

Material Solutions for Optimizing Data Center Containment and IT Infrastructure

Interstate Advanced Materials provides material solutions like polycarbonate multiwall and acrylic sheets for data center containment.

SACRAMENTO, CA, UNITED STATES, February 23, 2024 /EINPresswire.com/ -- Data centers require materials that can provide protection and help regulate temperatures to promote server efficiency, reduce server cooling costs, and minimize potential problems. Interstate Advanced Materials provides material solutions like polycarbonate multiwall and acrylic sheets that are tailored for the safety, security, and operational efficiency of data center containment systems and equipment.



Data centers rely on polycarbonate twinwall's durability and excellent insulation properties for secure and efficient hot and cold aisle containment systems.

Modern data center containment systems utilizing polycarbonate multiwall barriers operate with greater efficiency than traditional open aisles. Known for their extreme durability and excellent thermal resistance, twinwall panels have the necessary insulation properties to prevent the transfer of heat and maintain stable temperatures. In hot aisle containment, the panels isolate hot exhaust air, and prevent it from mixing with cooler intake air. In cold aisle containment, the panels enclose aisles to prevent mixing of cold supply air with hot exhaust air, optimizing cooling system efficiency and reducing energy consumption.

Polycarbonate twinwall is also widely used in data centers for server rack shelving. The material's multi-panel design effectively dissipates heat and helps maintain consistent operating temperatures. Air can flow through twinwall shelving and help mitigate heat buildup around server equipment, reducing the chance of overheating and ensuring more consistent server uptime. Twinwall is also easily machined and can be cold formed to create shelving solutions that meet the specific needs of each data center.

Turtle-shell and umbrella covers made from polycarbonate twinwall protect data centers from



Known for their extreme durability and excellent thermal resistance, twinwall panels have the necessary insulation properties to prevent the transfer of heat and maintain stable temperatures."

Christopher Isar

external hazards, shielding servers from threats like water, dust, and debris. These covers, shaped into arch or half-barrel forms, offer virtually unbreakable protection and allow for easy server visibility without requiring the removal of the covers. Polycarbonate twinwall is flame retardant and helps protect servers in smoke and fire scenarios with its Class A fire rating.

Acrylic is utilized for barriers and partitions in data cleanroom environments due to its high optical clarity, light weight, and impact resistance. Acrylic's transparency enables easy monitoring of equipment and airflow

patterns, aiding in troubleshooting and maintenance. Acrylic is up to 17 times stronger than glass, allowing it to withstand the accidental impacts or vibrations that are common in data center environments and reduce the risk of damage. Its light weight promotes quick deployment and modification of barriers and partitions without significant changes to the data center.

Interstate Advanced Materials offers polycarbonate twinwall and acrylic in sheet stock shapes. <u>Save 30%+ on polycarbonate twinwall and other materials</u> with an Interstate Advanced Materials membership. To learn more about polycarbonate twinwall and how it can fit your data center containment or IT infrastructure needs, call a material expert at (800) 742-3444.

Interstate Advanced Materials is a full-line distributor of sheet, rod, tube, bar, film, profile, and accessories, tools, and care products. With 10 locations nationwide and an online sales and support team, Interstate Advanced Materials provides full sheets and pallets, simple cut-to-size service, and complex CNC manufacturing. Interstate Advanced Materials is known for its reputation of selling high-quality products, providing excellent customer service, and superior technical support. Our products and services are available using the safe, secure, and convenient purchasing system on the Interstate Advanced Materials website. For instant help, we're always a phone call away at (800) 742-3444.

Stephen Sowinski
Interstate Advanced Materials
+1 800-742-3444
email us here
Visit us on social media:
Facebook
Twitter
LinkedIn
Instagram

YouTube

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.