

Groundwork for Success: Flooring Solutions for Data Centres

When it comes to data centres, flooring isn't just a surface to walk on. It's an essential protective layer that guards against electrostatic discharge (ESD), supports heavy equipment, and is easy to clean for a dust-free environment. Flooring must also withstand operational challenges such as temperature shifts, accidental exposure, and must be highly durable. Poorly designed or inadequate flooring can lead to system inefficiencies, equipment damage, and even costly downtimes.

The Case for Anti-Static Flooring

Electrostatic discharge is a silent yet significant risk in data centres. Even minor static buildup caused by everyday activities can result in damage to sensitive electronic equipment. Anti-static flooring provides the solution by mitigating these risks. Functional flooring systems for data centres offer not only ESD protection, but also dust-proof surfaces, aesthetic appeal, and easy maintenance. Examples of floor finishes suitable for a data centre environment include:

Peran ESD SL

A durable, anti-static, self-smoothing resin flooring system designed for server halls, technical rooms, and networking areas, offering a hygienic, seamless surface that withstands heavy loads and frequent foot traffic.

Flowfresh ESD SL

A medium-duty, static-controlling resin floor with high chemical and wear resistance, ideal for fire suppression rooms, backup power areas, and ATEX production zones requiring robust, hygienic, and long-lasting performance.

Flowcoat ESD SF41

A solvent-free, anti-static epoxy floor coating suited for use beneath raised floors in server rooms and EPAs, combining easy maintenance with seamless aesthetics and reliable protection for light to medium traffic areas.

Smart Flooring for Every Zone

It's a common misconception that flooring in data centres only needs to address ESD. While ESD protection is essential in server rooms, a data centre is much more than that. Areas such as receptions, offices, kitchens, and dining spaces all have different functional demands – and each require a flooring solution tailored to its specific environment.

Appropriate flooring solutions for every part of the data centre:

- **Reception Areas** – *Mondeco* offers a seamless, elegant, and durable finish that withstands high foot traffic and creates a professional first impression.
- **Office Spaces** – *Peran Comfort* combines visual appeal with underfoot comfort and sound-reducing properties, making it ideal for busy office environments.
- **Kitchen & Dining Areas** – *Flowfresh MF* is a slip-resistant, antimicrobial floor finish that ensures hygiene and safety in food preparation and dining areas.
- **Data Processing Zones** – *Peran ESD SL* is an anti-static, self-smoothing resin floor finish that ensures cleanliness and durability while meeting EN IEC 61340 and EN 1081 requirements for static control in technical spaces.
- **Server Rooms** – *Flowshield SL* provides a dust-resistant, cleanroom-compatible surface with excellent durability, ideally suited for core technical areas under continuous use.
- **Fire Suppression and Generator Backup Power Rooms** – *Flowfresh ESD SL* offers exceptional wear, chemical, and heat resistance, providing long-lasting performance in demanding utility areas.
- **Below Raised Floors** – *Flowcoat ESD SF41* delivers a dust-free, static-dissipative surface that remains hidden while still providing, critical areas with high levels of electrostatic control.

Hygienic and Customisable Solutions

Hygiene plays a crucial role in protecting sensitive equipment from dust and debris. Seamless surfaces minimise dirt accumulation and allow for efficient cleaning, supporting both operational reliability and infrastructure longevity.

Furthermore, the ability to customise flooring in terms of colour, thickness, and finish ensure solutions that not only perform, but also complement the design and functional needs of the facility.

Build a Solid Foundation with Tremco CPG

When designing or upgrading your data centre, don't leave your flooring to chance. Choosing the right floor finish for a data centre is a strategic investment in safety, durability, and performance. Beyond technical specifications, it must support ESD control, hygiene, and aesthetics. For all these reasons, a reliable floor is vital to supporting smooth long-term operations within a data centre that meets both present challenges and future needs.