

# Floor Integrity

## Ensuring the cleanliness of the Data Centre's infrastructure

8 Solutions has become the leading data centre healthcare provider in the UK and throughout the EMEA region. We understand that your data centre is the backbone of your organisation. Our team of highly trained, qualified and fully security cleared technicians provide a range of support designed to help ensure your data centre can deliver the problem-free service you need.

This support includes a range of authoritative advice, expert testing and skilled remediation and maintenance services to help ensure the Environmental Integrity of your data centre.

### Raised Access Floor Systems

Raised Access floors are the de facto standard within the majority of today's data centres. The floor provides a solid and accessible support structure for the room, a highly effective and functional conduit for cables and services and a distribution channel for the cold air generated by the cooling systems.

### New Floor Installations

The design and installation of a new Raised Access Floor system involves a number of key factors including;

- the size and design of the room
- the weight loading
- the type and quantity of utilities to be contained within the floor

- the air handling and distribution system
- the height of the raised floor above the floor slab
- the expected level of traffic within the room

8 Solutions has extensive experience in the design and installation of Raised Access Floor systems and can provide guidance across all aspects of the design, the floor panels and pedestal systems. Trained technicians can complete the installation including the sealing of the floor slab and the securing of the pedestals in accordance with best practice guidelines.

### Floor Upgrades and Maintenance

Data centre floors are effectively the foundation for the data centre; they are subject to considerable wear and tear, high point loads, regular equipment movement and the continual removal of tiles for access. Maintenance of the floor is therefore essential from both a functional and Health and Safety perspective. 8 Solutions specialist flooring technicians have considerable experience in conducting detailed audits reviewing all aspects of the floor system from the floor slab and the pedestal system to the floor surface. Detailed Health and Safety audits are also provided as required.





Post audit 8 Solutions has the expertise to address all flooring issues including:

- The repair or replacement of all types of flooring panels including the supply of bespoke panels
- The repair or replacement of defective grills
- The repair, replacement or securing of unstable pedestals
- The replacement of ESD systems

## Floor strengthening

Increased demand on costly floor space means that equipment densities and the weight that data centre floors have to carry are increasing. The consequences of a floor failure can be catastrophic, with injuries, and damage to servers and cabling meaning crippling downtime.

8 Solutions can provide surveys and assessments to identify floors that require strengthening, guidance on weight loading and fast and effective reinforcement with minimal disruption. Floor strengthening can be achieved in a variety of ways including:

- Supplemental pedestal installation
- Retrofit strengthening for heavier racks
- Installation of weight distribution plates
- Floor panel upgrades for UDL
- Stringer installation

