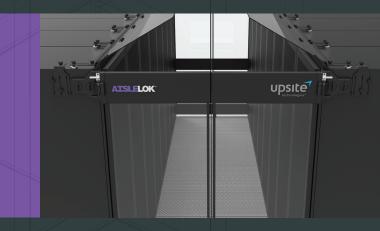


MODULAR CONTAINMENT



# Containment made easy.

The industry's first containment solution designed for quick and easy installation on individual racks.

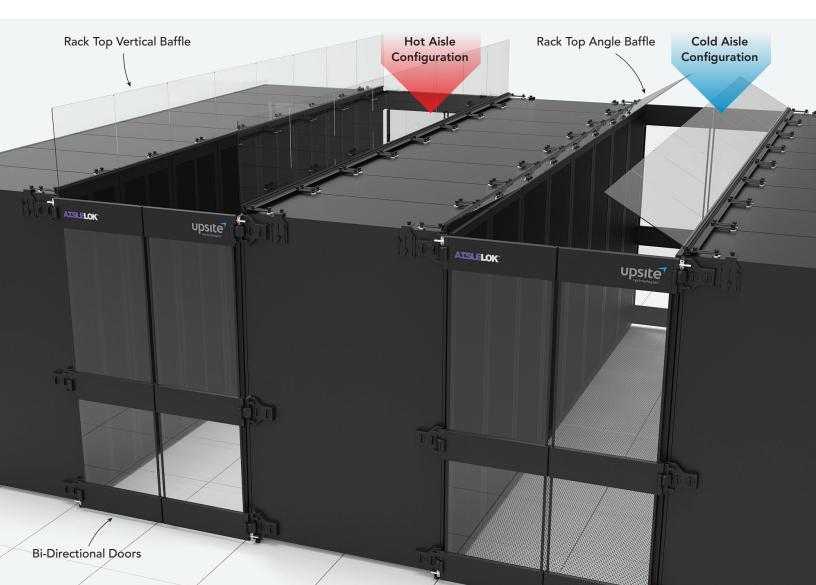


# **ATSLFLOK**<sup>®</sup>

# A New Approach to Containment

Hot and cold aisle containment have become established tactics to improve computer room cooling efficiency, increase rack densities, and improve overall utilization of the data center. Until now, the data center industry has only had two containment options to accomplish these goals: hard wall containment, and soft curtain containment.

Upsite's new solution, AisleLok® Modular Containment, provides an exciting alternative to the status quo by offering a much simpler and cost-effective containment solution that is easier to implement than any containment solution ever created. AisleLok® Modular Containment offers the same core airflow management benefits of traditional containment solutions, but with the major advantage of saving time and money upfront. The key benefit AisleLok® Modular Containment offers is rapid deployment with little or no disruption to existing operations, and the ability to reconfigure the installation as the needs of the computer room change. And with no 3rd party required for design or installation, it's affordable enough to deploy over multiple aisles or rooms.



# **Containment Made Easy**

AisleLok<sup>®</sup> Modular Containment offers the core airflow management benefits of containment, but with greater flexibility and value.

### **Effective Airflow Management**

- Lowers server intake temperatures and reduces hot spots.
- Allows for higher rack densities.
- Prevents hot air recirculation.
- Supports reduced energy costs by providing the opportunity to increase temperature set points and/or turn off cooling units or reduce fan speeds.

# **Easy to Install**

- Can be self-installed in minutes without tools.
- Minimal disruption in computer room as no custom construction required.
- Saves time and money as no professional installation is needed.

#### **Modular and Flexible**

- Flexible design can be applied to hot or cold aisles.
- Can be reconfigured quickly and easily.
- Adapts to your computer room as it evolves.
- Components can be used independently.

#### Available off-the-shelf

- Easy to order; no custom measuring required.
- Ready to install out-of-the-box.
- No 3rd party engineering, design, or installation required for set-up.

# Get the Core Benefits of Containment for Half the Cost

For a Data Center measuring 5,280 ft<sup>2</sup> (490 m<sup>2</sup>), the cost to fully equip all cold aisles with AisleLok<sup>®</sup> Modular Containment is about half the cost of installing legacy containment.\* Beyond the initial cost savings, AisleLok<sup>®</sup> continues to provide payback as it can easily be moved and reapplied by internal staff as your data center needs evolve.

	AisleLok <sup>®</sup> Modular Containment	Legacy Containment
Installed Cost	\$36,180	\$70,993*
Annual Energy Savings**	\$32,172	\$35,520
ROI	13.5 Months	24 Months
Installation Time	3 Staff Hours	80 Staff Hours
Ability to Move and Reapply	Easy	Difficult
Risk Level	Low. No tools required.Only internal resources used.	Moderate. Requires 3rd party construction.

\*based on installing the leading legacy containment system in a 5,280 ft<sup>2</sup> (490 m<sup>2</sup>) data center \*\*based on cost of 10/kWh

Learn more about the comparison of AisleLok<sup>®</sup> Modular Containment vs. Legacy Containment in our newest white paper, available at upsite.com/aislelok.

The open-sealing design allows pressure to flow out through the top.

upsité

# **Open-Sealing Design**

Fully-sealed cold aisles — as used in traditional containment systems — have the potential to over-pressurize the aisle. AisleLok® Modular Containment's open-sealing design allows excess supply air to flow through the top opening, thus eliminating the potential for overpressurization.

#### **Magnetic Attachment**

AisleLok's simplicity and ease of installation are attributed to its magnetic application. Testing by Upsite Technologies has shown that when AisleLok® Modular Containment is properly installed as designed, the magnets do not exceed the allowed magnetic field strength limits given by Manufacturers of IT equipment.

# **Fire Safety**

AisleLok® Modular Containment components are designed with UL94V flammability rated materials. The AisleLok<sup>®</sup> Modular Containment solution is suitable in most data centers using gaseous fire suppression systems. As with the installation of any containment method, the final approval for compliance resides with the local authority having jurisdiction (AHJ).

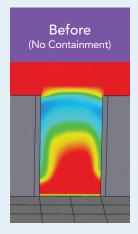


# **Analysis and Testing**

ATSLELOK

ATSLELOK

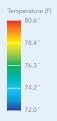
Extensive CFD analysis on the AisleLok® Modular Containment design shows that the solution can reduce server inlet temperatures by as much as 20°F in some conditions. On-site computer room testing of large financial and government institutions yielded similar results.



CFD Analysis shows hot air

recirculation into the cold aisle.





After AisleLok® Modular Containment is installed, cold air is effectively contained, decreasing server inlet temps.

# AisleLok<sup>®</sup> Modular Containment Products

U.S. and International Patents Pending

#### **Rack Top Baffle**

Prevents hot exhaust air from wrapping over the tops of racks and mixing with cold air.

- Made of clear polycarbonate.
- Attaches to top of rack magnetically.
- Angular baffle designed for cold aisle application.
- Vertical baffle is designed for hot aisle application.

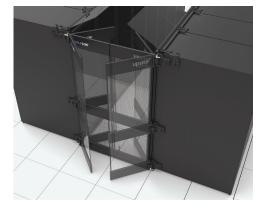
#### **Bi-Directional Doors**

Prevents hot exhaust air from wrapping around the sides of racks and mixing with cold air.

- Made of clear polycarbonate.
- Swing inward or outward when pushed; rest at center.
- Attaches to side of rack magnetically.
- Designed to allow carts to push through.
- Features door stop kick-stand to remain open.
- Can be applied to hot or cold aisle.



Angle



WINNER

FINALIST

enter Dyn 2014

Vertical

# Adjustable Rack Gap Panel

Blocks spaces between racks to prevent hot and cold air mixing.

- Attaches magnetically between two racks or other metal surface.
- Adjusts to fill in space between racks, from 10" to 60" (250 mm to 1500 mm).





Watch the installation demo at Upsite.com/AisleLok

4

# How to Order

AisleLok<sup>®</sup> Modular Containment products are designed to fit varying cabinet arrangements and come in a variety of sizes.

Rack Top Baffles	Fits	Part Number
24" Angle	24" (600mm) Wide Cabinets	10160-24
24" Vertical	24" (600mm) Wide Cabinets	10161-24
30" Angle	30" (750mm) Wide Cabinets	10160-30
30" Vertical	30" (750mm) Wide Cabinets	10161-30
31.5" Angle	31.5" (800mm) Wide Cabinets	10160-31.5
31.5" Vertical	31.5" (800mm) Wide Cabinets	10161-31.5

<b>Bi-Directional Doors</b>	Fits	Part Number
48" X 42U	48" (1200mm) Wide Aisles and 42U Cabinets	10163-42
48" X 45U	48" (1200mm) Wide Aisles and 45U Cabinets	10163-45
48" X 48U	48" (1200mm) Wide Aisles and 48U Cabinets	10163-48

Adjustable Rack Gap Panel	Fits	Part Number
10" – 60" (250 mm – 1500 mm) 42U	42U Cabinets	10164-42
10" – 60" (250 mm – 1500 mm) 45U	45U Cabinets	10164-45
10" – 60" (250 mm – 1500 mm) 48U	48U Cabinets	10164-48
10" – 60" (250 mm – 1500 mm) 50U	50U Cabinets	10164-50

Contact us to learn more at 888.982.7800.



Designer and Manufacturer 888.982.7800 www.upsite.com