

PRODUCT APPLICATION

Cabinet Supported Cold Aisle Containment (CAC) Solution

The Cabinet Supported Cold Aisle Containment (CAC) Solution by Chatsworth Products (CPI) features a cabinet supported ceiling that is used over a contained cold aisle as part of a closed cold air delivery system. This solution integrates with perimeter cooling and provides immediate improved cooling efficiency by separating hot and cold air within the room. It can be used as an alternative to hot aisle containment where there are low ceilings or where it would be difficult to add an overhead drop ceiling. It is ideal for small or medium scale data center computer rooms that are adopting containment but need to minimize changes when retrofitting the site.



1 CPI Cabinet System – Create cabinet rows using F-Series TeraFrame® Gen 3 Cabinets or GF-Series GlobalFrame® Gen 2 Cabinets. Configure cabinets with Thermal Management Accessories (see page 5) that block airflow through and around cabinets.

2 Cabinet Supported Ceiling Panel Kit – Attaches to the tops of cabinets, forming a ceiling over the contained aisle. Ordered as a single part number to match aisle width and length.

3 Door Mounting Bracket Kit – Adjustable height brackets used to attach the Aisle Containment Door Assembly to the tops of cabinets.

4 Door Standoff Kit – Optional kit used when cabinets are placed over a raised floor to offset the door approximately 2.5" (64 mm) away from the side of cabinets so that the bottom of the door is not located over the edges of floor tiles.

5 Aisle Containment Door Assembly – Sliding double doors (shown) or single door, both with automatic closing feature and large transparent panel(s). Attaches to the ends of cabinets to seal the ends of the contained aisle.

6 Aisle Containment Cabinet To Floor Seal Kit – Cabinet-specific trim panels used along the base of cabinets to seal the gap between the floor and the bottom of the cabinet frame.

Containment Accessories

- Adjustable Height Filler Panel
- Universal Cabinet End Panel
- Door Top Seal Kit
- GlobalFrame Door Rail Support Kit
- Floor Mounting Template

Cabinets and Accessories

- Bottom Panel
- Air Dam
- Snap-In Filler Panels
- AisleLok™ Acrycell™ Sealing Tape
- AisleLok™ Under Floor Seal
- KoldLok® Raised Floor Grommet

CABINET SUPPORTED COLD AISLE CONTAINMENT (CAC) SOLUTION

SOLUTION OVERVIEW

- Cabinet supported ceiling panel kit, ordered as a single part number
- Compatible with F-Series TeraFrame® Gen 3 Cabinets and GF-Series GlobalFrame® Gen 2 Cabinets
- Optional accessory filler panels accommodate shorter cabinets
- Translucent ceiling 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 many years of use

ORDERING INFORMATION

CPI Cabinet Systems		
Part Number & Finish		Description
Black	Glacier White	
F-Series TeraFrame Gen 3 Cabinet		
FF1U-113C-C42-B	FF1U-113C-E42-B	45U, 23.6"W (600 mm) x 51.2"D (1300 mm)
FF2U-113C-C42-B	FF2U-113C-E42-B	45U, 27.6"W (700 mm) x 51.2"D (1300 mm)
FF3U-113C-C42-B	FF3U-113C-E42-B	45U, 31.5"W (800 mm) x 51.2"D (1300 mm)
GF-Series GlobalFrame Gen 2 Cabinet		
GF-2A420-CB	GF-2A420-EB	45U, 23.6"W (600 mm) x 51.2"D (1300 mm)
GF-2D420-CB	GF-2D420-EB	45U, 27.6"W (700 mm) x 51.2"D (1300 mm)
GF-2C420-CB	GF-2C420-EB	45U, 31.5"W (800 mm) x 51.2"D (1300 mm)

Note: Other sizes are available.

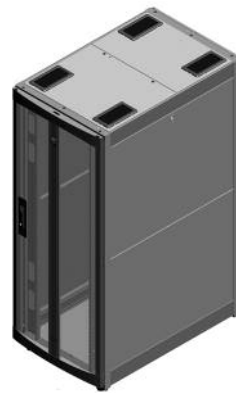
Cabinet Supported Ceiling Panel Kit		
Part Number & Finish		Description
Black	Glacier White	
For 2 Tile, 48"W (1200 mm) Aisles		
32710-712	32710-E12	4"H (100 mm), 20"L (6.0 m)
32710-775	32710-E75	8"H (200 mm), 20"L (6.0 m)
32710-7BW	32710-EBW	12"H (300 mm), 20"L (6.0 m)
For 3 Tile, 72"W (1800 mm) Aisles		
32711-712	32711-E12	4"H (100 mm), 20"L (6.0 m)
32711-775	32711-E75	8"H (200 mm), 20"L (6.0 m)
32711-7BW	32711-EBW	12"H (300 mm), 20"L (6.0 m)

Note: Contact CPI Technical Support for other sizes.

Door Standoff Kit		
Part Number & Finish		Description
Black	Glacier White	
32870-701	32870-E01	For Aisle Containment Double Door Assembly
32870-702	32870-E02	For Aisle Containment Single Door Assembly

Door Mounting Bracket Kit		
Part Number & Finish		Description
Black	Glacier White	
For Use With Door Standoff Kit		
32805-703	32805-E03	3"H (75 mm), For 85.3"H (2167 mm) to 91.4"H (2322 mm) Cabinets
32805-704	32805-E04	5"H (125 mm), For 82.6"H (2098 mm) to 94.2"H (2393 mm) Cabinets
32805-705	32805-E05	10"H (254 mm), For 77.8"H (1976 mm) to 98.9"H (2512 mm) Cabinets
For Use Without Door Standoff Kit		
32805-700	32805-E00	3"H (75 mm), For 85.3"H (2167 mm) to 91.4"H (2322 mm) Cabinets
32805-701	32805-E01	5"H (125 mm), For 82.6"H (2098 mm) to 94.2"H (2393 mm) Cabinets
32805-702	32805-E02	10"H (254 mm), For 77.8"H (1976 mm) to 98.9"H (2512 mm) Cabinets

Note: Two versions, select for use with or without Door Standoff Kit.



F-Series TeraFrame Gen 3 Cabinet



GF-Series GlobalFrame Gen 2 Cabinet



Cabinet Supported Ceiling Panel Kit



Door Standoff Kit



Door Mounting Bracket Kit

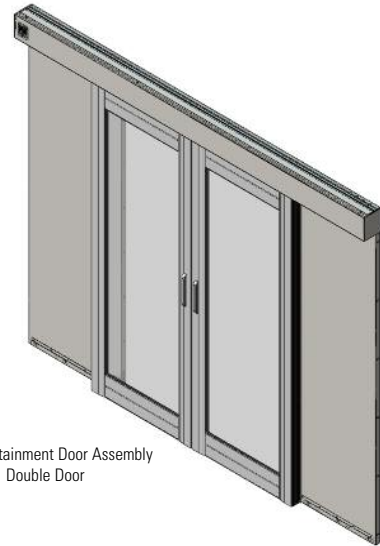
ORDERING INFORMATION

Aisle Containment Door Assembly		
Part Number & Finish		Description
Black	Glacier White	
Double Door		
32770-701	32770-E01	With Painted Door Frames
32770-702	32770-E02	With Anodized Aluminum Door Frames
Single Door, Opens To The Right		
32780-702	32780-E02	With Painted Door Frames
32780-704	32780-E04	With Anodized Aluminum Door Frames
Single Door, Opens To The Left		
32780-701	32780-E01	With Painted Door Frames
32780-703	32780-E03	With Anodized Aluminum Door Frames

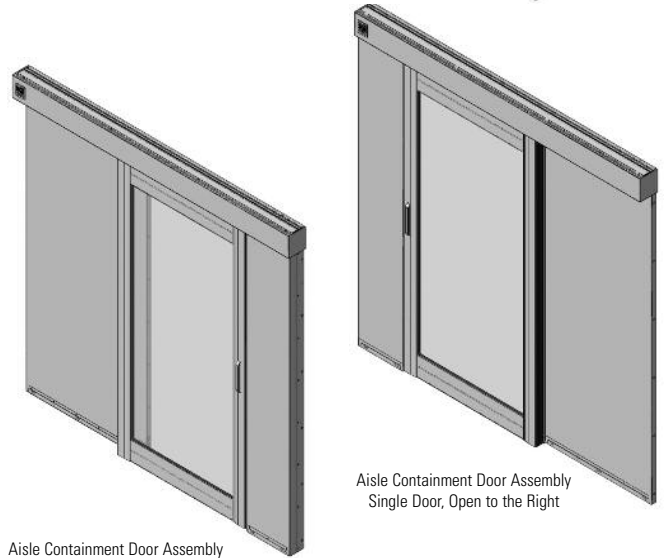
Notes: Double door spans two to three tile aisles and has a 42"W (1067 mm) door opening. Single door is right or left opening, spans two tile aisles and has a 32"W (812 mm) door opening. Order one Floor Mounting Template for each site, see Containment Accessories, page 4.

Aisle Containment Cabinet To Floor Seal Kit for F-Series TeraFrame® Gen 3 Cabinet and GF-Series GlobalFrame® Gen 2 Cabinet		
Part Number & Finish		Description
Black	Glacier White	
Front Seal Kits		
39208-700	39208-E00	Front Seal, For 23.6"W (600 mm) Cabinet
39208-701	39208-E01	Front Seal, For 27.6"W (700 mm) Cabinet
39208-702	39208-E02	Front Seal, For 31.5"W (800 mm) Cabinet
Side Seal Kits		
39209-700	39209-E00	Side Seal, For 31.5"D (800 mm) frame
39209-708	39209-E08	Side Seal, For 39.4"D (1000 mm) frame
39209-712	39209-E12	Side Seal, For 43.3"D (1100 mm) frame
39209-716	39209-E16	Side Seal, For 47.2"D (1200 mm) frame

Note: Order one Front Seal Kit for each cabinet. Order one Side Seal Kit for each end of the cabinet row. Other sizes are available. For existing cabinets, check with CPI Technical Support to identify the correct Floor Seal Kit.

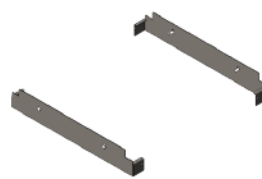


Aisle Containment Door Assembly
Double Door



Aisle Containment Door Assembly
Single Door, Open to the Left

Aisle Containment Door Assembly
Single Door, Open to the Right



Aisle Containment Cabinet to Floor
Front Seal Kit



Aisle Containment Cabinet to Floor
Side Seal Kit

ACCESSORIES

Containment Accessories

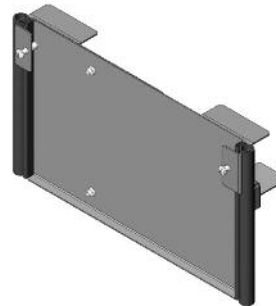
The following accessories are used in specific applications, when cabinet heights vary, if cabinets are taller than the Aisle Containment Door and to help install the doors.

Adjustable Height Filler Panel		
Part Number & Finish		Description
Black	Glacier White	
For up to 3U High Cabinet Height Difference		
32728-701	32728-E01	For 23.6"W (600 mm) Cabinets
32728-704	32728-E04	For 24.0"W (610 mm) Cabinets
32728-707	32728-E07	For 27.6"W (700 mm) Cabinets
32728-713	32728-E13	For 31.5"W (800 mm) Cabinets
For up to 6U High Cabinet Height Difference		
32728-702	32728-E02	For 23.6"W (600 mm) Cabinets
32728-705	32728-E05	For 24.0"W (610 mm) Cabinets
32728-708	32728-E08	For 27.6"W (700 mm) Cabinets
32728-714	32728-E14	For 31.5"W (800 mm) Cabinets
For up to 9U High Cabinet Height Difference		
32728-703	32728-E03	For 23.6"W (600 mm) Cabinets
32728-706	32728-E06	For 24.0"W (610 mm) Cabinets
32728-709	32728-E09	For 27.6"W (700 mm) Cabinets
32728-715	32728-E15	For 31.5"W (800 mm) Cabinets



Adjustable Height Filler Panel

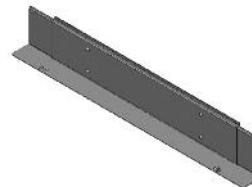
Universal Cabinet End Panel		
Part Number & Finish		Description
Black	Glacier White	
For up to 3U High Cabinet Height Difference		
32720-704	32720-E04	Adjusts from 19.7"W (500 mm) to 27.6"W (700 mm)
32720-710	32720-E10	Adjusts from 23.6"W (600 mm) to 31.5"W (800 mm)
For up to 6U High Cabinet Height Difference		
32720-705	32720-E05	Adjusts from 19.7"W (500 mm) to 27.6"W (700 mm)
32720-711	32720-E11	Adjusts from 23.6"W (600 mm) to 31.5"W (800 mm)
For up to 9U High Cabinet Height Difference		
32720-706	32720-E06	Adjusts from 19.7"W (500 mm) to 27.6"W (700 mm)
32720-712	32720-E12	Adjusts from 23.6"W (600 mm) to 31.5"W (800 mm)



Universal Cabinet End Panel

Door Top Seal Kit		
Part Number & Finish		Description
Black	Glacier White	
For Use With Door Standoff Kit		
32817-704	32817-E04	Adjusts from 48"W (1219 mm) to 59"W (1500 mm)
32817-705	32817-E05	Adjusts from 59"W (1500 mm) to 70"W (1775 mm)
32817-706	32817-E06	Adjusts from 70"W (1775 mm) to 81"W (2050 mm)
For Use Without Door Standoff Kit		
32817-701	32817-E01	Adjusts from 48"W (1219 mm) to 59"W (1500 mm)
32817-702	32817-E02	Adjusts from 59"W (1500 mm) to 70"W (1775 mm)
32817-703	32817-E03	Adjusts from 70"W (1775 mm) to 81"W (2050 mm)

Note: Use when the tops of cabinets are over 88" (2235 mm) tall.



Door Top Seal Kit

Floor Mounting Template		
Part Number & Finish		Description
Black	Glacier White	
32875-701	N/A	For Aisle Containment Double-Door
32875-702	N/A	For Aisle Containment Single Door

Note: Reusable, order one per site.



Floor Mounting Template

ACCESSORIES

Cabinet Thermal Management Accessories

Because it is critical to block airflow through and around cabinets, CPI offers cabinet-specific baying kits, seal kits and internal airflow baffles. Additionally, use Snap-In Filler Panels to block airflow around equipment within the cabinet and AisleLok™ Acrycell™ Sealing Tape to seal any other gaps between and within cabinets.

Air Dam, Bottom Panel and Rail Grommets for F-Series TeraFrame Gen 3 and GF-Series GlobalFrame Gen 2 Cabinets		
Part Number & Finish		Description
Black	Glacier White	
Air Dam For 45U High Cabinets		
39085-C03	39085-E03	For 23.6"W (600 mm) Cabinets
39085-C14	39085-E14	For 27.6"W (700 mm) Cabinets
39085-C25	39085-E25	For 31.5"W (800 mm) Cabinets
Bottom Panel For F-Series TeraFrame Gen 3 Cabinet		
39132-C00	39132-E00	For 23.6"W (600 mm) Cabinets
39132-C01	39132-E01	For 27.6"W (700 mm) Cabinets
39132-C02	39132-E02	For 31.5"W (800 mm) Cabinets
Bottom Panel For GF-Series GlobalFrame Gen 2 Cabinet		
39080-C00	39080-E00	For 23.6"W (600 mm) Cabinets
39080-C01	39080-E01	For 27.6"W (700 mm) Cabinets
39080-C02	39080-E02	For 31.5"W (800 mm) Cabinets
Equipment Rail Grommet Kit		
39133-001		For 27.6"W (700 mm) and 31.5"W (800 mm) GF-Series GlobalFrame Gen 2 Cabinet, Pack of 8

Note: Match cabinet color. Other sizes available.

Snap-In Filler Panels		
Part Number & Finish		Description
Black	Glacier White	
34537-002	34537-E02	1U x 19"EIA, Pack of 50
34538-002	34538-E02	2U x 19"EIA, Pack of 50

Note: Also sold individually and in packs of 6 each.

AisleLok™ Acrycell™ Sealing Tape		
Part Number & Finish		Description
Black	Glacier White	
13876-000		Expands .2" (5 mm) to .5" (12.7 mm), 5 rolls, 32.8' L (10 m)
13876-001		Expands .47" (12 mm) to 1" (25.4 mm), 5 rolls, 18.4'L (5.6 m)
13876-002		Expands .87" (22 mm) to 2" (50.8 mm), 5 rolls, 8.5'L (2.6 m)

AisleLok™ Under Rack Panel		
Part Number & Finish		Description
Black	Glacier White	
13877-001	N/A	2.5"H (64 mm) x 24.0"W (608 mm), Pack of 10

Note: Floor seal for other cabinets and equipment. Do not use with F-Series TeraFrame or GF-Series GlobalFrame Cabinets.

KoldLok® Raised Floor Grommets		
Part Number & Finish		Description
Black	Glacier White	
13671-002		Split Integral Grommet, 8"W (203 mm) x 4"D (102 mm) opening, 10 each
13872-002		Mini Grommet, 5" (127 mm) x 2-1/2" (64 mm) opening, 10 each
13874-002		Round Grommet, 3.5" (89 mm) Diameter, 10 each

Note: Other styles and sizes available. Also sold individually.



Air Dam



Bottom Panel



Equipment Rail Grommet Kit



Snap-In Filler Panel



AisleLok™ Acrycell™ Sealing Tape



AisleLok™ Under Rack Panel



KoldLok® Raised Floor Grommets

CABINET SUPPORTED COLD AISLE CONTAINMENT (CAC) SOLUTION

HOW TO GET STARTED

The specific combination of components needed to create a complete Cabinet Supported Cold Aisle Containment (CAC) Solution will depend on a number of factors including room layout, ceiling height and what types of cabinet models are selected.

To ensure you have a complete solution that addresses site- and cabinet-specific requirements, please contact CPI Technical Support for assistance developing a Bill of Materials (BOM).

Based on your input, CPI Technical Support will propose a complete solution with a drawing and detailed BOM. They will take the time to explain each selection, so you have a complete understanding of how the CPI solutions will provide the desired results.

Example Bill Of Materials (BOM)			
Item	Part Number	Description	Qty
Cabinet Supported Cold Aisle Containment (CAC) Solution			
1	FF1U-113C-E42-B	F-Series TeraFrame Gen 3 Cabinet, 45U, 23.6"W (600 mm) x 51.2"D (1300 mm), Glacier White	20
2	32710-E75	Cabinet Supported Ceiling Panel Kit, 8"H (200 mm), 20'L (6.0 m), Glacier White	1
3	32805-E04	Door Mounting Bracket Kit, 5"H (125 mm), With Offset, Glacier White	2
4	32870-E01	Door Standoff Kit, For Double Door, Glacier White	2
5	32770-E02	Aisle Containment Double Door Assembly, Clear Doors, Glacier White	2
6	39208-E00	Cabinet To Floor Front Seal Kit, F-Series TeraFrame Gen 3, 23.6"W (600 mm)	20
	39209-E16	Cabinet To Floor Side Seal Kit, F-Series TeraFrame Gen 3, 51.2"D (1300 mm)	4
Recommended Accessories			
	32875-701	Installation Template, Aisle Containment Double Door Assembly	1
	39132-E00	Bottom Panel for F-Series TeraFrame Gen 3, Glacier White	20
	39085-E03	Air Dam For F-Series TeraFrame Gen 3 Cabinets, Glacier White	20
	34537-E02	Snap-In Filler Panel, 1U x 19"EIA, 50 Pack, Glacier White	2
	34538-E02	Snap-In Filler Panel, 2U x 19"EIA, 50 Pack, Glacier White	2
	13761-002	KoldLok Split Integral Raised Floor Grommet, 10 Pack, Black	2



Notes: This example BOM is based on a solution for 20 each 45U, 23.6"W (600 mm) x 51.2"D (1300 mm) F-Series TeraFrame® Gen 3 Cabinets organized in two adjacent 10 cabinet rows. Parts listed under Item 3 and 6 are cabinet-specific. Recommended Accessories include Cabinet Thermal Management Accessories. Contact CPI Technical Support to develop a BOM for your site.

For a more detailed analysis of your site, CPI offers a Pre-Installation Site Survey, a service where a CPI Technical Representative visits your site to provide a more detailed recommendation. To help ensure an optimized aisle containment installation, CPI offers On-Site Installation Supervision Services, which includes related training and examination of the assembled solution. Both Pre-Installation Site Surveys and On-Site Installation Supervision Support are especially important if there are special conditions, concerns or required customization.

All suggestions and performance statements are based on using an overall approach to airflow containment through the use of CPI Products and solutions. For more information about CPI's Aisle Containment Services or products, call **800-834-4969**, email **techsupport@chatsworth.com** or contact your Regional Sales Manager.

All products quoted are subject to availability based on manufacturing capacity, and shipping dates should be considered estimates only. While every effort has been made to ensure the accuracy of all information, CPI does not accept liability for any errors or omissions and reserves the right to change information and descriptions of listed services and products.

Not exactly what you need? Additional products, sizes and configurations are available from CPI. Visit **www.chatsworth.com** or call **+1-800-834-4969**.