ELEVATE
Future Faster

FAMILY BROCHURE

Cold 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.

That's where Elevate Aisle Containment comes in, managing airflow minimising unnecessary losses and maximising overall efficiency.

Elevate Aisle Containment

Key benefits

Maximised efficiency:

Elevate cold aisle containment optimises current technology, significantly reducing the load on HVAC equipment and extending the operating envelope. This not only enhances cooling efficiency but also lowers energy consumption and operational costs.

Effective airflow management:

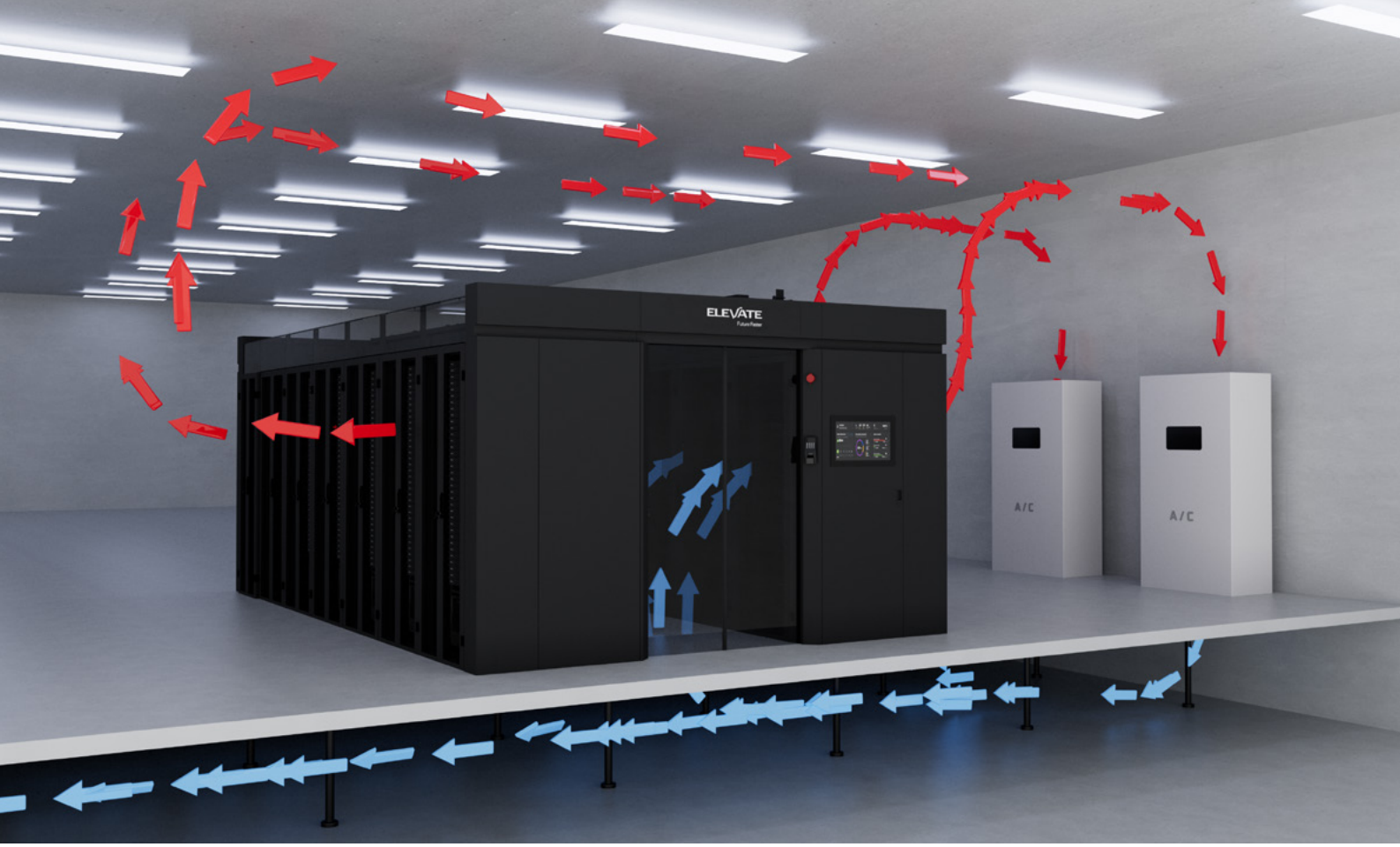
Efficient airflow management is crucial to maintaining the integrity of IT equipment. While tightly controlling the environment can be costly, allowing too much variability poses challenges. Elevate strikes the perfect balance, ensuring optimal performance without compromising on reliability.

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 cold aisle solutions are specifically engineered to support raised floor cooling systems, ensuring optimal airflow and temperature regulation within your data centre.

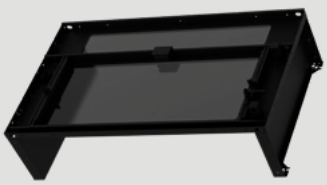
Cold air is introduced through the floor of the cold aisle, directly feeding active equipment in the racks. As the equipment operates, the cold air is absorbed, and hot air is expelled at the rear of the rack at the top.

This efficient design maximises cooling effectiveness and promotes energy efficiency, keeping your equipment running at peak performance while minimising the risk of overheating.

Elevate cold aisle solutions offer multiple features as standard that are offered as chargeable options in other systems on the market, over the coming pages we will highlight these advantages.

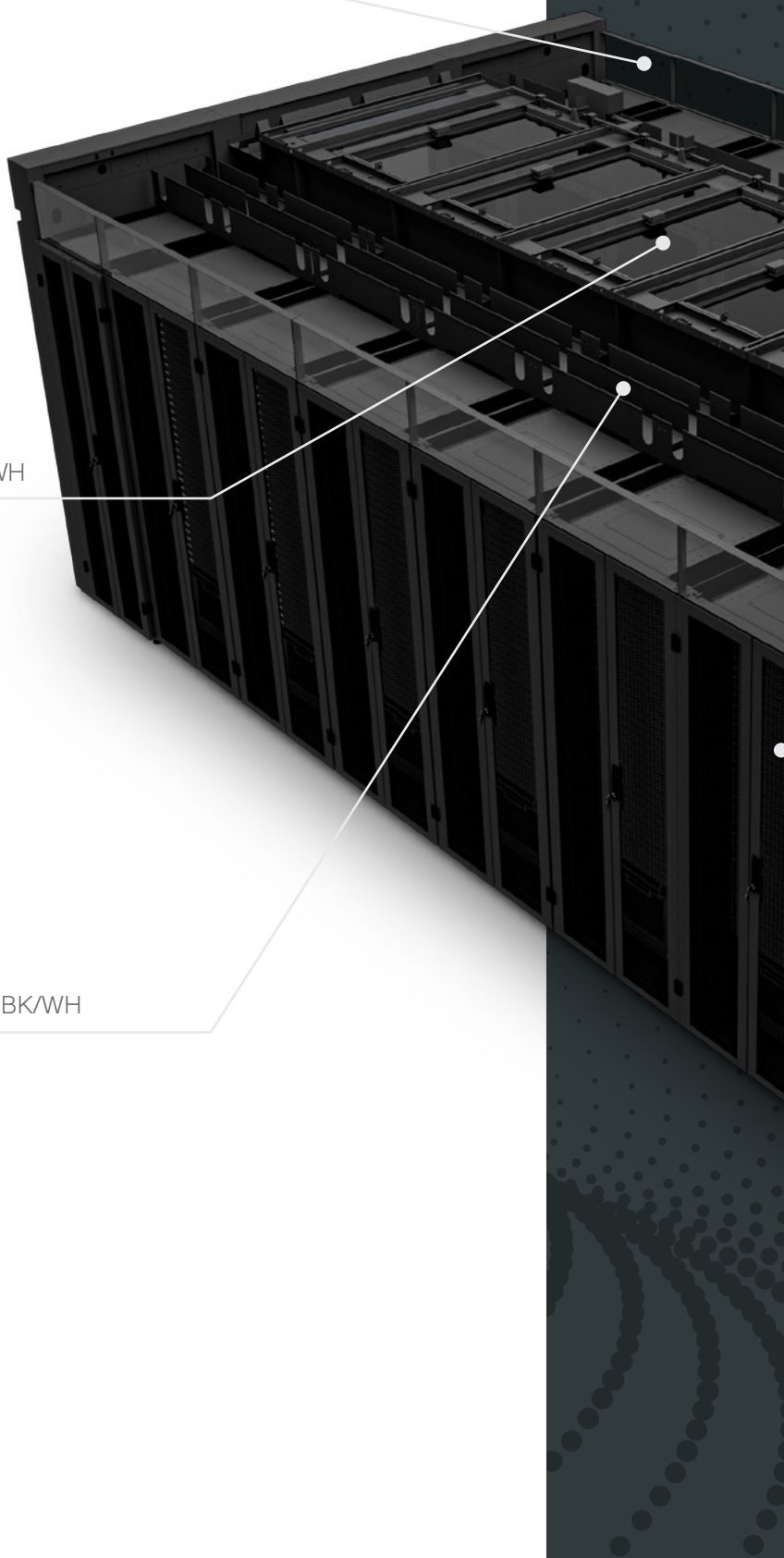
Key Elements of the Aisle Containment

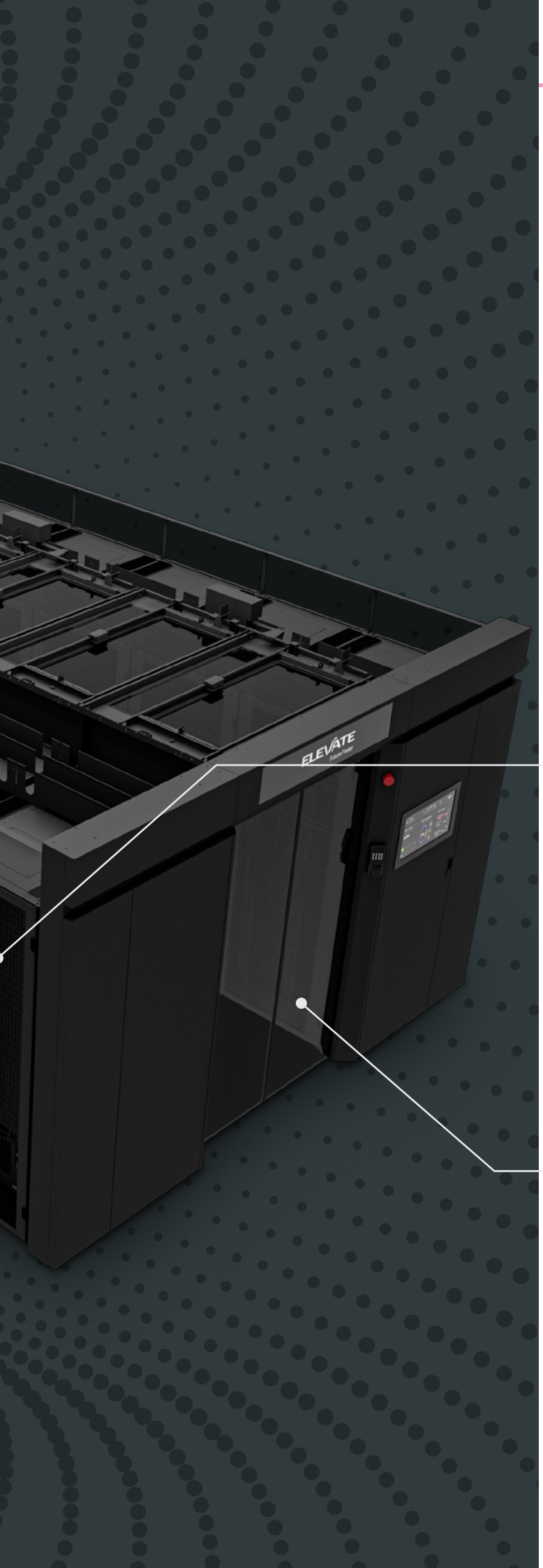
Closing Panels
574-6280/8280-BK/WH



Roof Skylights
572-XXXX-BK/WH

Roof Raceway
578-600/800-BK/WH





DCR Series
546-47810-XX-

Sliding Doors
573-XX12-12D-XXX

ELEVATE COLD AISLE CONTAINMENT

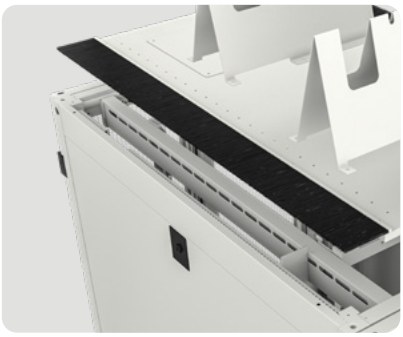
DCR Series

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.

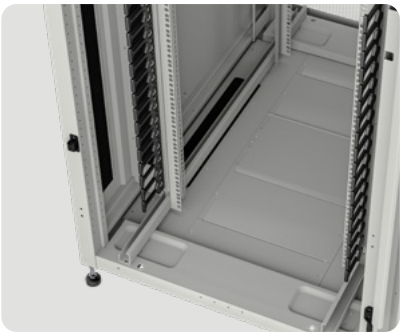
Airflow management baffles are a key design feature of the Elevate DCR series and provide effective airflow management ensuring cold air is directed through active equipment in the rack maximising the efficiency of the cold aisle system the racks are installed into.

The DCR series provides many other features such as finger cable management, high load capacity, high ventilation rate doors, fully adjustable 19 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

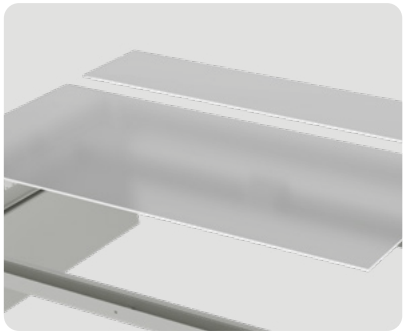
Manual Reset Skylights

The Elevate cold aisle manual reset skylight is designed to allow a modular approach to the construction of an aisle containment solution with a central closed roof.

This skylight features a standardised design, enabling quick on-site assembly. The use of clear tempered glass within the unit enhances visibility and is easy to clean.

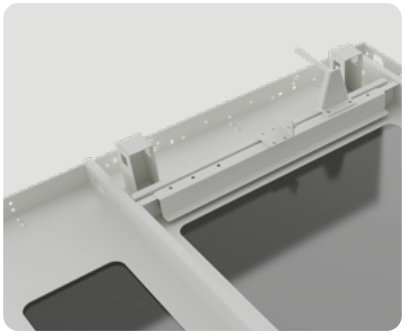
The skylight supports the installation of temperature and humidity sensors, smoke sensors, video surveillance cameras, and other equipment.

Each unit is supplied with integrated LED Lighting as standard which is powered by the control box.



- 5mm glass installed for providing clear daylight and safety of the unit.

- Each skylight components comes with Integrated 24V LED lighting that connects back to the control box.



- Active mechanism that allows the skylight to flip open when smoke is detected, skylights are all connected together to ensure all are opened at the same time.

Part Number Table

Part Number	Description
572-5612SM-BK	Elevate Aisle Containment Active Single Roof Skylight (Manual Close) 600W x 1200D, Tempered Glass, Black
572-5812SM-BK	Elevate Aisle Containment Active Single Roof Skylight (Manual Close) 800W x 1200D, Tempered Glass, Black
572-5612SM-WH	Elevate Aisle Containment Active Single Roof Skylight (Manual Close) 600W x 1200D, Tempered Glass, White
572-5812SM-WH	Elevate Aisle Containment Active Single Roof Skylight (Manual Close) 800W x 1200D, Tempered Glass, White

ELEVATE COLD AISLE CONTAINMENT

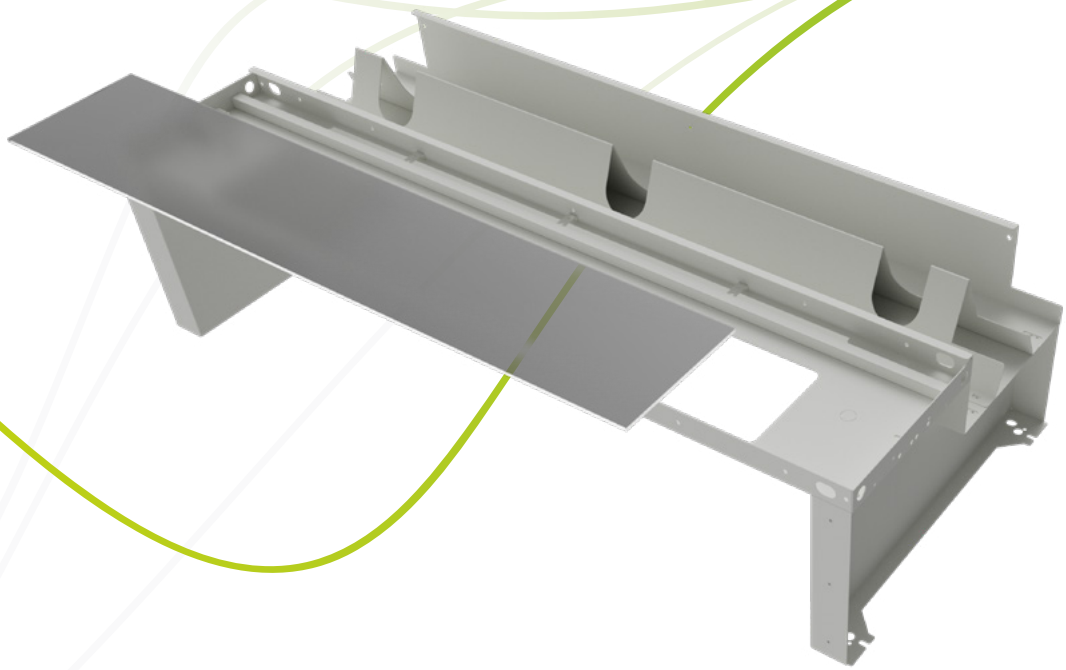
Fixed End Skylights

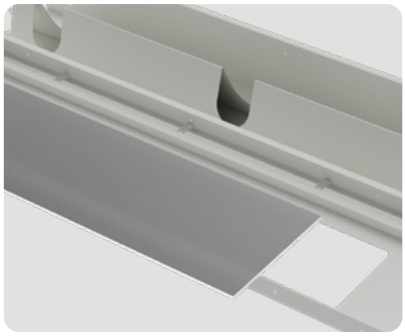
The Elevate cold aisle fixed end roof skylight is designed to allow a modular approach to the construction of an aisle containment solution with a central closed roof.

This skylight features a standardised design, enabling quick on-site assembly. The use of clear tempered glass within the unit enhances visibility and is easy to clean.

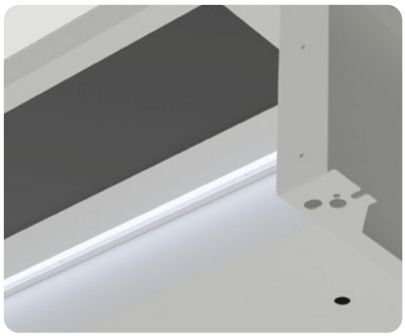
The skylight supports the installation of temperature and humidity sensors, smoke sensors, video surveillance cameras, and other equipment.

Each unit is supplied with integrated LED Lighting as standard which is powered by the control box.

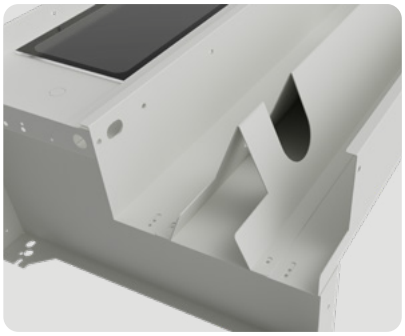




- 5mm glass installed for providing clear daylight and safety of the unit.



- Each skylight components comes with Integrated 24V LED lighting that connects back to the control box.



- Cable management is also included in the fixed end skylight and with variable positioning to allow segregation of power and data cables.

Part Number Table

Part Number	Description
572-3612E-BK	Elevate Fixed End Roof Skylight 600W x 1200D, Tempered Glass and Cable Trough, Black
572-3812E-BK	Elevate Fixed End Roof Skylight 800W x 1200D, Tempered Glass and Cable Trough, Black
572-3612E-WH	Elevate Fixed End Roof Skylight 600W x 1200D, Tempered Glass and Cable Trough, White
572-3812E-WH	Elevate Fixed End Roof Skylight 800W x 1200D, Tempered Glass and Cable Trough, White

Automatic Active Skylights

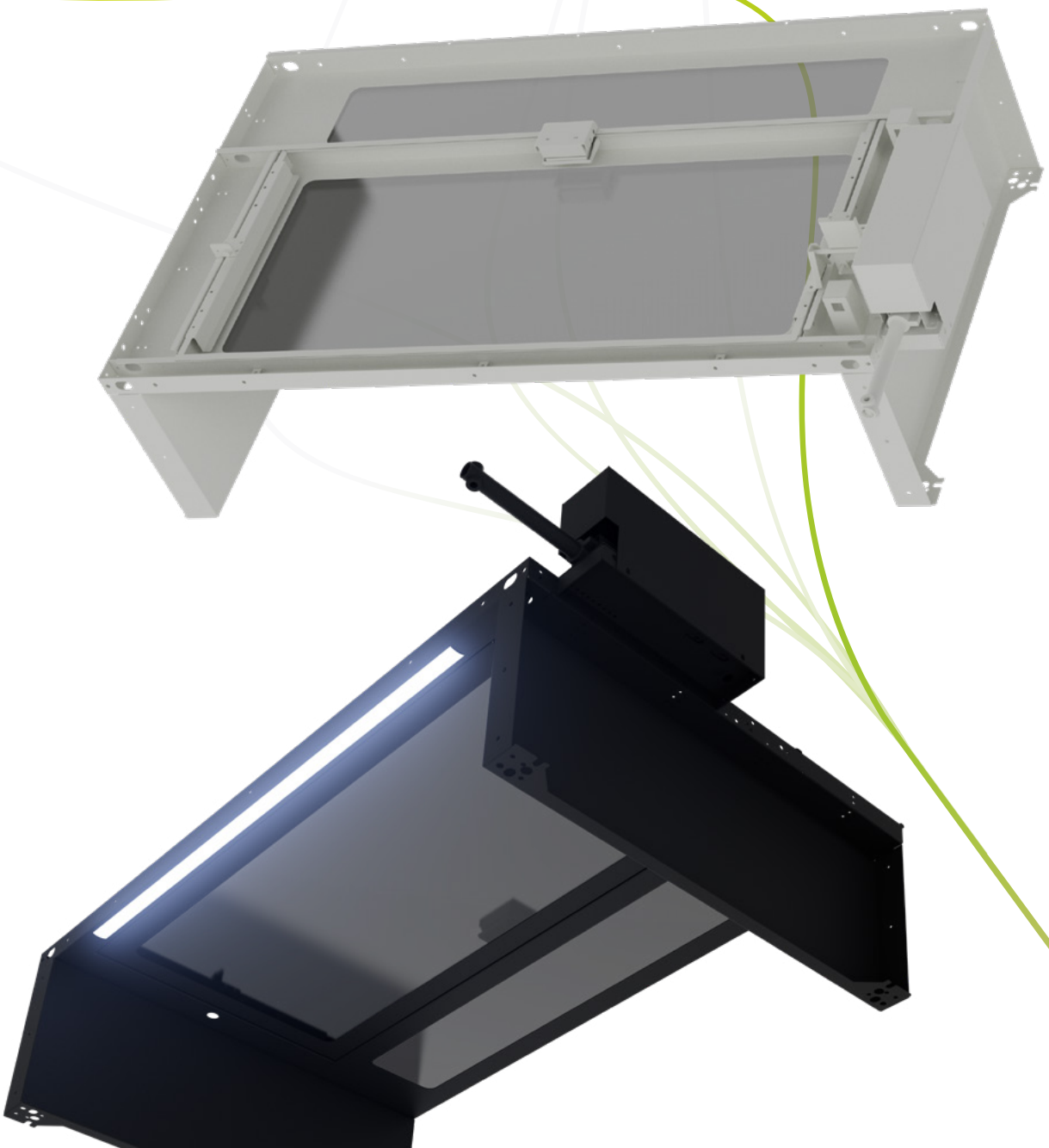
The Elevate cold aisle automatic active opening roof skylight is designed to allow a modular approach to the construction of an aisle containment solution with a central closed roof.

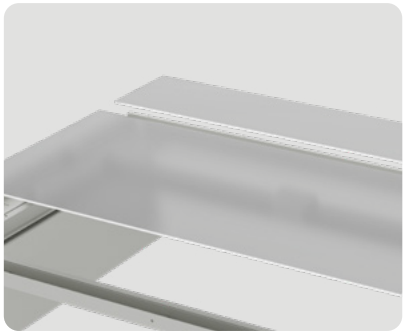
This skylight offers a clear rotating glass panel that opens when triggered by smoke sensors, with a powered reset to close. The use of clear tempered glass within the unit enhances visibility and is easy to clean.

The skylight supports the installation of temperature and humidity sensors, smoke sensors, video surveillance cameras, and other equipment.

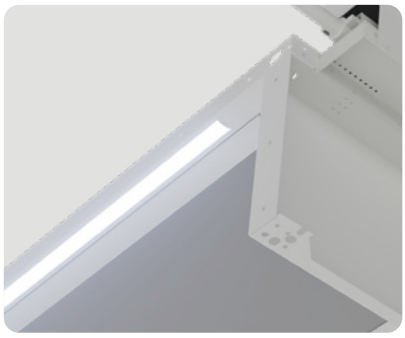
Each unit is supplied with integrated LED Lighting as standard which is powered by the control box.

Automatic active skylights include motors which can drive up to eight active skylights through connecting rods.

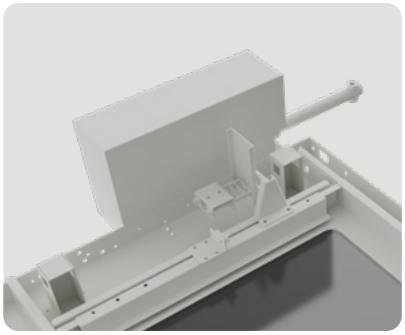




- 5mm glass installed for providing clear daylight and safety of the unit.



- Each skylight components comes with Integrated 24V LED lighting that connects back to the control box.



- Active mechanism allows the skylight to open when smoke is detected, skylights are all connected together to ensure all are opened at the same time and can be closed via reset function.

Part Number Table

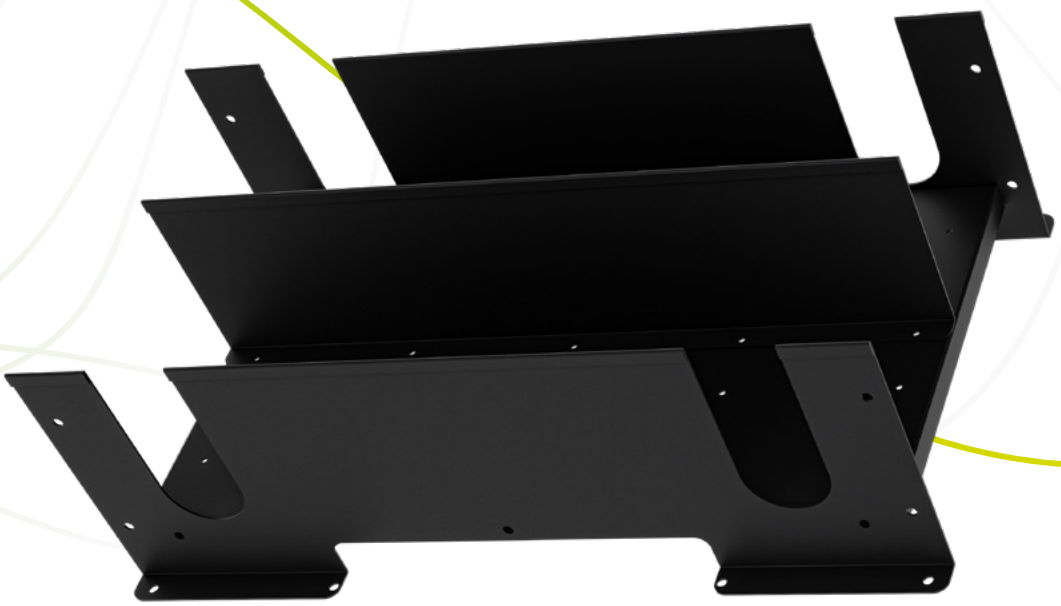
Part Number	Description
572-6612SAM-BK	Elevate Active Single Roof Skylight Automatic Reset (with Motor) 600W x 1200D, Tempered Glass Black
572-6812SAM-BK	Elevate Active Single Roof Skylight Automatic Reset (with Motor) 800W x 1200D, Tempered Glass Black
572-6612SAM-WH	Elevate Active Single Roof Skylight Automatic Reset (with Motor) 600W x 1200D, Tempered Glass White
572-6812SAM-WH	Elevate Active Single Roof Skylight Automatic Reset (with Motor) 800W x 1200D, Tempered Glass White
572-7612SAR-BK	Elevate Active Single Roof Skylight Automatic Reset (with Rod Kit) 600W x 1200D, Tempered Glass Black
572-7812SAR-BK	Elevate Active Single Roof Skylight Automatic Reset (with Rod Kit) 800W x 1200D, Tempered Glass Black
572-7612SAR-WH	Elevate Active Single Roof Skylight Automatic Reset (with Rod Kit) 600W x 1200D, Tempered Glass White
572-7812SAR-WH	Elevate Active Single Roof Skylight Automatic Reset (with Rod Kit) 800W x 1200D, Tempered Glass White

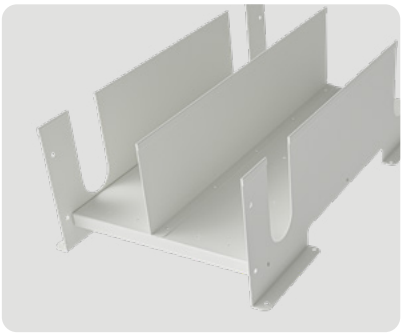
ELEVATE COLD AISLE CONTAINMENT

Roof Raceway Cable Management

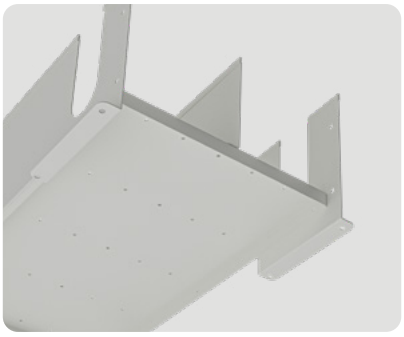
This versatile modular cable trough is designed for efficient cable management for data racks. Installed at the top of the cabinet, it features a double tray design that effectively separates power and data cables.

Available in two widths, 600mm and 800mm, with a standard height of 280mm, this raceway is easily mounted into pre-drilled holes on the DCR series roof.





- Designed at 280mm height each raceway section offers variable width channels to allow to difference cable volume between each side.



- Available in either 600mm or 800mm widths, it installs into pre-drilled holes on the DCR series roof.

Part Number Table

Part Number	Description
578-600-BK	Elevate Roof Raceway Cable Management 600W x 195H, Black
578-800-BK	Elevate Roof Raceway Cable Management 800W x 195H, Black
578-600-WH	Elevate Roof Raceway Cable Management 600W x 195H, White
578-800-WH	Elevate Roof Raceway Cable Management 800W x 195H, White

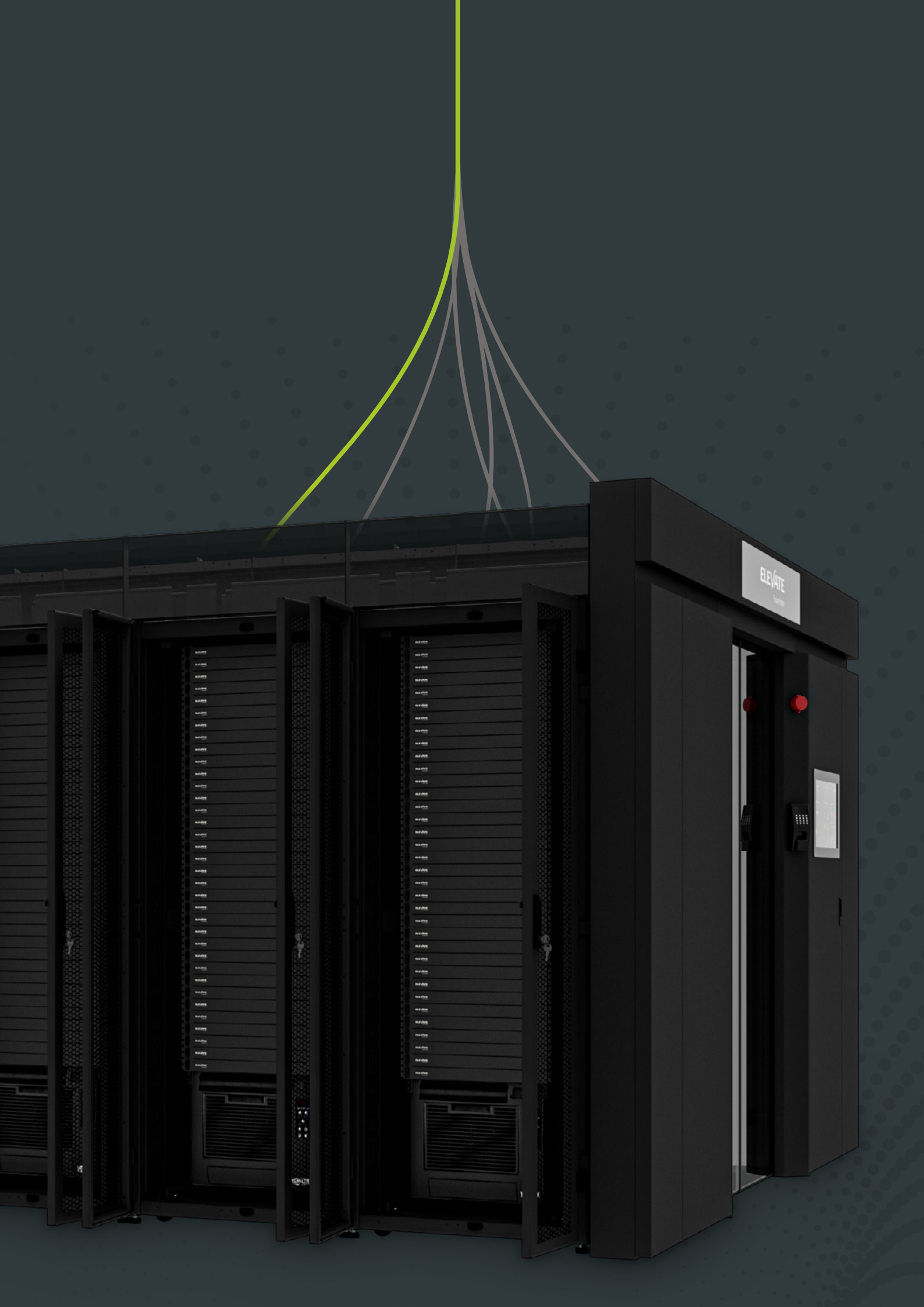
Roof Rear Cover Plate

The roof cover panels not only enhance the profile of the cold aisle but can also be used to enable a hot aisle “chimney” focused solution.

This dual functionality provides significant benefits. By improving the cold aisle profile, the panels help maintain a consistent and efficient airflow, optimising cooling performance and reducing energy consumption.

Part Number Table

Part Number	Description
574-6280-BK	Elevate Cold Aisle Roof Rear Cover Plate, 600W x 280H, Black
574-8280-BK	Elevate Cold Aisle Roof Rear Cover Plate, 800W x 280H, Black
574-6280-WH	Elevate Cold Aisle Roof Rear Cover Plate, 600W x 280H, White
574-8280-WH	Elevate Cold Aisle Roof Rear Cover Plate, 800W x 280H, White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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 Cold 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 Cold 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 Cold 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 Cold 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. Utilizing 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 Cold 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 Cold Aisle Water Leak Rope 5m

rev 2.0 - 05/01/26

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an excel solution