

# **HOT AISLE CONTAINMENT**



**Containment System  
Simple, Flexible and Efficient  
Containment for Every Data Center**

## HOT AISLE CONTAINMENT SOLUTION



① **Exhaust Containment** – Cabinet-independent frame and translucent exhaust duct cover the contained aisle to capture and vent airflow out of the aisle. Used as part of a closed return for the air handling system.

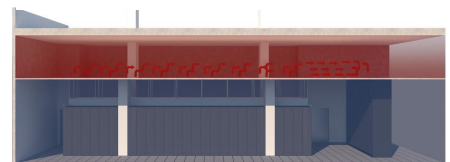
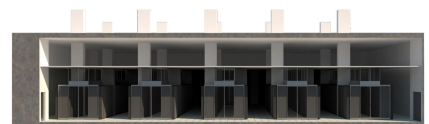
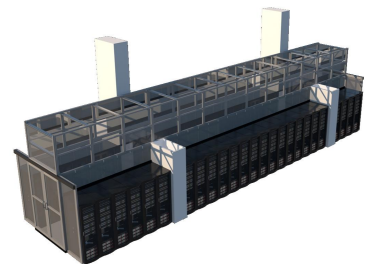
② **Aisle Containment Exhaust Duct Edge Seal** – Flexible, curved seal used around the top of the duct to create a complete seal with overhead drop ceiling tiles.

③ **Aisle Containment Double Door Assembly** – Sliding double doors with automatic closing features and large transparent panels. Attaches to the ends of the Frame Supported Exhaust Duct to seal the ends of the contained aisle (this system not compatible with Single Door Assembly).

④ **Adjustable Height Filler Panel** – Adjustable height panels or universal cabinet end panel used above standard equipment cabinets to seal gaps between the 52U Frame Supported Exhaust Duct and the cabinets.

Alternately, Universal Cabinet End Panels adjusts in both height and width.

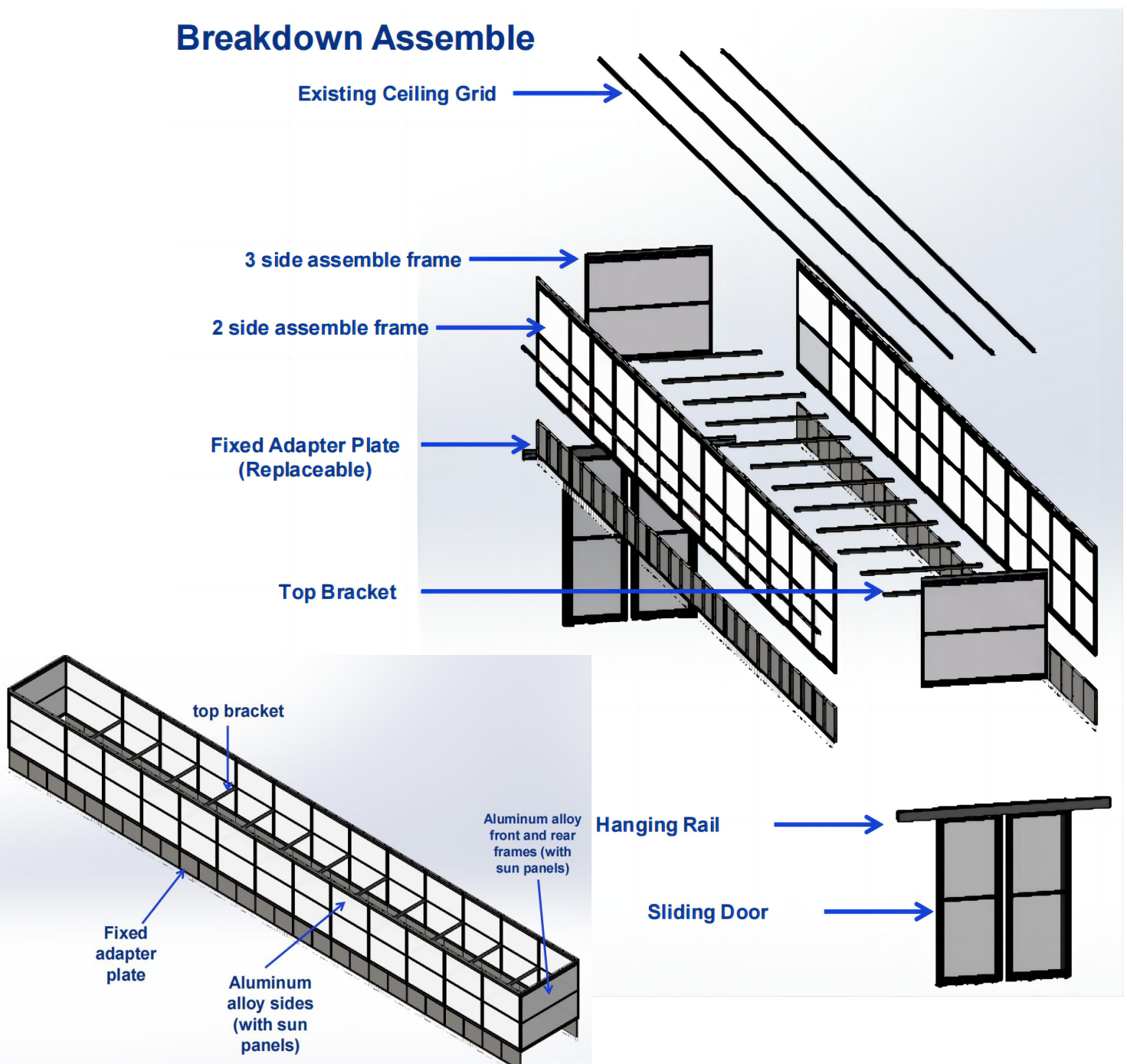
⑤ **Full Height Blanking Panel** – Translucent panel and seal used to fill gaps where entire cabinets are omitted from the cabinet row. Easy to trim to match required width. Supports “roll-in/roll-out” deployment and variable length cabinet rows created when cabinets of differing widths are deployed in the same row.



## SOLUTION OVERVIEW

- Flexible frame supported duct installed before the cabinets allows you to add, remove or omit cabinets as required
- Compatible with virtually any mix of cabinets; any width and heights up to 52U high
- Large open spans with 12'(3 m) to 20'(6 m) clearance between frame support posts for bayed cabinets
- Built-in height, width and depth adjustments on frame beams, lateral supports and panels accommodate site differences and existing conditions reducing the need for complex, time-consuming, field modification or special-ordered parts
- Translucent duct and transparent door panels allow light to enter the contained aisle
- Doors close automatically to maintain containment and reduce recovery time
- A complete solution maximizes performance with baffles to seal around and within cabinets and the contained aisle
- Durable construction and maintenance-free design provide years of use

## Breakdown Assemble



## Sliding Doors-Customizable Solution for Hot Aisle

### Features & Benefits

- No threshold design prevents tripping
- Perimeter compression gaskets efficiently seal and minimize air leakage
- Sturdy aluminum framing
- Clean panel option adheres to NFPA codes
- Ergonomically designed with angled handles to reduce pinch points
- Easy installation with integrated doc locks

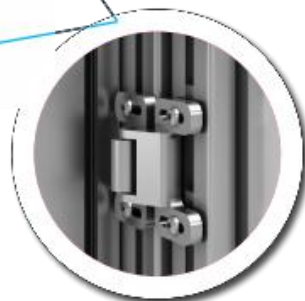
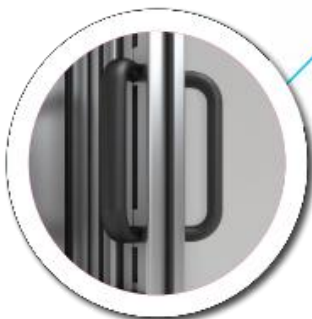
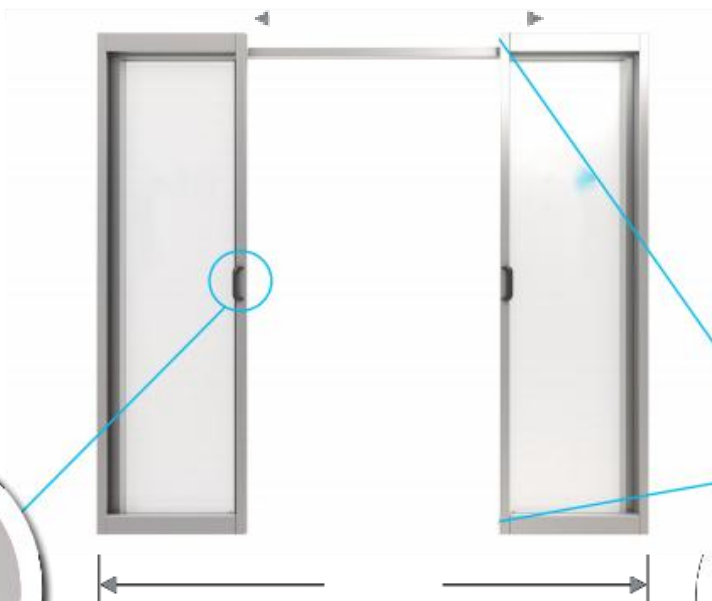
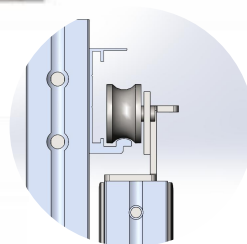
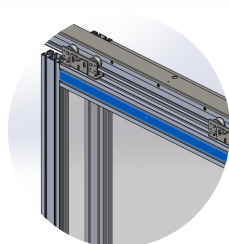
### Hardware

Standard features include:

- Door slide locks
- Door stop bumpers
- Angled door handles
- Spring loaded double ball door catch
- Auto-close available

### Weight

- 200 lbs (91kgs) – Clear polycarbonate





# Exhaust Duct - Hot Air Containment

## Features & Benefits

- No threshold design prevents tripping
- Factory installed perimeter compression gasket system
- Sturdy aluminum supports • Custom attachments (locks, stays)
- Side panels attach easily • Easy installation
- Ergonomically designed with angled handles to reduce pinch points • Auto-close option available

## Multiwall Polycarbonate for the wall panel

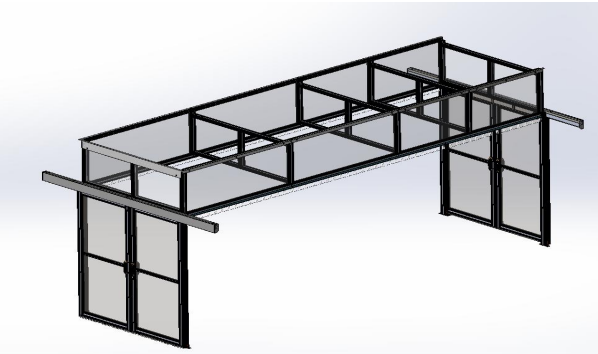
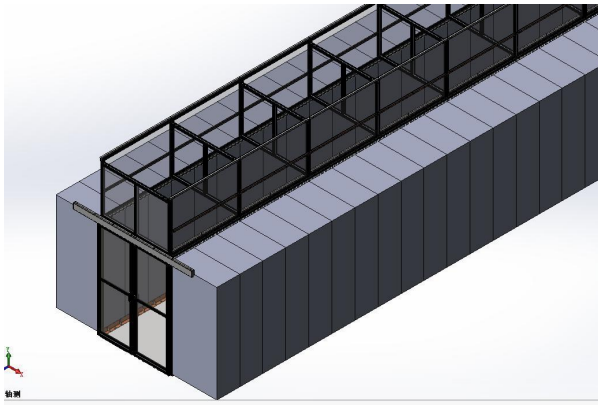
- Semi-transparent
- Compliant to the new NFPA 75 2013 requirements
- ASTM E-84 and ASTM D-635 listed
- 8mm thick with edge-sealing gasket



## Rigid Walls

Size	
Max Size	50" x 98"
Profile Width	1 3/16"
Standard Finish	Clear
Door & Frame	
Material	8040 T-5 Temper Aluminum
Tensile Strength	30,000 psi

Panel Options	Test	Result
8 mm Twin-Wall Polycarbonate (Self-ignition temperature: 450 deg C)	ASTM E-84	Class A
	ASTM D635	CC1



## Chimney Panel Details

fill material shall be of 8mm clear, multi-wall polycarbonate sheets. For compliance to the local SCDF Fire Safety regulation, the polycarbonate sheets shall be tested to N13501-1 (Sub-Category; Test EN ISO 11925 for Flame Spread EN 13823 for Smoke Density) and EN 45545-1 / EN ISO 5659-2 for Toxicity Emission and certified with a valid COC, or to local relevant authority compliance.



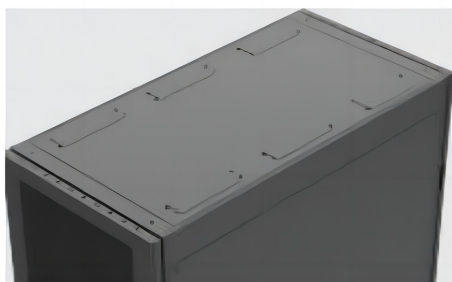
#### STANDARD

Comply with EIA-310-E, IEC297-2, DIN41491

PART1, DIN41494 PART7, GB/T3047.2-92 standard, compatible with ETSI standard.

#### FEATURES

- Various sizes and parts are available according to different application demand.
- Welded frame, demountable structure design, light duty but sturdy and flexible.
- Closed-able cable routing at top and bottom panel without tools. Brush panel to prevent dust and outside things.
- Two cable management rails are equipped at the rear of the cabinet for cable management for PDU assembly.
- Embedded side panel, tool free in assembling and dismantling, lock is optional.
- Front door and rear door can be interchanged quickly without tools, opening angle 130°, convenient for equipments installation and maintenance.
- Rotary door handle, keys are universal to front and rear doors for all KJ series cabinets.
- With cabinets connector. Complete accessories.
- Provided with adjustable feet, maximum static loading is 1800kgs. Surface treatment procedure is degreasing-->pickling-->anti-rust and phosphorization-->water cleaning-->powder coating,
- RoHS compliant.



Several cable input panels meets different location cable routing request.



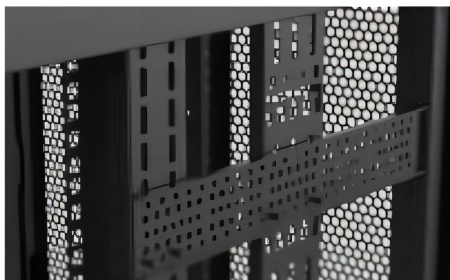
Spring Lock



With cable entries on the bottom panel



Side panel in half height,  
With connector



Adjustable Mounting rails



**Cable management rails in rear**

Mounting PDU without tools  
Mounting vertical cable managers

The most effective way to capture hot exhaust air is at the aisle level. The hot aisle containment solution has been designed to utilize our proprietary extrusion and casting framing system along with poly carbonate panels that extend from the top of our racks to the exhaust plenum. The aisle solution prevents hot air from mixing anywhere in the room. Sliding or swing door options for the hot/cold aisles provide row access while preventing air mixing.



Temperature (F)

