

Data Center Contamination:

Limiting Contamination by Sealing Under Floor Cable Cutouts with Brushed Grommets

Sensitive Electronic Equipment

As electrical components shrink, they become more susceptible to failure caused by airborne contaminants. Data Center contamination can lead to overheating, corrosion damage, electrical and mechanical failure of disk and tape drives, power supplies and circuit boards.

Contaminants can be solid, liquid or gas. They can originate from within the data center or outside. Once contaminants enter the data center environment, they are drawn into and moved about through the air handling units. Particulate matter and gaseous contaminants are blown around by the air-handlers, and the fans in the computers pick up the contaminants and suck them into the equipment itself leading to equipment failure, and downtime. Contamination can cause a wide range of equipment problems, including intermittent, premature and permanent failure, overheating and loss of energy efficiency.

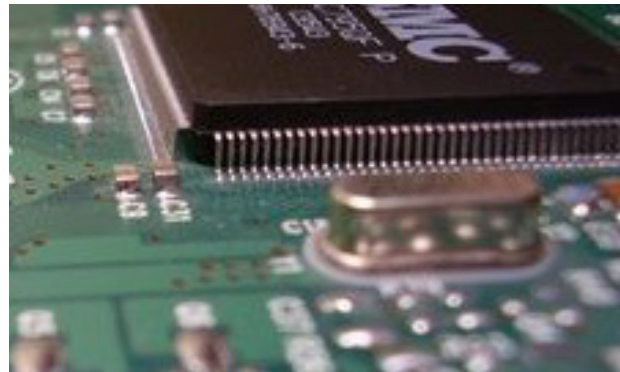
As electrical equipment tolerances become more precise, the risk of failure due to contamination increases. As a result some equipment manufacturers have begun to void warranty claims due to data centers lack of decontamination standards.

Install Brushed Grommets in Cable Cutouts

Unsealed cable openings in raised floors provide a pathway for contaminants to enter the plenum environment and are circulated in and around sensitive electrical equipment.

The installation of brushed grommets on your raised floor to conceal the holes created by power and network cables is an industry best practice to limit airflow bypass, but also serves to prevent contaminants from entering the under floor plenum.

A quick fix to cover existing cable cutouts, the Air-Guard Surface Mount is designed to retro-fit around existing cables without the need to disconnect cables.



Sealing cable openings with overlapping brush and or EPDM "rubber" gasket grommets, designed to eliminate bypass airflow through cable cutouts, help prevent under-floor contamination by particulate matter.

For new construction, brushed grommets like the Air-Guard Flush Mount and Extreme are both designed to eliminate airflow bypass and prevent contaminants from entering the under floor plenum environment.

Brushed grommets like the Air-Guard Surface Mount and Flush Mount Brush kit are ideal for retrofitting around existing cables, enclosing floor cutouts, limiting airflow bypass and trapping contaminants before they can pass under the floor.

Contamination Solutions

Remember, in addition to implementing a cleaning program designed to minimize contaminants in the data center, seal all raised floor cable cutouts with brushed grommets to eliminate airflow bypass and limit contaminant migration into the air handlers and electrical equipment.

With the Air-Guard Surface Mount, controlling airflow bypass and limiting under floor contamination is easy.

Air-Guard® Surface Mount

