme seismic requirements
- For high floor heights

Substructure – Stringers and Bracings

Aluminum (Steel) Stringers

Our aluminum stringers are made with extruded aluminum (steel stringers are galvanized steel profile) and designed to fit 600 mm systems. The stringers are used to provide lateral support only and are not intended to improve the vertical load carrying capacity of the panels.

The stringers do not establish the system spacing as the holes in the stringer tops are slightly slotted, allowing the stringers to conform to the size of the panels.

When used in cleanrooms, the stringers can feature an e-coat, epoxy powder coat or bare finish (steel stringers excluded). Both conductive and non-conductive coatings are available.

Bracing System

Additional strengthening of the substructure, particularly along the perimeter lines, in the form of additional bars or threaded rods which are clamped onto the base at an angle and mechanically fastened to the slab by anchor bolts to inhibit movement when the floor has to cope with high horizontal loads.

Reinforcement for Seismic Bracing

This bracing of the floor system is installed for heavily loaded areas such as tool move-in paths, heavy machine areas and seismic activity regions.

Advantages

- Designed to withstand heavy loads
- Applicable to existing raised floor systems
- Convenient installation
- Economical price and convenient replacement and maintenance
- Handy installation at points of the system

Heavy duty pedestal head

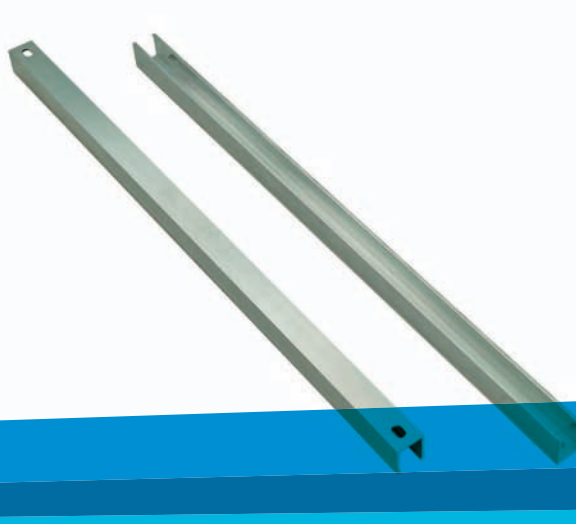
Aluminum pedestal

Steel pedestal

Aluminum Stringer

Steel pedestal with bracing detail

Aluminum pedestal with bracing detail



Additional Reinforcement

Post Type

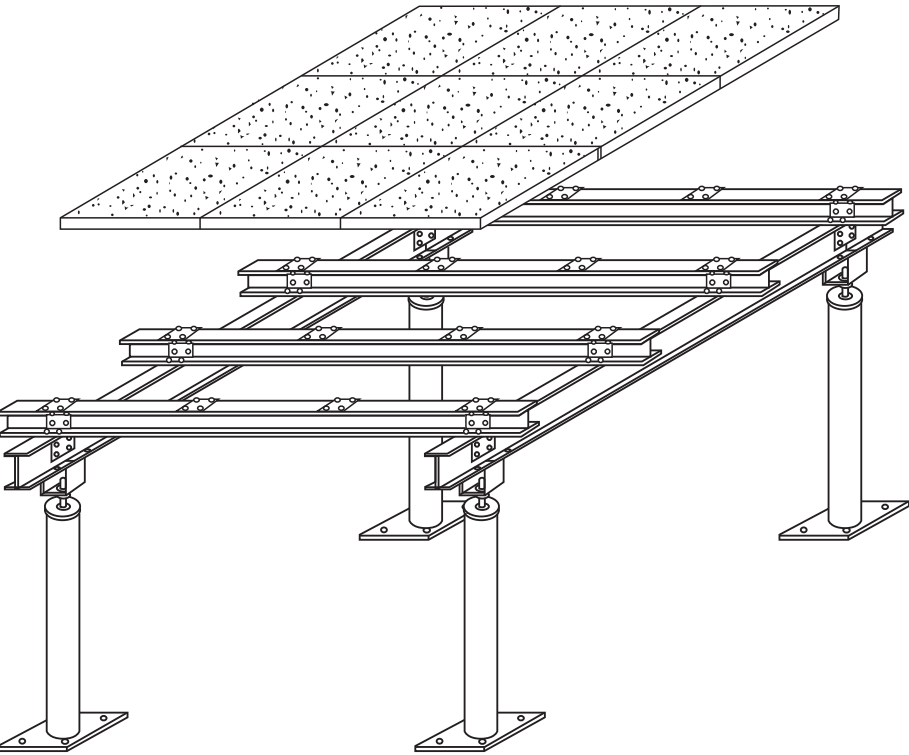
We have our own particular type of substructure system with sizes of 1,200, 1,800 and 2,400 mm. The upper and lower side beam can be coated with e-coating or epoxy powder. The height is adjusted using a bolt on the post. The base of the post can be attached to the subfloor with anchor bolts. The upper and lower beams are fastened with bolts, aluminum plates and insulation plates are placed on the beam in order to install raised access floor panels.

- Variable distance between posts
- Height range: 600 – 1,800 mm
- Convenient installation

Spanning

When installations beneath the raised floor such as pipes, air ducts or other utility lines are in conflict with the standard pedestal layout, the spanning system gives the possibility to stay within the standard layout using C-Channels on the pedestal heads to bridge these obstructions.

- Keeping the installation module of the raised floor
- Convenient installation using the existing pedestal
- Economical price and convenient remodeling



Product Line

Standard Systems

Blind (Solid) Panels

Type	Dimensions [mm]	Max. Point Load [kN]
ABS-650	600×600×40-42	5 kN
ABH-602 LC	600×600×46-50	9 kN

Perforated Panels

Type	Dimensions [mm]	Free Cross Section [%]	Max. Point Load [kN]
APS-650	600×600×40-42	15–23	5 kN
APH-602 LC	600×600×46-50	18–22	8 kN

Grating Panels

Type	Dimensions [mm]	Free Cross Section [%]	Max. Point Load [kN]
AGS-609	600×600×46-50	25–45	7 kN
AGH-607	600×600×46-50	51	8 kN

Heavy Load Systems

Blind (Solid) Panels

Type	Dimensions [mm]	Max. Point Load [kN]
ABH-602 C	600×600×46-55	11 kN
ABH-602 F1	600×600×50	13 kN
ABH-602 EXR	600×600×46-55	15 kN
ABH-2000	600×600×50-55	20 kN
ABH-2500	600×600×70	25 kN

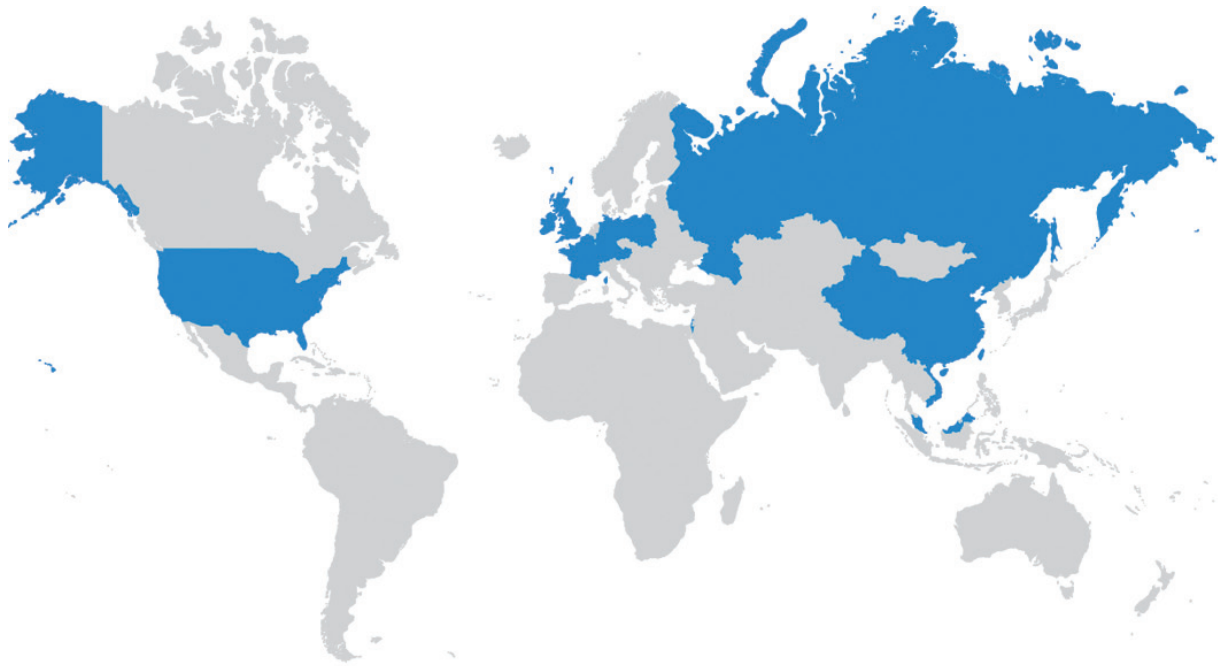
Perforated Panels

Type	Dimensions [mm]	Free Cross Section [%]	Max. Point Load [kN]
APH-602 C	600×600×46-55	18–22	10 kN
APH-602 F1	600×600×50	18–20	12 kN
APH-602 EXR	600×600×46-55	18–22	13 kN
APH-2000	600×600×50-55	18–22	15 kN
APH-2500	600×600×70	18–22	25 kN

Grating Panels

Type	Dimensions [mm]	Free Cross Section [%]	Max. Point Load [kN]
AGH-608	600×600×46-50	51	10 kN

Local Support Wherever You Need Us



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