

Price of Cold Aisle Systems for Computer Rooms



AI Overview

A cold aisle containment system in a data center typically costs between \$200 and \$1,000 per linear foot, depending on design, density, and retrofitting requirements. Overview of Cold Aisle Containment Cold aisle containment involves enclosing the corridor in front of server racks to trap cold air and ensure consistent inlet temperatures for servers. This improves cooling efficiency, reduces energy consumption, and extends equipment lifespan. It can be implemented in new data centers or retrofitted into existing raised-floor facilities with minimal downtime.

Factors Affecting Cost

- Aisle Length and Height:** Longer aisles and taller containment panels increase material and installation costs.
- Containment Type:** Options include rigid panels, modular doors, or flexible curtains. Rigid systems are more expensive but offer better airflow control.
- Integration with Existing Cooling:** Retrofitting into an existing raised-floor system is generally less costly than a full redesign but may require adjustments to CRAC units and airflow management.
- Density of Equipment:** High-density racks generate more heat, requiring more robust containment and potentially higher costs.
- Energy Efficiency Incentives:** Utility rebates or energy savings programs can offset initial investment, sometimes reducing payback periods to a few months.

Typical Cost Estimates

- Small to mid-sized aisles: \$200–\$500 per linear foot for modular or curtain-based containment.
- High-density or enterprise-grade aisles: \$500–\$1,000 per linear foot for rigid panels with integrated airflow management.

Total project costs: For a standard enterprise data center, retrofitting cold aisle containment can range from tens of thousands to several hundred thousand dollars, depending on aisle length and complexity.

Return on Investment Cold aisle containment can reduce cooling energy consumption by 10–30%.

Article Content

Hot & Cold Aisle Containment Systems For Data Centers by Cool Shield

Cool Shield™ products provide customers with versatile, turnkey aisle containment systems for new or existing critical spaces. Our offerings range from a single row in a server room to entire data center

Hot / Cold Aisle Containment

Sliding Doors offer data centers aisle-end containment in just minutes and without the need for contract labor. The one-tool design allows for quick and easy installation, removal, and re-installation with

Cold Aisle Containment

Discover cold aisle containment systems with IP20 protection and modular design for data centers. CE certified, customizable, airtight storage solutions.

Hot and Cold Aisle Containment

Can be configured in either hot or cold contained systems. In a cold aisle containment the return air path to the CRAC is typically ambient room environment. End of aisle doors and roof panels contain the

Move to a Hot Aisle/Cold Aisle Layout

A Time-tested Technique The hot aisle /cold aisle data center layout was originated by IBM in 1992 and it is one of the oldest ways to save energy in the data center. 1 Hot aisle/cold aisle layout involves

FOCUSED COOLING USING COLD AISLE CONTAINMENT

While either hot aisle or cold aisle containment systems can be installed and are both capable of increasing efficiency and cooling today's high heat data centers, meaningful differences exist in how

Data Center Aisle Containment

Traditional open aisle data centers use perimeter PAC (precision air conditioning) or CRAC (computer room air conditioning) units to channel cold air up through a raised floor void via grilles positioned in

Aisle Containment for Server Rooms and Data Centers

Shop aisle containment solutions at Server Racks Online. Explore hot and cold aisle containment systems, including doors, panels, and ceilings. Improve data center airflow, cooling efficiency, and

Hot Aisle vs Cold Aisle Containment Explained (Data Center Cooling ...

While advanced cooling systems like chilled water plants and CRAH units play a major role, one of the most effective strategies is much simpler: controlling how air moves through the data

Best Data Center Cooling Systems 2026

Data center cooling systems all accomplish thermal regulation, but they have a few means of reaching this goal. The most straightforward data center cooling method is computer room air conditioners,

Data Center Hot/Cold Aisle Containment Systems | Eaton

An aisle containment system is a simple way to improve cooling efficiency in hot aisle/cold aisle rack configurations. Essentially creating a room within the aisle,

Cold Aisle Containment

How Cold Aisle Containment Works The cold aisle containment system encloses the cold aisle and prevents the mixing of cold air with hot exhaust air. This lets hotter

Hot/Cold Aisle Containment | Data Center Containment Systems

Hot and cold air containment systems designed to maximize cooling predictability, capacity, and efficiency at the rack, row or room level. Get flexible and cost-effective rack and containment

Data Center Hot/Cold Aisle Containment Systems | Eaton

An aisle containment system is designed to be installed without the assistance of contractors or HVAC specialists. The components are organized into modular

Data Center Aisle Containment Systems | Profile IT

Data-center airflow catalogue Keep cold air focused. Send heat where it belongs. Specify complete aisle containment systems for data centers, edge facilities and

Cold Aisle Containment | Legrand

Superior Cooling Efficiency: By sealing the cold aisle so that only cool supply air reaches server inlets, cold aisle containment improves the effectiveness of airflow management. This focused use of cold

Cold Aisle Containment

If properly installed you can expect 20-50% reduction in cooling costs. Efficiency is maximized if the cooling systems with variable speed fans and there is a good

Data Center Cooling Best Practices

11. Seal the vertical front of the racks using blanking plates or other systems to prevent Cold Aisle air from moving through the empty rack positions into the Hot Aisle. 12. Seal the cable

Data Center Curtains | Server Room Insulated Curtains

Steel Guard Safety's data center curtains provide an economical and highly effective solution for controlling server room temperatures through hot aisle and cold aisle

Data Center Cooling | Schneider Electric United States

Data center cooling technologies are designed to transport heat energy from the IT environment to the outside atmosphere. We provide integrated cooling systems and solutions ranging from chiller and

Hot and Cold Aisle Containment: What You Need to Know

A cold aisle containment system is a budget-friendly option. Containing cold aisles is easy to do with an older space, whereas hot aisle containment systems often require more

Cold Aisle Containment in Data Centers | Subzero

Cold aisle containment systems use doors at aisle ends, ceiling panels or lids above racks, and structural frames to create enclosed zones where cold supply air

Data Centre Aisle Containment Systems

Data Centre Aisle Containment Systems A data centre aisle containment system separates the supply of the cold air and hot exhaust air return paths. Aisle containment helps to ensure a stable and

Hot & Cold Aisle Containment Doors for Data Centers

The Cool Shield Double Sliding Hot & Cold Aisle Containment Data Center Door system is an integral part of a highly efficient aisle containment solution. Double

Data Center Aisle Containment Systems | Profile IT Solutions

Specify complete aisle containment systems for data centers, edge facilities and high-density compute rooms. Compare configurations, build a shortlist and send one project-ready enquiry.

Cold Aisle Containment Systems | Server Room Environments

Cold Aisle Containment Cold air falls and installing cold aisle containment provides a way to seal cold aisles in data centres and server rooms to prevent hot exhaust air from IT server cabinets mixing with

Aisle containment | Airflow management | Eaton

Aisle containment ceilings, walls and end of row doors are designed to help maintain optimal operating temperature in server rooms and data centers in order to lower data center energy demands and

The pros and cons of hot and cold aisle containment

With data centres and computer server rooms becoming larger and more numerous companies are often faced with a decision: what is most suitable for their circumstances, hot or cold aisle

Contact Us

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