

FLEXIBLE DESIGN PROVIDES UNPRECEDENTED LIFE SPAN

## ISO FLOOR

#### FOR DATA CENTRES



The Iso Floor system provides many added values for us, including maximum flexibility, stability and strength. By using the Bergvik floor we don't need separate equipment stands for heavy CRAC's, UPS's etc.

> **Gys Geyser** HEAD OF OPERATIONS, TERACO DATA ENVIRONMENT

# THE COMPLETE SOLUTION

Bergvik's Iso Floor is the strongest and most flexible raised access floor on the market. Iso Floor is a unique floor system that can be adjusted to the conditions you have within your project.

Bergvik work in conjunction with the client's professional teams to provide an optimal designed floor, supply all materials including all accessories, install it in accordance with the approved design and also supply all after market requirements to the client. This means that there is one less item you need to worry about during construction of a new facility.

- Full stability from 300 2100 mm FFH
- Can be installed in two deployments due to the rigid and self-supporting steel sub-structure. Panels can be installed at a later stage. No other raised floors offer this value-added feature.

- Standard panel size is 600x600 mm, but to achieve an optimized equipment layout and full access to the under-floor plenum, Iso Floor also offer panel sizes from 315-1200 mm.
- All heavy equipment is supported directly by the modular and self-supporting sub-structure. No costly and bulky equipment stands are needed.
- $\cdot\,$  Tested and approved in accordance with EN 12825
- Up to 70% fewer pedestals than with conventional 600x600 mm grid floors. This means less obstruction and more space for cable management, etc.



The distance between primary beam sections (Lx) and pedestals (Ly) are the factors that control the design load.

### HEAVY EQUIPMENT? NO PROBLEM!

The sub-structure and floor panels are adapted to the equipment layout at the design stage if needed. All panels are free to be lifted, which gives full access to the under-floor plenum.

Iso Floor's flexible design allows for uniform distributed load up to  $50 \text{ kN/m}^2$ . The distance between primary beam sections and pedestals are the factors that control the design load.

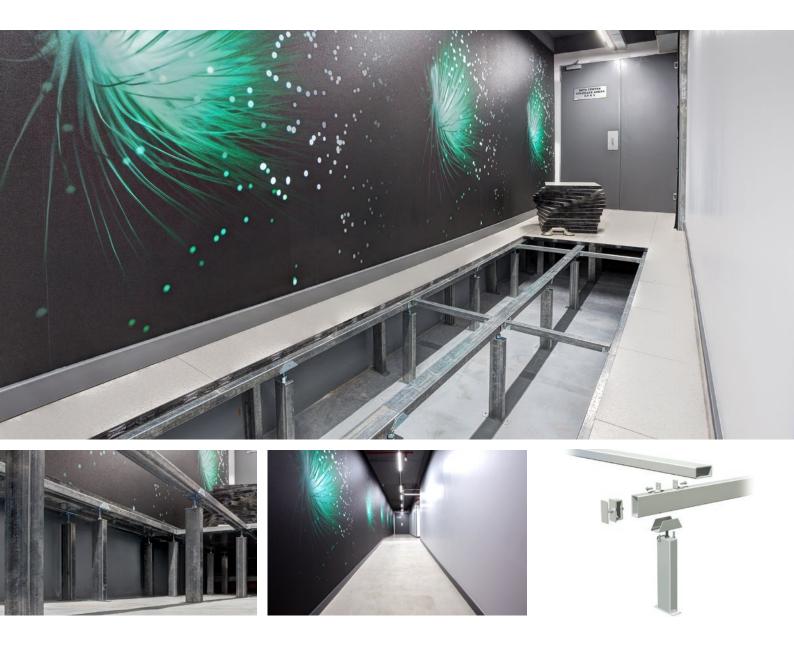
All heavy equipment including PDU and CRAH Units are supported directly by the rigid and self-supporting sub-structure. No costly and bulky equipment stands are needed.

Whenever future conditions are changing in your data centre; heavier equipment or different Server Rack footprint, it's quite easy and very cost effective to change or reinforce the Iso Floor system by simply adding pedestals and beam sections or changing panel sizes. The sub-structure stays intact – priceless!

### QUICK AND EASY INSTALLATION

Every project is designed and communicated with the client to simplify the installation stage. Bergvik always provide CAD-drawings for review to our customers.

All deliveries include all pedestals needed for your floor height, and 80x40 mm beam sections can be pre-cut to the correct length based on approved project drawings if needed. This provides a quick and easy installation. Installation can be performed in 2 (two) stages. The first stage is without panels due to the rigid Iso Floor design. This provides opportunities for other subcontractors to do their installations before floor panels are installed. Other subcontractors can utilize the Iso Floor sub-structure to support cable management, fire suppressant, etc as well. These installations are attached to the floor sub-structure using Bergvik's quick mounting cable ladder Holder Clamp (see page 6 for more information about our accessories).



### HIGH QUALITY FLOOR PANEL WITH DURABLE FINISH

The core of Bergvik's standard floor panels consist of a 38 mm high density particle board. A more moisture resistant panel core, classified V313, can also be ordered. To maximize the access to the under-floor plenum around equipment, we offer floor panels in customized sizes, from 315x600 mm and up to 1200x600 mm. Bergvik panels have a unique direct laminate finish process, which means that it's laminated directly to the panel core, preventing any de-lamination. Other manufacturers glue their laminate, which could cause de-lamination. Bergvik laminate panels are antistatic, extremely durable and easy to clean. The Bergvik panels are also fully recyclable and environmentally friendly.

As standard we offer the M335 Granite laminate finish, with H818 Alder and A0040 Oak laminate finishes as alternatives.



#### Bergvik laminate floor panel benefits

- Custom made panel sizes for maximum optimization
  High mechanical strength
- · Easy to handle due to it's light weight
- Easy to clean and very resistant to harsh chemicals and battery acid
- Fulfils flame spread requirements in accordance with ASTM-E84
- Direct lamination process provides long life span to the panels
- Environmentally friendly and fully recyclable

I know of no other flooring system that would allow me to reconfigure my floor to suit individual (future and unforeseen) client requests without also rebuilding the floor sub-structure at extreme cost. With Bergvik, I just order custom sized panels and I am done. No sub-structure work, no contractors, no cost beyond panels.

> **Tom Panazzo** CTO, DATA REALTY USA

### TAKE THE WORRY OUT OF THE DESIGN PROCESS!

Bergvik takes the worry out of the design process. We custom design the floor for every project to provide our customers with the quality they expect and deserve. Your equipment layout can be decided at the design stage and the floor is designed to adapt to your optimized equipment layout. Through Iso Floor's flexibility and ability to use custom sized panels, Bergvik can provide the Iso Floor with your dream layout without adapting to a 600x600 mm floor grid.

By using Iso Floor, the hot and cold aisles can be adjustable to get up to 25% more Server Racks on the same floor space, in comparison to traditional 600x600 mm grid floors.



### TO CONSIDER FOR SPECIFICATION

- If raised access floor should be dimensioned for a higher UDL than 10  $k\text{N}/\text{m}^2$
- If the raised access floor should be delivered with step-less Holder Clamps for installation of cable ladder brackets, pipes etc.
- That panel covering shall be Bergvik antistatic direct laminate
- That floor panels shall be delivered in the appropriate sizes, adapted to the aisle widths so that no floor panels gets locked-down
- That complete Auto-Cad drawings or optional Revit model shall be delivered with the project
- That a load calculation specific for the project shall be included in the delivery



### COMPLETE RANGE OF ACCESSORIES

Bergvik offers a complete range of accessories and options for our raised floor systems. These typically include panel lifters, stairs, handrails, ramps, border fascia panels, cable seals and grommets. Our popular Holder Clamp, which can be quickly mounted to a floor pedestal, provides simple and varied options for installation of cable ladders, cable trays, chiller piping, fire suppressant piping, smoke detectors, etc. As part of our accessory range, we also offer various forms of airflow panels and grilles, as well as panels made of different materials and sizes. We can also provide cover kick plates for protection of vertically mounted cable ladders, threshold transition plates, vertically mounted emergency door openers and earthing bars. Contact us for specific data cut sheets on the listed accessories.

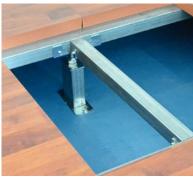


#### ISO FLOOR COMPACT

Bergvik's Iso Floor Compact is an alternative to Iso Floor for floor heights FFH 150–400 mm if you have a limited building/ceiling height.

In general, Iso Floor Compact can achieve the same load specification as our standard Iso Floor, using secondary stringers directly supported by pedestals using a type 80 head brackets without the primaries, thereby decreasing the overall profile design height from 160 mm down to 80 mm.





#### CUSTOM MADE SOLUTIONS WITH THE HIGHEST QUALITY

Coordinating with Bergvik is worry free. We custom design the floor for every project if needed in our CAD software to provide customers with the quality they expect and deserve. This means that your equipment layout can be decided at the design stage and the floor is designed to adapt around your optimized project design. Additionally, a standard 5-year warranty on the floor is priceless.

Bergvik was founded in 1970. Through all the years, we have exported our floors to more than 100 countries around the world.

Today we design and deliver fully modular and technical floors like Iso Floor, HiFlex Floor, Tech Floor and our proven secure Seismic Bracing Frames. As well as the structural ceiling system - Iso Flex-Grid.

#### Our products

#### ISO FLOOR



Raised floor for data centres and power distribution rooms with unique flexibility.



High-built power distribution floor as an alternative to concrete beams.



Bergvik's seismically secure raised floor that protects critical electrical equipment.

ISO FLEX-GRID



A load-bearing ceiling system that is both a dropped ceiling and a support grid in one cost effective solution.

TECH FLOOR



An economical standard grid floor system for installation in offices and communication centres.

