edp
Data Centre Solutions

Product Overview

Aisle Containment is a recognised solution to aid the cooling of high-density server installations within Data Centres and Enterprise IT Rooms.

Aisle Containment can be installed in two ways:

- **Cold Aisle Containment** - where the cold aisle is enclosed, so containing the cold air that cools the IT equipment.
- **Hot Aisle Containment** - where the hot aisle is enclosed and the hot exhaust air is either directed into the return plenum and back to the CRAC units or is cooled by In-Row Coolers.
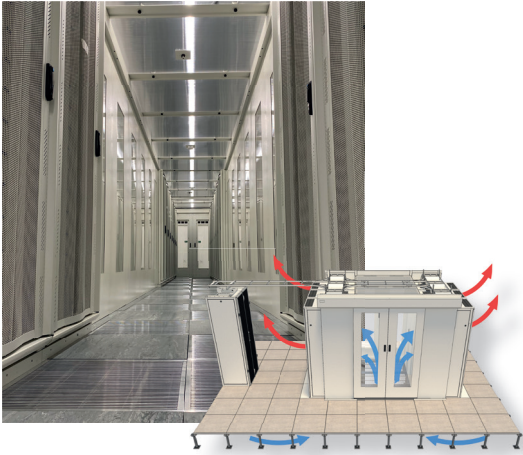
EDP Data Centre Solutions designs, manufactures, and installs bespoke aisle containment systems for use in retrofit, new build and hyperscale projects providing greater flexibility.

Custom engineered Hot and Cold Aisle Containment systems are designed to be supported from the raised floor or suspended from overhead structural ceiling grids. Modular designs enable the system to scale with growth on demand with solutions integrating with other critical data, power and fire suppression services. The flexibility custom design provides enables it to tackle obstacles within the aisle such as building support columns, as well as taking into account uneven rack heights.

Features & Benefits

- An aisle containment system that is non-intrusive, bespoke and retrofitting.
- Can be used in new build, retrofit or hyperscale projects, either floor standing or suspended from ceiling.
- Retrofits to existing cabinets no matter what their height, width or manufacturer.
- Prevents the mixing of cold conditioned air and hot exhaust air, that enables optimisation of cooling systems which leads to energy efficiency gains and reduces CO_2 emissions.
- Better control of room temperatures, humidity airflow and balancing.
- Enables better utilisation of rack U space and can help with power savings on installed equipment.
- Design of door system enhances door stability, provides greater access to the aisle and are also self-closing insuring entry at floor level is clear of obstruction.
- Custom built solution allows the use of infill panels for sealing round obstacles, differing rack heights or maintaining gaps for future rack expansion.
- FM approved roof panels that work with various types of fire suppression systems.
- Our Project Management team will produce 2D drawings & 3D renders of the proposed solution.
- Through the use of Augmented Reality (AR) clients have the opportunity to 'walk through' their proposed solution within their Data Centre, prior to deployment to see how it integrates with other infrastructure.

Cold Aisle Containment

CAC Features & Benefits

- Can be installed to new build aisles or retrofitted to existing cabinets.
- With CAC installed cost savings of up to 30% can be made on the current operational cost of building cooling systems supporting Data Centres.
- Lightweight roof panels are easily demounted for maintenance access to the top of a cabinet.
- FM approved roof panels have a high light transmission and drop away for fire suppression systems to access the source of the combustion.

Hot Aisle Containment

HAC Features & Benefits

- HAC systems are not dependant on the Data Centre having a raised floor.
- Provides a higher thermal mass which is returned to the cooling system making it operate more efficiently.
- With the hot aisle contained the operating room temperature is more comfortable.
- As the entire room is filled with cold air there is more volume of air available for cooling equipment. In the event of a cooling system failure this provides more cooling until the problem is resolved.

Infill Panels

Infill panels provide extra flexibility and can be used to fill gaps caused by different height racks, reserve space for future rack deployments, surround obstacles such as pipe work or building support columns, or create supporting walls.

Panels can be solid steel or steel-frame with inset Perspex or Polycarbonate.

Ver: EDPBAC0923.1