DATALEC
PRECISION INSTALLATIONS

Bespoke Manufacturing

Aisle Containment and Caging Solutions

datalecltd.com

Datalec Hyperion Ceiling System

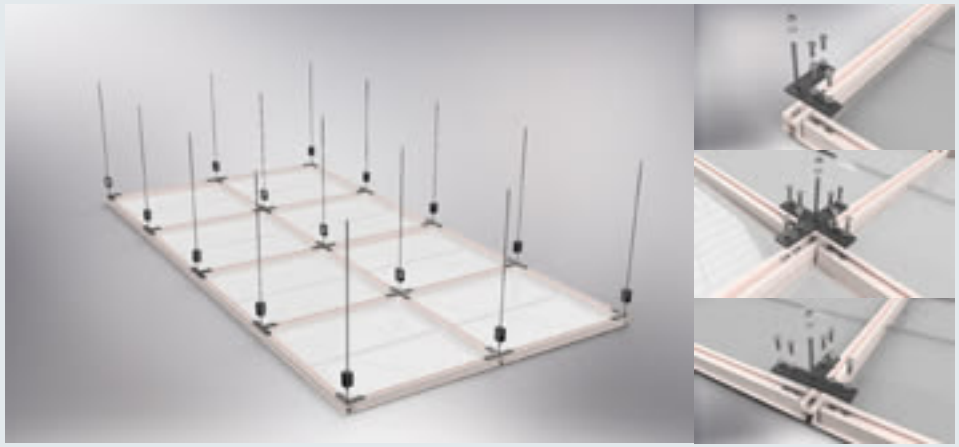
Providing Certainty with our Structural Ceiling System

A high-performance structural load ceiling system, engineered to confidently and securely suspend and support all the main components essential to data centre infrastructure, AI facilities and infrastructure, clean rooms and industrial applications.

Reliable, Adaptable, and Cost-Effective Ceiling System

The Datalec Hyperion Ceiling System is a pre-engineered, aluminium structural ceiling designed for maximum functionality and durability. Featuring continuously slotted primary elements and secondary supports secured with robust steel connectors, it provides a stable and efficient solution for suspending power modules/ busbars, cable containment, HOT/ COLD aisle containment and various other essential data centre infrastructure components.

Engineered for versatility, the heavy-duty aluminium grid is quick to install, highly adaptable, and configurable to meet the unique specifications of any data centre. Our innovative extrusion design ensures compatibility with standard strut fasteners, streamlining assembly while enhancing structural integrity.



Designed and manufactured by DPI for seamless installation, the Hyperion Ceiling System provides long-lasting, high-performance support tailored for the demands of modern data centre operations. Its robust architecture is engineered to accommodate advanced AI facilities and infrastructure, ensuring optimal environmental control, scalability, and reliability for mission-critical workloads.

Key Features & Benefits

Robust Load Performance:

- Point Load Capacity: **6 kN** (load distribution as per diagram).
- Uniform Load Capacity: **8 kN/m²** (load distribution as per diagram).
- Safety factor: **2.**

Suspended load data has been independently tested and certified by a third party accreditated engineering body.

Reaction to Fire:

- Classified A1 (in accordance with BS EN 13501-1:2018)

Modular & Prefabricated Design:

- Consists of double channel primary and secondary aluminium grid elements, joined via steel connectors — fast, consistent installation with high tolerance control.

Service-friendly Grid:

- 1200×1200 mm centres, offering clear grid openings of 1129.6 × 1129.6mm, ideal for MEWP access and maintenance.

Versatile Application:

- Engineered for data centre infra-structure, including AI applications, clean rooms, industrial ceilings, and containment systems.

Quality & Control:

- Manufactured in the DPI's **UK** and **UAE** ISO-9001 accredited facilities, providing repeatable build quality and delivery certainty.

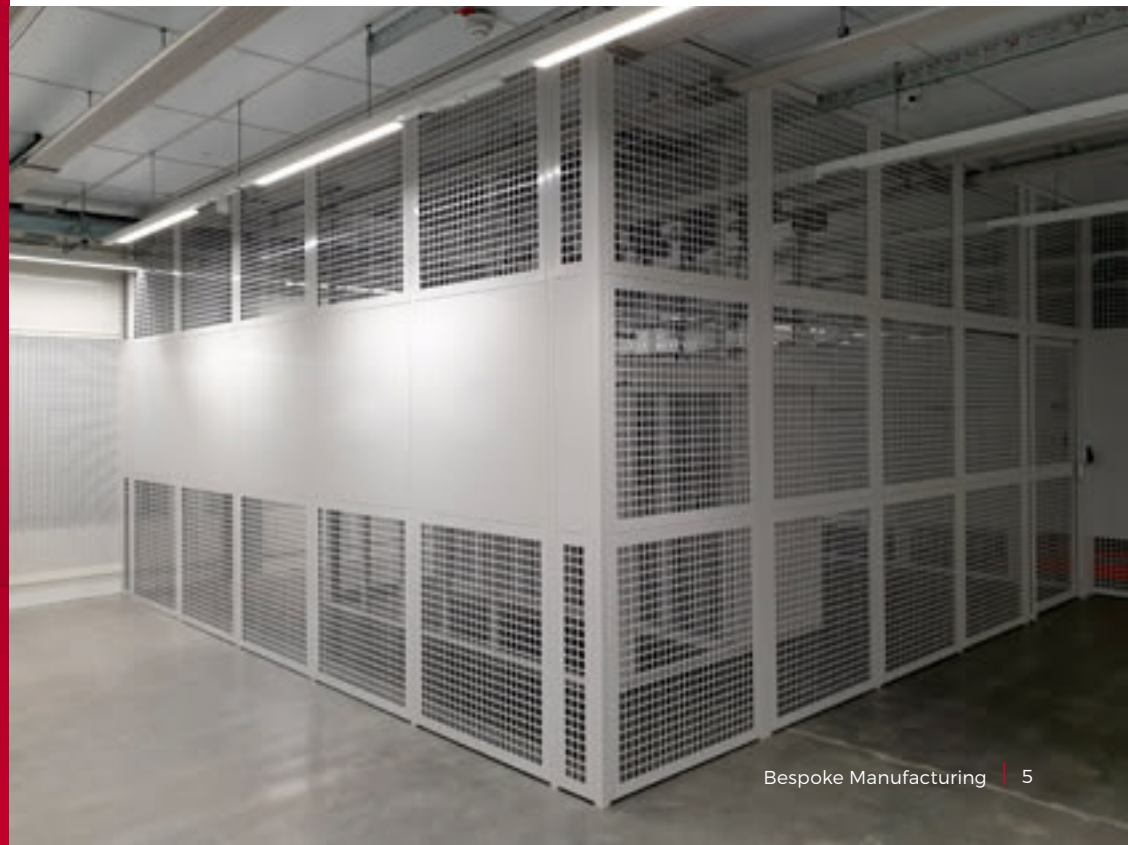
Security Cages

IT equipment and data security is an ongoing concern for Data Centre managers as IT systems continue to play an ever more critical role in daily operations. A standard server cabinet locking mechanism is often not enough to satisfy a Data Centres' security requirements. For this reason, Datalec has designed security cages that ensure optimum safety at all times.

Secure containment, storage & staging

Cage Wall

Steel:	1.5mm (standard). Options of 2.0mm, 2.5mm and 3.0mm are available.
Punched Holes:	12.7, 19, 25, 33, 38, 45 mm square, 1- 3mm rounded corners other hole patterns and sizes are available on request.
Height:	Available to a height of 8.0m.
Cage Frame:	50mm x 50mm x 1.5mm Box Section. Options of 2mm and 3mm are available.
Fixings:	M6 Machine Screws, M6 Nylock Nuts, 5.5 x 25mm Tek screws. Security fixings available on request.

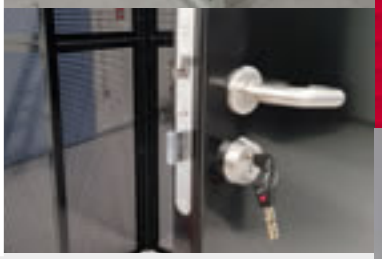


Underfloor Barrier

Steel:	1.5mm (standard). Options of 2.0mm, 2.5mm and 3mm are available.
Punched Holes:	12.7, 19, 25, 33, 38, 45 mm square, 1-3mm rounded corners; other hole patterns and sizes are available on request.
Fixings:	M6 Machine Screws, M6 Nuts, 5.5 x 25mm Tek screws. Security fixings available on request.

Cage Roof

Steel:	1.5mm (standard). Options of 2.0mm, 2.5mm and 3.0mm are available.
Punched Holes:	12.7, 19, 25, 33, 38, 45 mm square, 1-3mm rounded corners other hole patterns and sizes are available on request.
Roof Support:	50mm x 50mm x 2.0mm Box Sections or Channels. In some instances, vertical supports will be needed.
Fixings:	M6 Machine Screws, M6 Nylock Nuts, 5.5 x 25mm Tek screws. Security fixings available on request.



Doors

Steel:	Sliding or Hinged.
Size:	900mm - 2400mm wide, 2000mm - 2900mm high.
Locks:	Key, electromagnetic, mechanical code locks, emergency exit hardware, electromechanical (Abloy EL 560/561).
Fixings:	M6 Machine Screws, M6 Nuts & 5.5 x 25mm Tek screws. Security fixings externally.
Lead Time:	Delivery is 2-3 weeks from receipt of order with installation the following week.

Secure Louvre

Louvre Partitions and Panels:	Aluminium or Steel Louvres (up to 70% free area) Perforated steel panels fitted for additional security.
	Single and double bank blades options.

Mission critical data centre installations

Aisle Containment

Hot Aisle and Cold Aisle Containment systems offer considerable savings in energy costs by separating airflows; this optimises efficiency whilst also reducing the risk of re-circulation and bypass airflow.

Improve Power Usage Effectiveness (PUE)

CAC Roof

Drop Down Panels:	Can be used in Data Hall with sprinkler fire suppression systems and eliminates the need to modify or extend fire suppression sprinklers. **Heat Reactive FM Global Approved Plastic** - Support and cross brackets are adjustable to allow installation of different size panels (adjustable to the different aisles length and width). - Available for installation on any cabinet type and size.
Fixed Panels:	Flexible, modular design, adjustable to different aisle lengths and widths. Can be retrofitted on any cabinet type and height.
Sliding Roof Panels:	- Easy access to overhead services and light fittings. - Available for installation on any cabinet type and size.
Active Roof Panels:	Active Roof panels are integrated with DC fire suppression system and open automatically during a fire alarm event to allow access of gas or water mist suppressant inside contained aisles. Electromagnets hold active roof panels closed during normal operation and in the event of an alarm, release roof panels to swing open.

Doors

Bi-sliding:	- 1200, 1800 or 2400mm wide with or without lock self-closing with speed control and soft close. - Aluminium frame (anodised or powder coated finish). - 4mm Polycarbonate or Toughened Glass vision panels. - Door coordination option available.
Single sliding:	- 900 or 1200mm wide. - Self-closing with speed control and soft close. - Aluminium frame (anodised or powder coated finish). - 4mm Polycarbonate or Toughened Glass vision panel.
Hinged:	- 900 or 1200mm wide. - Self-closing with speed control and soft close. - Aluminium frame (anodised or powder coated finish). - 4mm Polycarbonate or Toughened Glass vision panel.
Cage CAC door (secure containment):	- Sliding or hinged doors can be supplied with a variety of locks such as electro-magnetic (can be integrated into existing access control system or stand-alone), key operated locks etc. - Vision panels provide sufficient lighting inside the aisle without security being compromised.
All doors are:	Suitable for installation on any cabinet type and size. Available in anodised aluminium or powder coated finish in variety of colours.

Our rigorous project management and supervision ensures solutions are implemented the first time, every time

Increase the efficiency of cooling by up to 30%

Hot Aisle Containment channels the naturally rising hot exhaust air created by servers directly into a ceiling void or CRAC/CRAH system intake. This containment method prevents hot air from recirculating and mixing with the air supply, increasing the efficiency cooling by up to 30%.

Roof Chiller Containment

Aisle containment principles can be applied to other vital data centre systems to increase cooling efficiency. Cold Aisle Containment solution can be modified for exterior use and used to segregate cold intake air from hot exhaust air.

Improves PUE in your data centre

On-Site Powder Coating Facility

The introduction of our on-site powder coating facility brings together the core characteristics of Datalec, of being agile, efficient and precise. The ability to have complete control over the process means that we have better quality control and shorter lead times leading to better efficiency. It also means we are able to use the most up-to-date technological process that enables us to deliver an environmentally responsible product due to its green credentials.

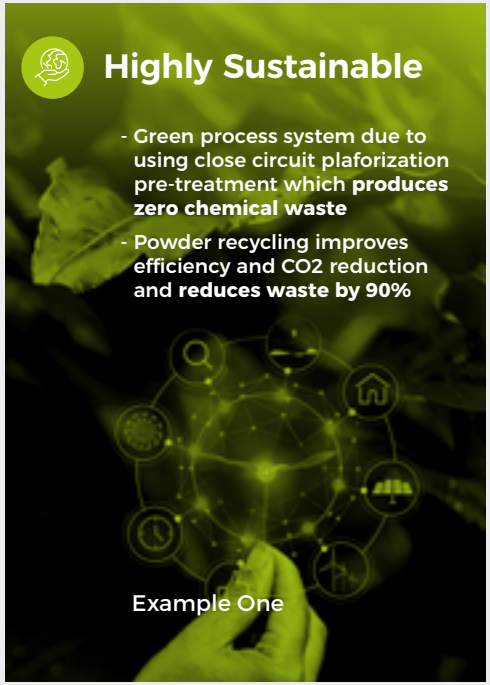
4 4 guns fully automated paint booth, with additional stand alone bay.

60 60 standard colours available, all others available on request.

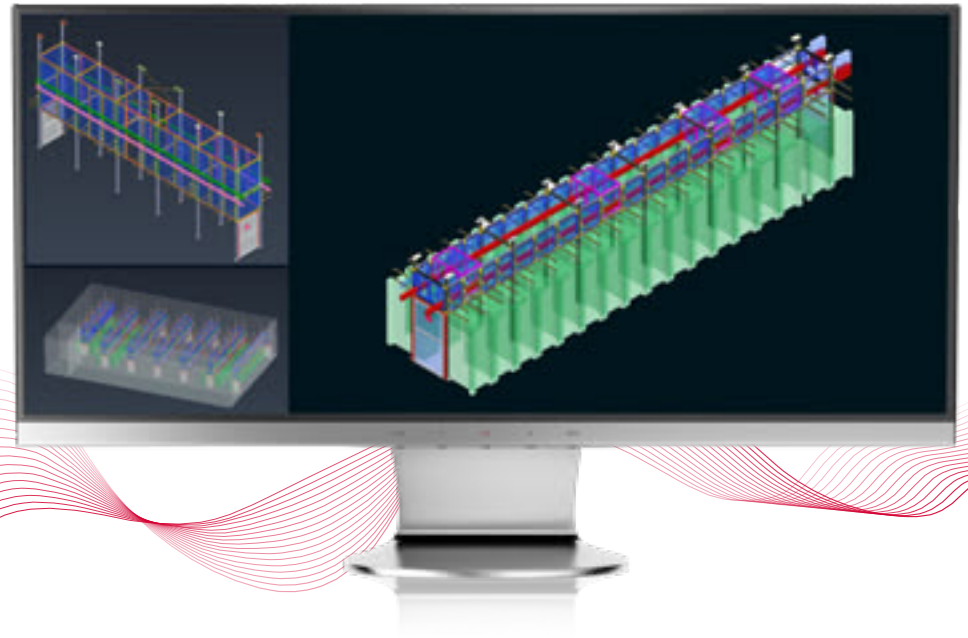
164 164m conveyor track length including 15m of pre-treatment, 15m of drying oven and 35m curing oven.

1.5 1.5 hrs track time.

40 40 x standard 1200mm x 1200mm panels per hour spray capacity.



Free-standing Aisle Frame



Datalec's free-standing aisle frame provides a simple and efficient method for the deployment of infrastructure support and aisle containment.

Designed to provide a complete system solution that combines the key components of containment, cable and power pathways, and cabinet docking into a single modular structure, it enables mission-critical facilities to build and scale data centres quickly and efficiently.

Our innovative approach is the driving force for our consistent improvements

Server Rack Cabinet Enclosure

Heavy-Duty Cabinets Engineered for Performance and Sustainability.

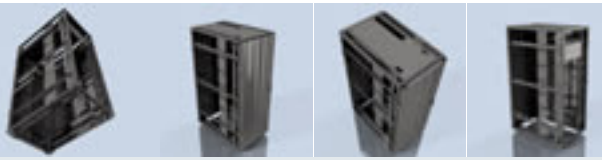
We specialise in the manufacture of fully bespoke, heavy-duty cabinets designed to meet each client's unique specifications. Sustainability is embedded throughout every stage of production, from initial design and precision powder coating to final assembly and shipping, all carried out on-site at our dedicated manufacturing facilities.

Server Rack Cabinet Enclosure

Our fully integrated approach ensures exceptional quality control, consistent craftsmanship, and streamlined operations.

The result?

Faster delivery timelines that align with the pace and demands of dynamic regional projects.



Specifications: Bespoke Network / Server / Cabinet Enclosures

- Standard sizes:
  Widths – 600mm, 750mm and 800mm
  Depths – 1000mm and 1200mm
  Height – 42U/47U/52U
  Bespoke sizes available on request.
- Material: Aluminium extrusions frame, steel perforated doors, side panels, top cover and accessories (polyester powder coated).
- Colour: White RAL9003 std, other colours on request.
- Door free area: 80%.
- Door locking mechanism: Two-point locking, key operated swing handles with keyed alike or keyed to differ cylinders, combination lock handles, electronic handles with proximity card and/or biometric access.

Sustainability

- Aluminium extrusion for cabinet's frame is of the same type as used for our aisle containment solutions which significantly increases our materials utilisation and manufacturing efficiency.
- Airflow management which improves PUE.

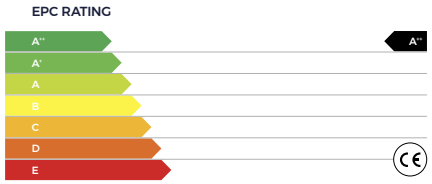
Value Add

- Optional Accessories: Slide-in dividing panels, blanking panels, shelves, custom brush strips, cable management, bespoke cable entry locations, lighting, electronic security features (cameras), castor wheels,
- Managed Services: Full pre-staging/rack & stack capabilities - active equipment, structured cabling, PDUs, CDUs, rear door heat exchangers.

Designed and manufactured by DPI.

Datalec LED Luminaire

Datalec LED Luminaire is a lighting system with low power consumption and minimal heat generation, providing long term affordability. These standalone, modular design, lights can be easily installed with new HAC/CAC or retrofitting into exiting PODs of any length. Manufactured in the UK and designed to meet the TIA-942-A Standard for data centre lighting controls.



Service offering includes

Critical Infrastructure

- Connectivity
- Mechanical & Electrical
- Electronic Security
- CSA
- High-density & AI Solutions
- Lifecycle
- Modular Infrastructure
- New/Refurb

Bespoke Manufacturing

- Modular & AI Solutions
- Caging Solutions
- Aisle Containment
- Hyperion Structural Ceiling
- Powder Coating
- Accessories
- Research & Development

Consultancy Services

- Project Management
- Client-side Technical PM
- Technical Contract Administration
- Construction Management and Monitoring
- Strategic Project Advisory
- Risk Management & Mitigation

Technology & Data Centre Services

Data Centre Services

- Critical Infrastructure Maintenance
- Facilities Management
- Technical Cleaning
- Soft Services

Technology Services

- Active Hardware Engineering
- Technical Resource
- Remote Hands Service
- Migrations
- Data Destruction

OUR COMMITMENT TO QUALITY AND INNOVATION

Self-delivery is Datalec's commitment to providing the quality, consistency, and common exacting standards in workmanship that clients deserve and demand.

About Datalec

Datalec Precision Installations delivers global data centre solutions, specialising in M&E and connectivity design, bespoke manufacturing, modular solutions, installation and data centre services. With unmatched expertise, we offer consultancy, cleaning, electronic security, remote hands and migrations. By delivering advanced, future-ready data centres, we empower clients to embrace and lead the AI revolution through innovation and digital transformation.

Known for our quality, flexibility and reliability Datalec constantly seeks how to better meet and exceed client expectations.

The company holds various industry certifications and accreditations. Through careful recruitment and rigorous training Datalec's critical industry qualifications and partner programs are well maintained.

TIQC

HEALTH IS OUR MISSION • SAFETY IS CRITICAL • dpi

CNCI

CDCDP

SAFE ELECTRIC

SAFECERT

VOLUNTARY CONSTRUCTION REGISTER

nqa ISO 9001 QUALITY MANAGEMENT

nqa ISO 14001 ENVIRONMENTAL MANAGEMENT

nqa ISO 27001 INFORMATION SECURITY MANAGEMENT

nqa ISO 45001 HEALTH & SAFETY MANAGEMENT

"I'm sure this won't be the last time we work with Datalec, I will be looking forward to the next project"

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