

# product spotlight

## AISLE CONTAINMENT DOORS

More and more data center managers are doing everything they can to maximize and to focus the available cooling within their data center spaces. For many, it means incorporating some type of containment.

One of the easiest ways to explore the potential of containment is to add doors to both ends of an aisle, either “hot” or “cold”. Doors at the end of the hot aisle help to channel the hot air upward and prevent recirculation into the cold aisle. The doors create a defined space, either isolating exhaust or creating a concentrated area of conditioned air which enhances the cooling effect on the enclosures within the contained space.

In response to customer demand, Great Lakes has created standard sets of containment doors designed to accommodate 84”H and 78”H standard ES Series enclosures across an aisle ranging from 48”W to 72”W. The doors are mounted with a trolley assembly to a rail which spans the aisle and attaches to the enclosures at the end of the row. The door unit does not require a bottom track for installation, so there is no threshold to block or cross the aisle.

Constructed of the same cold-rolled steel as our enclosures, the doors also carry the same powder coat to provide a clean, finished look to the contained space.

Great Lakes Case & Cabinet has created a number of custom containment configurations using end of aisle doors. Some employed doors alone; others included chimneys to accelerate the removal of hot air exhaust from the enclosures to minimize or eliminate the possibility of hot air recirculation. Still others, used third party panels above the enclosures in addition to end of aisle doors to further isolate the space and maximize the cooling effect of the contained area.



# GREAT LAKES CASE & CABINET



Invest in Solid Engineering

Part No.	Description
ACD840ES	Aisle Containment Doors for 84"H ES Enclosures
ACD780ES	Aisle Containment Doors for 78"H ES Enclosures

REV	DESCRIPTION	DATE	APPROVED
0	ECO-02007	11/03/06	FED
1	ECO-02086	07/10/08	CO
2	ECO-02086	02/10/09	WSS
3	ECO-03000	02/02/09	WSP
4	ECO-03000	11/28/11	WZ
5	ECO-03001	01/29/11	WZ

**SPECIAL NOTES:**

- ASSEMBLE AND INSTALL PARTS IN VIEW A (SHEET 2).
- DO NOT INSTALL TROLLEY ASSEMBLIES ONTO DOORS - VIEW B (SHEET 2).
- DO NOT INSTALL DOORS ONTO TRACK
- ALL OTHER PARTS AND BRUSHES TO BE BAGGED AS KIT AND SHIPPED WITH DOORS, ALIGNMENT BRACKET ASSEMBLIES AND TRACK.

ITEM	PART NUMBER	STOCK NUMBER	QTY	DESCRIPTION	FILE NAME	REVISION
1	P100B-1420		2	UNISTRUT 1420 CHANNEL NUT WITH SPRINGS (1.5" SERIES)	P100B-1420.gif	
2			1	1/4" DIA X 1/2" PAN HEAD PHIL TYPE 25 SCREW	1420RHS.gif	5
3			1	CONTAINMENT DOOR LEFT SIDE ASSEMBLY	0111123.gif	5
4			1	CONTAINMENT DOOR RIGHT SIDE ASSEMBLY	0111123.gif	5
5			1	CONTAINMENT DOOR TRACK WELDMENT	0111123.gif	2
6			2	CONTAINMENT DOOR END DOOR STOP	0111144.gif	1
7			2	BOTTOM BRUSH STRIP FLEXIBLE PVC 1" TRIM (TANIS INC.)	0111123.gif	0
8			2	FLEXIBLE PVC TRIM 3" WIDE CUT LENGTH FROM #PVC122036 - TANIS MFG	0111123.gif	0
9			1	PINCH BOTTOM ALIGNMENT BRACKET SUB-ASSEMBLY	0111137.gif	2
10			1	LEFT BOTTOM ALIGNMENT BRACKET SUB-ASSEMBLY	0111136.gif	2
11	22N214543		4	5/16-18NC X 1/2" THUMB SCREW ZINC PLATED STL (LS)	22N214543.gif	-
12	22N20452		4	5/16-18NC WING NUT ZINC PLATED STL (LS)	22N20452.gif	-
13	516EFLW3HR		12	5/16" ZINC PLATED PLAT WASHER 87P-ID 37P-OD .062" THICK	516EFLW3HR.gif	-
14			3	SIDE BRUSH STRIP FLEXIBLE PVC 1" TRIM (TANIS INC.) TOTAL LENGTH 83"	0111143.gif	1
15	312-18INthead		4	BOLT 5/16-18 X 1" HEX HEAD CAP SCREW ZINC PLATED	312-18INthead.gif	-
16	516EFLW3HR		4	WASHER 5/16" SPLIT LOCK, ZINC PLATED	516EFLW3HR.gif	-
17	1602-052	1602-052	4	5/16-18 HEX FLANGES SEPARATED LOCKNUT ZINC RHHS (5/16-18X10NUT)	1602-052.gif	-
18	V5C-1625-8		2	1" 66P 50 VINYL CAP CARPLUGS, BLACK	V5C-1625-8.gif	-

(SEE OR ZINC PL. HARDWARE FOR THE 1/2" SERIES IS ACCEPTABLE)

**VIEW SHOWN FULLY ASSEMBLED  
DO NOT ASSEMBLE COMPLETELY FOR SHIPPING  
SEE NOTES**

INTERNET DRAWING FILE NAME: Y143H-184  
 DRAWING SCALE: 1:1  
 TOLERANCE UNLESS OTHERWISE NOTED:  
 DIMS: .010  
 HOLE: .015  
 R: .005  
 X FOR REF ONLY  
 UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES

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PART NUMBER: ACD840ES100  
 WORKING TITLE: AISLE CONTAINMENT DOOR, 84"H STANDARD ES ENCLOSURE, 48"W TO 72"W AISLE WIDTH  
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