

Airport Cooled Aisle Dimensions



Summary of Content

Cooled aisles in airport IT or data center environments typically require a minimum width of 1.2 meters, with lengths up to 16 meters for continuous rows, and can be custom-configured for optimal airflow and equipment access.

Standard Width and Length

For effective cold aisle design, the minimum aisle width is generally 1.2 meters (approximately 4 feet), which allows for two full floor tiles between equipment racks and ensures proper airflow and personnel access . The maximum aisle length for continuous rows is recommended at 16 meters, while aisles with restricted exits should be limited to 6 meters to maintain safe access and evacuation . These dimensions help maintain thermal performance and allow technicians to service equipment safely.

Containment Systems

Cold aisle containment (CAC) systems are often used to enclose the cold supply air, preventing it from mixing with hot exhaust air. This ensures that servers and IT equipment receive a consistent supply of cooled air, improving efficiency and reliability . CAC systems can be custom-engineered to fit the specific layout of the airport data hall, including adjustable length, width, and height, as well as options for sliding or hinged doors and roof panels . Raised floor systems are commonly paired with CAC to deliver conditioned air directly into the aisle from the underfloor plenum.

Design Considerations

- Airflow efficiency: Proper aisle width and containment prevent hot and cold air mixing, optimizing cooling performance.

Article Content

Airport Departure Lounge Design Guidelines | PDF | Bar

The document discusses guidelines for designing airport facilities such as security checkpoints, departure lounges, and baggage

Aisle containment system buying guide

Aisle containment system buying guide Discover the key factors to consider when choosing a hot aisle/cold aisle containment

Aisle Containment Systems for Hot & Cold Aisle Solutions

Aisle containment is a layout design for server racks and other computing equipment in a data center. The goal of a hot or cold aisle

Aisle Containment System in Data Center

Aisle Containment System in Data Center Aisle containment is a data center cooling strategy that separates the hot

Federal Aviation Regulation Sec. 29.815

Sec. 29.815 — Main aisle width. The main passenger aisle width between seats must equal or exceed the values in the following table:

Advisory Circular 150/5300-13A, Airport Design

A set of scale drawings of current and future airport facilities that provides a graphic representation of the long-term development

Hot Aisle vs Cold Aisle Containment Explained (Data

Air-cooled systems By controlling where air goes, containment ensures that cooling

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Enhancing Airport Experiences, Enriching Time. We are global experts in designing, building, and

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

Airport Design and Engineering Standards

Airport Design and Engineering Standards This page provides a quick reference to engineering, design, and

Data Center Design: Hot Aisle & Cold Aisle – Length

Efficient airflow management in data centers relies heavily on proper Hot Aisle and Cold Aisle

Cold Aisle Containment & Hot Aisle Containment

Executive Summary of Aisle Containment This article examines cold aisle containment and hot aisle containment (also known as

AC 150/5360-9, Planning and Design of Airport Terminal Facilities

Peaking characteristics vary from airport to airport and thus influence the planning, - sizing, and design of passenger terminal

AISLE CONTAINMENT

The aisle containment system is a modular rowbased thermal containment solution, which separates cold and hot data center air

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The A320 Family is the world's best-selling single-aisle aircraft. An A320 takes off or lands in the world each 1.5 seconds for each

Cold Aisle Containment: The Ultimate Guide To

Cold Aisle Containment: As we have discussed, in this strategy the cold air supply is confined to the cold

Is there any limit on how narrow aisles can be?

For a transport category airplane with 20 or more seats the minimum aisle width is 15 inches from the floor to a height of 25 inches,

Data Center Aisle Containment

How data center aisle containment can be applied to meet the key objectives in effective data center design.

14 CFR § 29.815

§ 29.815 Main aisle width. The main passenger aisle width between seats must equal or exceed the values in the following table: ... 1

Airport Design and Engineering Standards

This page provides a quick reference to engineering, design, and construction standards for various airport-related

IMPROVING DATA CENTER EFFICIENCY AND CAPACITY

COLD AISLE CONTAINMENT Cold aisle containment systems (CACs) force a greater concentration of the cooled supply air from

Airport Design Standards and Requirements

The document discusses standards and requirements for different areas of an airport terminal building. It addresses requirements for

eCFR :: 14 CFR 25.815 -

§ 25.815 Width of aisle. The passenger aisle width at any point between seats must equal or exceed the values in the following table:

Data Center Aisle Containment Systems | Profile IT Solutions

Explore 30 hot aisle, cold aisle, structural, door, roof, flexible containment and airflow-control products for data centers. Engineering

Aviation Department

definitive Port Authority planning guide for airport planning. This manual takes into consideration latest industry planning. and

Airport Terminal HVAC Design Guidelines | PDF | Ventilation ...

The document provides guidelines for HVAC design of an airport terminal. Key points include: - Outdoor design conditions are hot

EASA CS 25 Aisle clearance – Main aisles/Cross aisles

Considerations related to aisle clearance with respect to seat installations Ref EASA CM No.: CM-CS-007 Issue 01

EASA CS 25 Aisle clearance – Main aisles/Cross aisles

Aisle widths should be determined with seats and their moveable features in the most critical positions allowed by the

Hot and Cold Aisle Containment Solution | Legrand

Effective aisle containment is critical to maintaining peak data center cooling efficiency. By creating a physical barrier between cold

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By harnessing insight, putting people first, and working as your partner, we create new opportunities for growth while enriching the

Hot and Cold Aisle Containment: What You Need to Know

Hot aisle containment systems isolate the hot aisle using a similar enclosure system to that of a cold aisle with a sealed

EASA Recommended master template

Aisle widths should be determined with seats and their moveable features in the most critical positions allowed by the design. This

Contact Us

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