

FAMILY BROCHURE

Hot Aisle Containment Solutions

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Elevate Aisle Containment

Optimise your data centre's cooling efficiency with Elevate Aisle Containment.

In the world of data centres, effective cooling is paramount in ensuring compute, networking and server equipment operate within recommended temperature ranges. Traditional cooling systems that rely on circulating air within large open spaces may fall short in achieving peak efficiency.

Elevate Hot Aisle Containment

Key Benefits

Maximised efficiency:

The Elevate Hot Aisle Containment System optimises data centre cooling by directing server exhaust heat straight into the ceiling plenum or CRAC/CRAH return. By fully separating hot and cold air streams, it minimises thermal inefficiencies and enhances overall cooling performance by up to 30%.

Effective airflow management:

Efficient airflow management is crucial to maintaining the integrity of IT equipment. While tightly controlling the environment can be costly, allowing too much variability poses challenges. Elevate strikes the perfect balance, ensuring optimal performance without compromising on reliability.

Intelligent monitoring:

An optional advanced environment monitoring system provides real-time data and insights, allowing for proactive adjustments to maintain optimal conditions. This intelligent system ensures that your data centre operates at its best, 24/7.

Flexible access control:

Elevate cold aisle containment includes flexible access control with integrated system safety monitoring. This feature ensures that only authorized personnel can access critical areas, enhancing security and compliance.





Cooling

Elevate Hot Aisle Containment systems are precision-engineered to optimise cooling performance and efficiency in modern data centres, whether or not they feature raised floor infrastructure. These solutions effectively isolate and control the flow of hot exhaust air from IT equipment, ensuring stable temperatures and consistent cooling throughout your facility.

As servers draw in cool air from the surrounding cold aisles, heat generated by active equipment is expelled into the contained hot aisle. This hot air is then channelled through ceiling plenums or return ducts back to the cooling units, preventing air mixing and maintaining a controlled environment for critical hardware.

This intelligent design maximises cooling effectiveness, improves energy efficiency, and supports higher-density deployments - keeping your data centre operating at peak performance while reducing operational costs and mitigating the risk of overheating.

Elevate Hot Aisle Containment solutions come with a range of premium features as standard - features that many competing systems only offer as optional upgrades. Over the following pages, we'll showcase the advantages that set Elevate apart in data centre airflow management and efficiency.

Key Elements of the Aisle Containment



Elevate Hot Aisle End Panel 1200mm (W) x 1000mm (H) Set
577-3210E



Hot Aisle Blanking Panels
577-6447



Elevate Hot Aisle Side Panel 1600mm
(W) x 2000mm (H) Set
577-1620F





DCR Series
546-47810-VDPN-WH



Electronic Double Doors
573-4712-12D-STD-WH



DCR Series

Elevate DCR series brings a range of size options, choice of colour, multiple airflow and cable management features, paired with high load bearing and aesthetically attractive design. Airflow management baffles are a key design

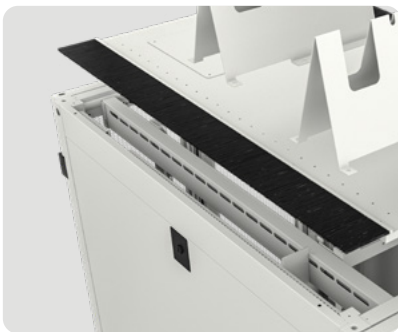
feature of the Elevate DCR series and provide effective airflow management ensuring cold air is directed through active equipment in the rack maximising the efficiency of the cold aisle system the racks are installed into.

The DCR series provides many other features such as finger cable management, high load capacity, high ventilation rate doors, fully adjustable 19-inch profiles front and back and provides the structural basis for the cold aisle.

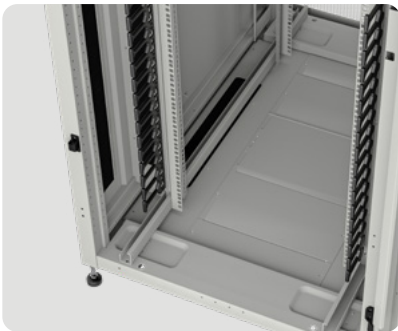




- ✓ Airflow management baffles for all racks as standard featuring overlapping brush cutouts.



- ✓ Full length roof brushes with improved access for installing commando power.



- ✓ Finger cable management supplied on 800 wide racks as standard.

Part Number Table

Part Number	Description
546-47610-VDBN-XX	Elevate DCR600 47U Rack 600x1000mm Vented (F) D/Vented (R) B/Panels No/Mgmt
546-47612-VDBN-XX	Elevate DCR600 47U Rack 600x1200mm Vented (F) D/Vented (R) B/Panels No/Mgmt
546-47810-VDBF-XX	Elevate DCR800 47U Rack 800x1000mm Vented (F) D/Vented (R) B/Panels F/Mgmt
546-47812-VDBF-XX	Elevate DCR800 47U Rack 800x1200mm Vented (F) D/Vented (R) B/Panels F/Mgmt
546-52810-VDBF-XX	Elevate DCR800 52U Rack 800x1000mm Vented (F) D/Vented (R) B/Panels F/Mgmt
546-52812-VDBF-XX	Elevate DCR800 52U Rack 800x1200mm Vented (F) D/Vented (R) B/Panels F/Mgmt

42U also available

Fixed Side Panel Sets

Elevate Hot Aisle Side Panels are supplied in pairs to cover both sides of the aisle and include top and bottom support struts for secure connection between the two sides.

Panels are available in heights of either 1 metre or 2 metres.

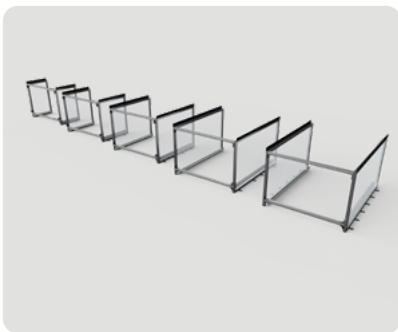
The top edge of each side panel features an extended brush seal, designed to minimise airflow loss where the panel meets the ceiling containment system.

Elevate Hot Aisle Side Panels feature adjustable brackets and are designed to mount directly onto Elevate DCR Racks, providing secure and reliable support.





- ✓ The Elevate Hot Aisle Side Panels have movable brackets and install directly into the Elevate DCR racks for support.



- ✓ Available in widths of 600 mm, 800 mm, 1200 mm, and 1600 mm, the panels can span one or two racks per side, offering flexible installation options.

Part Number Table

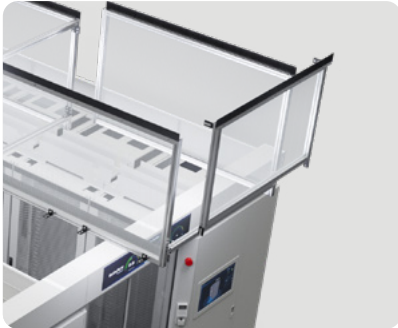
Part Number	Description
577-0610F	Elevate Aisle Containment Hot Aisle Side Side Panel 600 mm x 1000 mm (WxH) Set
577-0810F	Elevate Aisle Containment Hot Aisle Side Side Panel 800 mm x 1000 mm (WxH) Set
577-1210F	Elevate Aisle Containment Hot Aisle Side Side Panel 1200 mm x 1000 mm (WxH) Set
577-1610F	Elevate Aisle Containment Hot Aisle Side Side Panel 1600 mm x 1000 mm (WxH) Set
577-1810F	Elevate Aisle Containment Hot Aisle Side Side Panel 1800 mm x 1000 mm (WxH) Set
577-0620F	Elevate Aisle Containment Hot Aisle Side Side Panel 600 mm x 2000 mm (WxH) Set
577-0820F	Elevate Aisle Containment Hot Aisle Side Side Panel 800 mm x 2000 mm (WxH) Set
577-1220F	Elevate Aisle Containment Hot Aisle Side Side Panel 1200 mm x 2000 mm (WxH) Set
577-1620F	Elevate Aisle Containment Hot Aisle Side Side Panel 1600 mm x 2000 mm (WxH) Set
577-1820F	Elevate Aisle Containment Hot Aisle Side Side Panel 1800 mm x 2000 mm (WxH) Set

Fixed End Panel Sets

Elevate Hot Aisle End Panels feature adjustable brackets and are designed to integrate seamlessly with adjacent side panel structures.

Each set includes two panels, configured for a 1200 mm aisle width.





✓ Designed as a modular solution, they bolt directly onto Elevate DCR Racks to form the structural framework.

Part Number Table

Part Number	Description
577-3210E	Elevate Aisle Containment Hot Aisle Front and Rear Panels 1200 mm x 1000 mm (WxH)
577-3220E	Elevate Aisle Containment Hot Aisle Front and Rear Panels 1200 mm x 2000 mm (WxH)

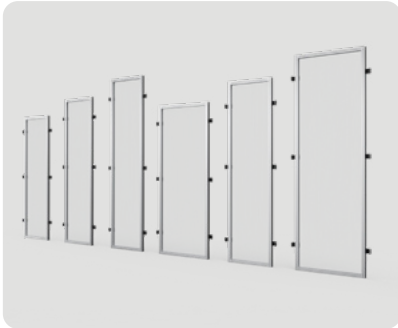
Blanking Support Panels

These modular blanking panels are manufactured from high-quality extruded anodised aluminium and fitted with 4 mm clear polycarbonate inserts.

Designed for versatility, they are available in heights of 42U, 47U, and 52U, with widths of either 600 mm or 800 mm.

The panels enable the creation of a complete Hot Aisle Containment System around existing building pillars, ensuring continuous airflow separation and optimal thermal efficiency.





✓ Complete flexibility - available in 42U, 47U, and 52U heights with widths of 600 mm or 800 mm.

Part Number Table

Part Number	Description
577-6442	Elevate Aisle Containment Blanking Plate 42U 600W
577-6447	Elevate Aisle Containment Blanking Plate 47U 600W
577-6452	Elevate Aisle Containment Blanking Plate 52U 600W
577-8442	Elevate Aisle Containment Blanking Plate 42U 800W
577-8447	Elevate Aisle Containment Blanking Plate 47U 800W
577-8452	Elevate Aisle Containment Blanking Plate 52U 800W

Automatic Sliding Doors

The Elevate aisle containment automatic double sliding glass door assembly is expertly engineered to secure and seal each end of a containment aisle, isolating hot and cold air to enhance cooling efficiency.

Each unit offers advanced specification as standard integrating powered glass doors, a durable door frame, lintel, and an advanced access control system, all managed by the control box.

An optional assembly is available which includes the addition of a 10-inch touch screen display which can be used to monitor environmental conditions within the aisle.





- ✓ Multiple authentication options including card, passcode and biometric, giving you flexible and reliable methods to manage access.



- ✓ For added safety, two infrared sensor beams are installed, preventing door closure while motion is detected near the doors.



- ✓ The optional monitoring screen that provides real-time insights into critical cold aisle conditions, including lighting, temperature, and humidity. This ensures optimal environmental control for sensitive areas.

Part Number Table

Part Number	Description
573-4210-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 42U Racks 1000 Deep Aisle Black / White
573-4710-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 47U Racks 1000 Deep Aisle Black / White
573-5210-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 52U Racks 1000 Deep Aisle Black / White
573-4212-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 42U Racks 1200 Deep Aisle Black / White
573-4712-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 47U Racks 1200 Deep Aisle Black / White
573-5212-12D-STD-BK/WH	Elevate Automatic (Double Row) Sliding Door 52U Racks 1200 Deep Aisle Black / White

Control Box

The aisle containment control box provides connectivity for powering and managing essential devices within aisle containment systems. It seamlessly provides power to skylights electromagnetic locks, aisle lighting, sliding doors, access control systems, and more.

Featuring a flat, compact design, it is engineered for compatibility with aisle containment sliding door installations.

The control box ensures no rack U-space is occupied, as it is installed discreetly inside the aisle door chassis, optimising both space and functionality. Ideal for managing multiple systems in the cold aisle, this control box provides a streamlined and space-saving approach to aisle containment management.

- ✓ Seamlessly provides power to skylights electromagnetic locks, aisle lighting, sliding doors, access control systems.
- ✓ Compact depth just 46mm allowing discreet installation in the sliding door frame.
- ✓ Provides control link for lighting, monitoring system and control functions of the cold aisle via control host.



Part Number Table

Part Number	Description
579-100	Elevate Aisle Containment Control Box

Host Controller Box

The Elevate cold aisle control host is a robust solution designed to integrate data collection, storage, and local display for effective monitoring and management of aisle environments.

Built on a linux-based platform and powered by an ARM Cortex A9 processor with 1GB of memory, this host controller delivers a stable and reliable platform for a variety of control and monitoring applications.

Each host controller includes six RS485 ports, HDMI support for external displays, and four digital input (DI) and four digital output (DO) ports. It also features dry contacts for flexible sensor integrations. Capable of supporting up to 35,000 sensors.

This solution ensures scalable, efficient, and centralized aisle management.



Part Number Table

Part Number	Description
579-101	Elevate Aisle Host Control Box

Display Monitor

The Elevate cold aisle monitoring display screen is a state-of-the-art touch screen interface designed for comprehensive monitoring and management of cold aisle environments in data centres.

It provides real-time data on temperature, humidity, and airflow, ensuring optimal cooling performance. The display allows control of system settings, including skylight status, LED lighting, sensors, power usage, and alarms.

- ✓ High-resolution LCD touch screen with WiFi and Bluetooth
- ✓ Compatible with containment sliding door installation
- ✓ Provides live information on key environment indicators
- ✓ HDMI Input with 4K support
- ✓ Android 11 operating system



Part Number Table

Part Number	Description
579-110-DIS	Elevate Aisle Containment Monitoring Display Screen, 10.1-inch

Smoke Sensor

The Elevate cold aisle smoke sensor integrates with the cold aisle controller host, providing real-time smoke detection for optimal safety in critical environments.

This sensor automatically opens both the active skylight roof panels and the powered front doors when smoke is detected, ensuring efficient and immediate response.

The sensor is equipped with a built-in alarm that generates a high-decibel sound to notify smoke detection, enhancing both visibility and response time during emergencies.



Part Number Table

Part Number	Description
579-550-100	Elevate Aisle Smoke Sensor

Temperature and Humidity Sensor

The Elevate aisle temperature and humidity sensor is a high-precision, integrated solution designed to monitor temperature and humidity levels within aisle installation. utilising a digital integrated sensor design, this device connects to the host controller system, providing real-time temperature and humidity data across various zones of your cold aisle infrastructure.

With an RS485 interface, the sensor is easily connected to the host controller through a double-head crystal network cable, ensuring reliable and uninterrupted data transmission.



Part Number Table

Part Number	Description
579-550-200	Elevate Aisle Temperature Humidity Sensor

Water Rope Detection Sensor

Protect your critical infrastructure with the Elevate aisle water leak detection system, a cost-effective solution designed to monitor and detect water ingress in the cold aisle area. This system seamlessly integrates with your existing host controller, offering real-time water leak detection and rapid response.

Equipped with 5 meters of high-quality water detection rope, it provides precise closed-contact detection of water drops, alerting you immediately through an integrated alarm signal and the integrated monitoring system. The sensors fast response, low-cost operation, and easy installation make it a convenient choice for ensuring the safety and longevity of your data centre equipment.



Part Number Table

Part Number	Description
579-550-300	Elevate Aisle Water Leak Rope 5m

ELEVATE

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