AiR TRAP

AIR-FLOW MANAGEMENT
DATA CENTRE CONTAINMENT SOLUTION

AiR-TRAP System

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TRAP

AIR-FLOW MANAGEMENT

As rack densities inevitably climb, the challenges for air-flow management become more severe. The infrastructure struggles to deliver a sufficient volume of cool air to the equipment and to move exhaust air to the air handlers. As it's forced to deliver colder air at a greater CFM, the cooling scheme consumes more energy from the fans through the pumps, down to the chiller. And even under minimal loads, the efficiency of these systems is suspect.

Due to the open architecture of the data center room, hot aisle/cold aisle cannot attain complete air separation. Therefore, here comes in the COLD AISLE / HOT AISLE CONTAINMENT SOLUTIONS.

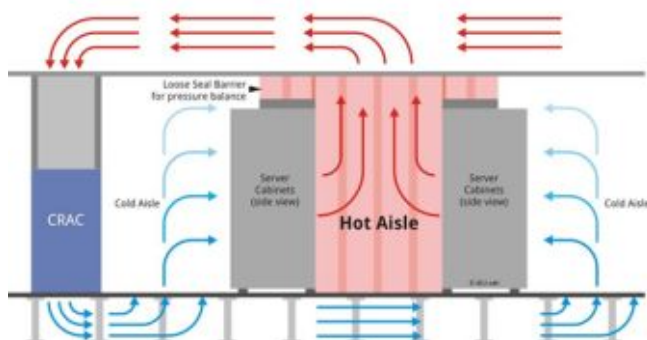## COLD AISLE CONTAINMENT SOLUTIONS

The premise of cold aisle containment, though simple, can improve cooling performance. With the cold aisle encased, the cold air, delivered from under the floor, stays where it's needed at the server intake. The roof and walls of the containment ensure that the only place this air can exit is through the rackmount equipment. The exhaust air, because of the boundaries, routes back to the air handlers only, eliminating the previous concerns of hot air contamination and hot air recirculation.

Cold Aisle Containment System with door at the front and the end of the row

HOT AISLE CONTAINMENT SOLUTIONS

Hot Aisle Containment reduces energy consumption by exhausting hot air and eliminating bypass air flow

The Hot Aisle containment system works in the same way as a conventional hot aisle / cold aisle layout. Cold air from the local room ambience is drawn through the perforated doors on the front of each cabinet The cold air is drawn over the active equipment where the heat from the equipment transfers to the air.

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AIR-TRAP CONTAINMENT SYSTEM

No matter you are constructing a COLD-AISLE Containment System or HOT AISLE Containment System, **AIR-TRAP** can provide you will all kinds of Air-flow blocking solutions to manage your needs.

Lightweight Construction

Our products are made of highly flexible lightweight aluminum profiles and materials. This can reduces the net weight of the cabinet system to ease the load of the raised floor and enables easy transport.

Highly Flexible

With the construction of the aluminum profiles, allows us to design custom-made solutions which fit your needs. These aluminum frame can be mounted to different cabinet systems.

Save Time and Money

Time is Money, with our experienced engineering team, we provide custom-design and build orientated solutions. Since most of the materials are comes in flexible size, therefore our solutions can deliver in a short period of time and in a very attractive price.

By using AIR-TRAP products, you can maintain your air-flow within the containment system at all time.

HD2 Sliding Door

SLiM2 Vertical Block	Bottom Block	SLiM2 Tri-Frame	SLiM2 Sliding Door
Curtain Block	Ceiling Block	SLiM2 Top Blocking	SLiM2 Swing Door

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Auto-Retract Sliding Containment Door

Heavy
Duty

AIR-TRAP's HEAVY D2
Heavy Duty Double / Single Sliding Door
with Auto-Retract feature

The **AIR-TRAP's Heavy D2 Sliding Containment Door** provides perfect solution for trapping the air-flow within the containment. With its *power-free Auto-Retract* mechanism, make sure you can contain the Hot / Cold air inside the containment system all the time.

Constructed with Toughened Glass provides 100% view and better air blocking function.

Featured with Large Size Handle for easy opening or closing action.

Pls. visit www.youtube.com/watch?v=OCisvHmE1sI to view the action.

AIR-TRAP SLiM2 SLIDING DOOR

Auto-Retract Sliding Containment Door

AIR-TRAP's SLiM2
Double / Single Sliding Containment Door
with Auto-Retract feature

The **AIR-TRAP's SLiM2 Sliding Containment Door** provides perfect solution for trapping the air-flow within the containment. With its *power-free Auto-Retract* mechanism, make sure you can contain the Hot / Cold air inside the containment system all the time.

With the structure of Modular Aluminum Profile, we can nearly construct any size of the containment door to fit you Data Centre in a short period of time.

AIR-TRAP's Sim2 Sliding Containment Door comes with 2 type of Panel

- 100% Clear Fire-Retardant Rated Sheet   or
- 80% UV Fire-Retardant Rated Sheet

Pls. visit www.youtube.com/watch?v=XTh04_frqFwI to view the action.

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Swing-TypeContainment Door

AIR-TRAP's **SLiM2**
Double / Single Swing Door
Slim Body - Save Space

The **AIR-TRAP's** **SLiM2 Swing-Type Containment Door** provides light weight and slim size solution for trapping air-flow within the containment. It make sure you can contain the Hot / Cold air inside the containment system all the time.

With the structure of Modular Aluminum Profile, we can nearly construct any size of the containment door to fit you Data Centre in a short period of time.

AIR-TRAP's Sim2 Swing-Type Containment Door comes with 2 type of Panel

- 100% clear Fire-Retardant Rated Sheet
  or
- 80% UV Fire-Retardant Rated Sheet

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TRI-FRAME SUPPORT STRUCTURE

AIR-TRAP's SLiM2
Tri-Frame Horizontal Support Structure

The **AIR-TRAP 's SLiM2 Horizontal Tri-Frame Support** Structure provides basic support for holding the **SLiM2** Series Doors (Sliding/Swing type) and the Top Blocking Panel.

With the Modular Design we can construct this basic support structure to attach with nearly any size or brand of cabinets inside the containment system.

AIR-TRAP's SLIM2 Top Blocking Panel must use with AIR-TRAP's SLIM2 TRI-FRAME

LIGHT-WEIGHT TOP BLOCKING PANEL

AIR-TRAP's **SLiM2**
Detachable Top Blocking Panel

The **AIR-TRAP's SLiM2 Detachable Top Blocking Panel** provides lightweight solution for trapping air-flow within the containment. It trapped the Hot / Cold air inside the containment system all the time.

With the structure of Lightweight Modular Aluminum Profile, we can nearly construct any size of the containment system. This Top Blocking Panels is modular and scalable to accommodate differences in rack widths and row spacing.

The detachable features, you can detach the Top Blocking Panel anytime for clean up or maintain any system above it (such as lighting or cable containment system) very easily.

AIR-TRAP's SLIM2 Top Blocking Panel must use with AIR-TRAP's SLIM2 TRI-FRAME

AIR-TRAP's Sim2 Top Blocking Panel comes with 2 type of Panel
- 100% clear Fire-Retardant Rated Sheet   or
- 80% UV Fire-Retardant Rated Sheet

Pls. visit www.youtube.com/watch?v=bkYc3sXyUO0
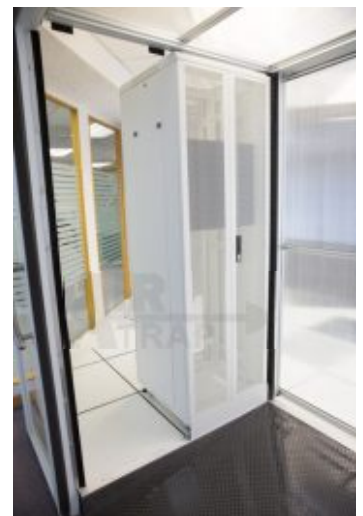to view the action.

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VERTICAL BLOCKING PANEL

AIR-TRAP's **SLiM2**
Vertical Blocking Panel

The **AIR-TRAP's** **SLiM2 Vertical Blocking Panel** constructs with Lightweight Modular Aluminum Profile and UV Panel, which can nearly made in any size to block with empty space for temporary or permanent use.

Its featured with lightweight magnet to hold the Blocking Panel into the fixed position and can be detach and re-install at anytime.

Small handle feature provide easy handling during detach or re-install action.

VERTICAL CURTAIN BLOCK

AIR-TRAP
Vertical Curtain Blocking Sheet

The **AIR-TRAP** **Vertical Curtain Blocking Sheet** provides blocking air flow within the containment.

With the Modular Design we can customize nearly any size of Curtain Blocking Sheet to fit in your containment system.

Curtain Blocking Sheet contains with
- 99% clear Fire-Retardant Rated Soft Plastic Sheet
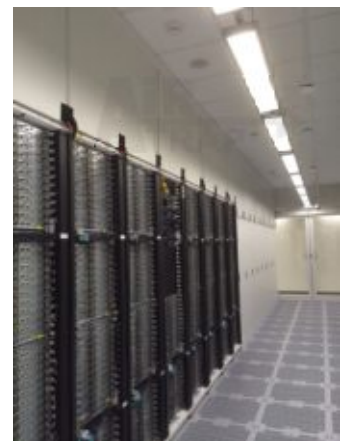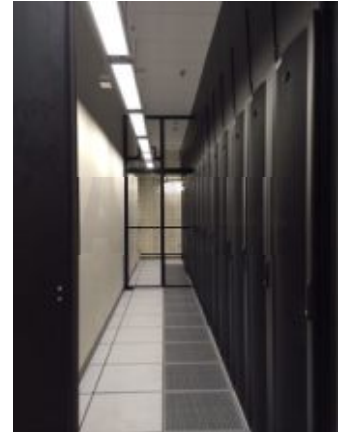

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BOTTOM BLOCKING PLATE

AIR-TRAP
Detachable Bottom Blocking Plate

The **AIR-TRAP's** **Detachable Bottom Blocking Plate** provides enhance air-flow blocking solution for the cabinet inside the containment system.

Many user has overlooked there are gaps in between the bottom of the cabinet and raised floor/ground. This is very important that to block this area to avoid air leaking. Used with **AIR-TRAP**'s Bottom Blocking Plate, it trapped the Hot / Cold air inside the containment system all the time.

AIR-TRAP's Bottom Blocking Plate comes with light-weight magnet for easy installation to the cabinet.

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CEILING BLOCKING PANEL

AIR-TRAP
Ceiling Blocking Panel

The **AIR-TRAP 's Ceiling Blocking Panel** constructed with light-weight aluminum panel provides both in light and rigid blocking support for containment system with above rack blocking purpose.

We can construct the Ceiling Blocking Panel nearly in any size to fit most of the containment system.

Featured with adjustable height and cable access allows easy cabling installation and racks adjustment.

Customize Color can also available.

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