ZetaFrame®

ZetaFrame® Cabinet
User's Manual

CHATSWORTH
PRODUCTS

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Contents

ZetaFrame Cabinet Overview

Introduction to the ZetaFrame Cabinet

The ZetaFrame® Cabinet from Chatsworth Products (CPI) has been developed to meet a wide range of application needs. The ZetaFrame is available in multiple widths, heights, and depths, allowing for precise alignment with the size and capacity requirements for most installations.

The ZetaFrame cabinet accessories, including cable management, power management, thermal management and more, offer additional flexibility, enabling the cabinet to be further configured to support many different applications.

Conventions Used In This Manual

This manual provides general safety guidelines to be observed when planning for, installing, and operating your ZetaFrame Cabinet.

Special messages used throughout this manual are explained below:

WARNING: Text highlighted in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life. Obey all safety messages that follow this symbol to avoid possible injury or death.

CAUTION: Text highlighted in this manner indicates that failure to follow instructions could result in damage to equipment or data.

NOTES: Text set off in this manner present clarifying information, commentary or other specific instruction.

Safety Information

Keep a printed copy of this User's Manual, especially the following safety information, in or near the cabinet.

WARNINGS:

- Improper use of this product or failure to follow these instructions may result in equipment damage, personal injury, or death. Read and understand all instructions for proper installation and use of this product.

- Only trained service personnel or licensed electricians shall install the equipment.

- Be sure to use sufficient personnel to safely remove the cabinet from the pallet.

- Do not attempt to move large cabinets by yourself. Obtain adequate assistance to stabilize the cabinet during movement or hire professional equipment riggers.

- Move cabinets on installed casters with extreme care. Sudden stops, excessive force, uneven surfaces or debris on the floor may cause the cabinet to overturn. Move the cabinet with the back as the leading edge. Never push on the sides.

- The cabinet shall be level, stable, bolted and appropriately secured to the building structure. Castors are only provided to transport the cabinet from the receiving location to its install location.

- The cabinet shall be installed in a Restricted Access Location and only used by trained service personnel.

- Suitable for mounting on concrete or other noncombustible surface only.

- Component Servicing – The cabinet should be repaired by personnel trained by the manufacturer or returned to the manufacturer for repair or replacement.

Safety Information

WARNINGS:

- Two or more cabinets can be bayed together (coupled) to enhance their stability. Each cabinet should be anchored to the floor.

- Before loading equipment in the cabinet, be sure to adjust and lock the leveling feet to level the cabinet. Do not use casters to stabilize the cabinet; <u>always</u> anchor the leveling feet or the cabinet frame to the floor.

- Always load heavy equipment, such as a UPS, at the bottom of the cabinet first, and add lighter equipment on higher levels.

- A safety risk exists when equipment is mounted on a shelf installed more than 30 inches (760 mm) above the floor in a cabinet without doors and/or side panels. The equipment may accidentally slide or be accidentally pushed off the shelf and fall on personnel. When equipment is mounted on a shelf in this condition, securely fasten the equipment to the shelf or cabinet frame in a manner that will prevent the equipment from accidentally sliding off the shelf. The seismic equipment tie-down bracket (P/N 14061-719) may be used to secure certain equipment on shelves.

- The cabinet can support many system configurations. The amount of force required to tip or make the cabinet unstable differs with each. Read and follow your equipment manufacturer's specific assembly, installation, and safety instructions.

- When servicing slide-mounted equipment such as servers:
  - Secure all equipment, other than the unit being serviced, in position to prevent it from sliding out and destabilizing the cabinet.
  - Slowly extend only one unit at a time. Extending multiple units may cause the cabinet to tip over. Rapid deployment of the unit could cause the cabinet to tip.

- For protection of the equipment and personnel, bond each cabinet individually to the Telecommunications Equipment Bonding Conductor (TEBC) or Signal Reference Structure (SRS).

- Provide the minimum spacing between the accessories/components and the housing that shall be maintained for safe operation of the equipment when installed in accordance with the National Electric Code, ANSI/NFPA 70, or adopted regional electrical code.

- As appropriate, all wiring and equipment should be installed in accordance with NFPA 70, "National Electrical Code," and the applicable sections of ANSI C2, "National Electrical Safety Code", or adopted regional electrical safety code(s).

Intended Use

Keep a printed copy of the Preface of this User's Manual in or near the cabinet.

- Install the cabinet only in a Restricted Access Location, such as a data center.

- Use indoors only, in environmentally controlled areas; do not use outdoors, in harsh environments, or in air-handling spaces.

- Use the cabinet for information and communications technology (ICT) equipment, including servers, data storage, network switches and peripherals.

- Allow only qualified service personnel to use the cabinet.

- For rolling on casters, install equipment so Center of Gravity does not rise above 22.5 RMU by placing equipment at the bottom of the cabinet.

- The cabinets must be anchored to the floor to ensure stability and a safe working environment.

- The load-bearing capacity of the ZetaFrame cabinet is:

Static on levelers and casters: (4X Equipment Rails with 4 or less Cable Pass-Thru Ports)	5,000 lb (2268 kg)	per UL 2416
Static on levelers and casters: (4X Equipment Rails with 5 to 8 Cable Pass-Thru Ports or up to 3X 2RMU ZeroU Mounting)	4,000 lb (1814 kg)	per UL 2416
*Rolling on casters:	4,000 lb (1814 kg)	per UL 2416 for depths 1000mm or greater
Shipping load on shock pallet:	4,000 lb (1814 kg)	

*Cabinets 1000D and greater only. For cabinets <1000D, remove equipment before moving.
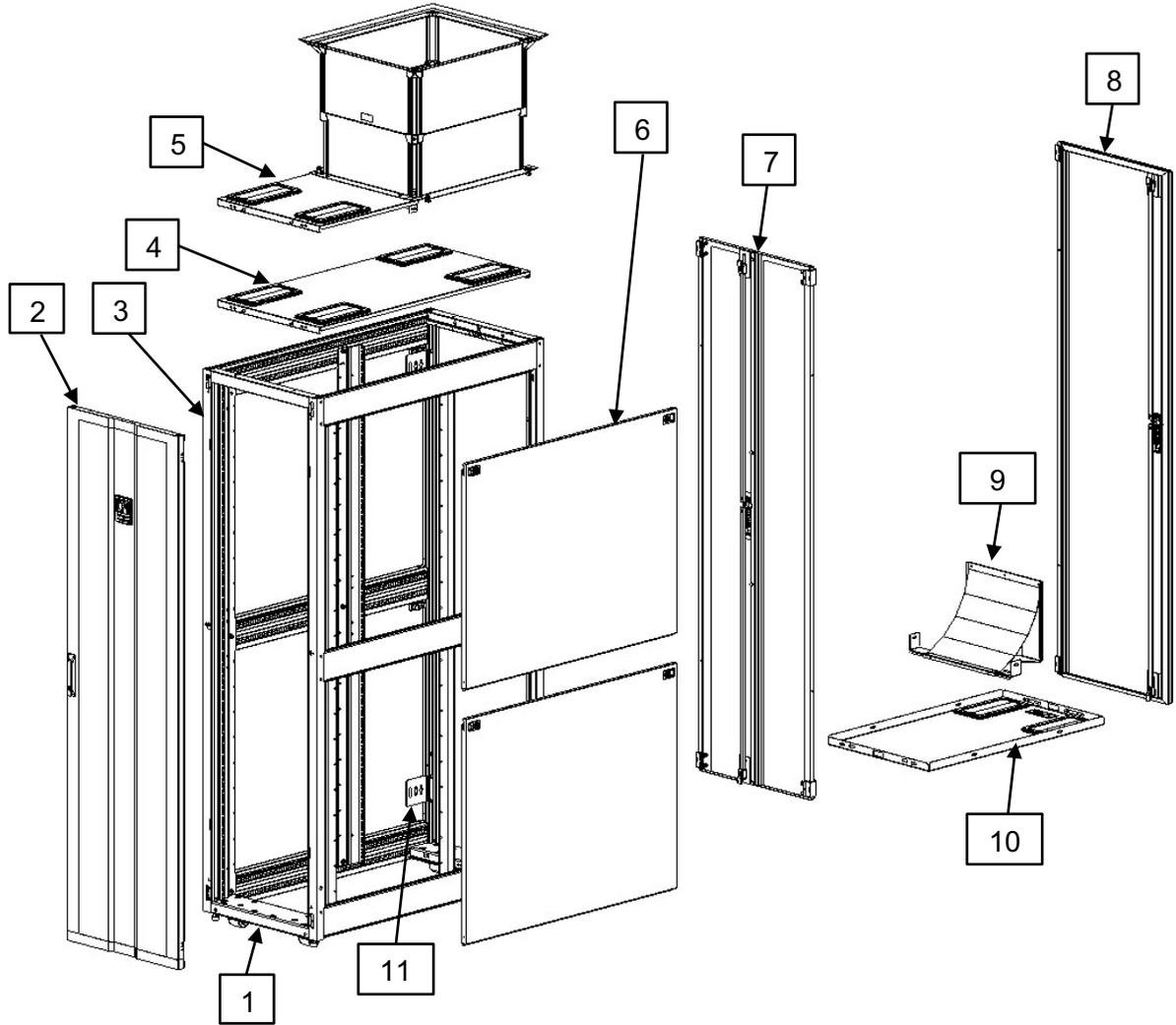
Certifications:
- EIA-310 Compliant
- UL Listed 2416, NWIN

Transportation Tests:
- Transportation tests apply to Shock Pallet option
- Meets requirements per the International Safe Transit Association (ISTA) 2B
- ASTM D4169 Truck Assurance Levels: low, medium and high
- ASTM D4169 Air Assurance Levels: I, II and III

Components of the ZetaFrame Cabinet

1. Frame

2. Front door

3. Equipment mounting rails

4. Standard top panel

5. Vertical Exhaust Duct top panel

6. Side Panel

7. Double rear door

8. Single solid rear door (used with duct)

9. Air Director (accessory)

10. Bottom Panel

11. Standard PDU bracket

Included Hardware

1. (2) Keys

 x 2

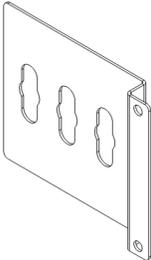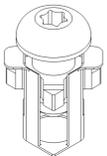2. (50) M6 Cage Nuts and Screws

 x 50

 x 50

3. (2) Standard PDU Brackets + (4) M6x16 Screw and Front Mount Nut

 x 2

 x 4

4. (2) Baying Brackets, (4) M8x16 Hex Head Screws, + (4) M8 Hex Nuts
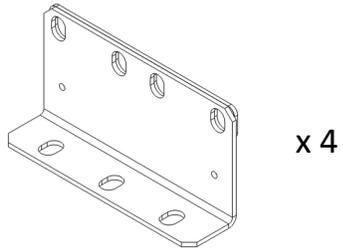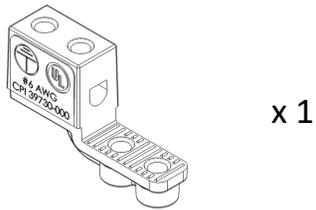
 x 2

 x 4

 x 4

5. (4) Anchor Brackets + (4) M8x20 Hex Head Screws + (4) M8 Washers

x 4

x 4

x 4

6. (1) Ground Terminal Connector + (4) M6x12 Screw + Antioxidant Compound

x 1

x 4

7. (1) T25 TORX Bit

x 1

Getting Started

Tools Required

1. Utility Knife

    a. For removing stretch wrap from around cabinet

2. 13 mm Socket Wrench

    a. For removing shipping brackets securing cabinet to pallet
    b. For adjusting equipment mounting rail
    c. For installing baying brackets

3. 13 mm Open End Wrench

    a. For adjusting leveling feet

4. T25 Torx Screwdriver

    a. For installing ground terminal block
    b. For removing and installing door hinges
    c. For installation and removal of PDU brackets
    d. For installation of optional cable management accessories

5. #2 Phillips Screwdriver

    a. For installing M6 screws into cage nuts to secure equipment in mounting rails

6. 5mm Ball Hex Driver

    a. For adjusting leveling feet

Unpacking A New Cabinet

CAUTION: The ZetaFrame cabinet is heavy. Use a minimum of two (2) people to unpack and remove the cabinet from the pallet.

CAUTION: The ZetaFrame casters are for moving the cabinet short distances over smooth floor surfaces only. Move shipping pallet as close as possible to the final installation location before unpacking.

CAUTION: The ZetaFrame casters are not intended to support cabinet loads for extended periods of time.   Always level and anchor the cabinet after positioning.

Inspect the cabinet for damage. If any damage to the cabinet is observed, contact your distributor or CPI Customer Service.

1. Carefully remove the plastic wrap surrounding the cabinet using a utility knife. Be careful not to allow the knife to contact the cabinet as this may damage the unit.

2. Remove the four (4) cardboard corner protectors.

3. Inspect inside the cabinet to insure all items are securely fastened to the cabinet. Remove any items that were shipped inside the cabinet but are not fastened to the cabinet.

4. Remove the shipping brackets that anchor the cabinet to the pallet using a 13 mm (1/2") socket wrench.

> **NOTE**: Do not discard the shipping brackets. These brackets are used to anchor the cabinet to the floor. See "Anchoring the cabinet to the floor".

5. Remove the cabinet from the pallet.

> **RECYCLABLE MATERIALS**: CPI uses only recyclable materials in all cabinet packaging. Please save packaging for later use or dispose of properly. All wood components of CPI pallets have been properly treated to comply with the pest-free certifications required by foreign countries.

6. If the cabinet is to be reshipped, save all packaging materials for reuse.

> **DISCLAIMER**: CPI is not responsible for any damage to the cabinet or its contents after the cabinet is repackaged and reshipped.

7. After the cabinet is unpacked, check the cabinet and the hardware kit to ensure that all the components and hardware items have been received with the cabinet. If any components are missing or damaged, email Technical Support at **techsupport@chatsworth.com**, or call toll-free at 800-834-4969 (US & Canada) Monday to Friday, 5 a.m. to 5 p.m., Pacific Time.

Unpacking A Loaded Cabinet

This section describes the system unpacking procedure for a cabinet shipped with installed equipment on a shock pallet.

WARNING: Handling wooden parts such as the pallet can cause splinters. Wear gloves when handling the pallets.

CAUTION: Position pallet loaded with cabinet to allow 20 feet of clearance between the pallet/ramp interface and final stopping point for cabinet to roll off ramp and come to a complete stop.

1. Check pallet deck height versus ramp. If pallet deck is too low to properly align with ramp, carefully lift pallet with appropriate equipment (pallet jack, forklift, etc.) and add spacers on floor under front and rear edges of pallet as required to raise and level the pallet deck to align with the ramp.
2. Remove front shipping brackets anchoring cabinet to pallet.

WARNING: Do not remove rear shipping brackets anchoring cabinet to pallet.

3. Align metal ramp to pallet and bolt the ramp to the pallet.
4. Remove bolts securing rear shipping brackets to the cabinet frame, but do not remove the bolts securing the rear shipping brackets to the pallet.

WARNING: Do not remove bolts securing rear shipping brace to pallet.

5. Due to extremely heavy load, use a minimum of three individuals to move cabinet towards ramp and walk adjacent to or behind cabinet.

WARNING: Do not allow anyone in front of cabinet during movement.

6. Once clearance is assured, move cabinet onto ramp and allow it to roll down.

WARNING: Do not attempt to stop cabinet during movement.

7. Once cabinet has stopped rolling, it is OK to maneuver cabinet as required.

CAUTION: It is recommended to move the cabinet with swivel casters at the rear.

CAUTION:

- The engineered shock pallet is designed to be used only once. The pallet should not be reused after the cabinet reaches its destination.
- Reusing a shock pallet may not protect the cabinet and installed equipment. If a cabinet with installed equipment needs to be shipped to a new destination, a new shock pallet must be used.

Moving Loaded Cabinets on Casters

WARNING:

- Install equipment so Center of Gravity does not rise above 22.5 RMU by placing heavy equipment at the bottom of the cabinet.
- If the Center of Gravity rises above 22.5 RMU, the cabinet may become unstable and tip while moving the cabinet.

CAUTION:

- Cabinets with casters should be moved with care.
- Sudden stops, excessive force, and uneven surfaces may cause the product to overturn.
- When rolling the cabinet, make sure to push firmly on the door frame and not the door mesh.
- Never push on the sides of the cabinet, which could cause the cabinet to overturn.
- Customer is responsible for assuring that floor surface is free of obstructions and other obstacles that would impede safe movement of the cabinet. Concentrated, ultimate and rolling load floor loading capacities must be carefully observed. All ramps and thresholds must be safely and properly addressed.
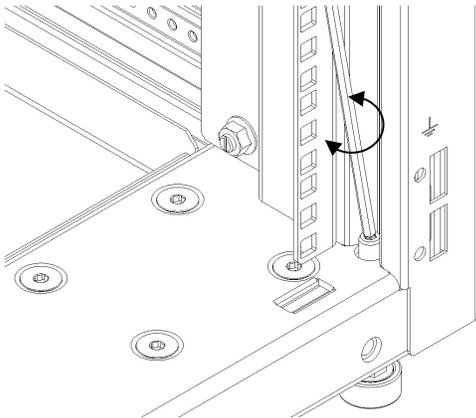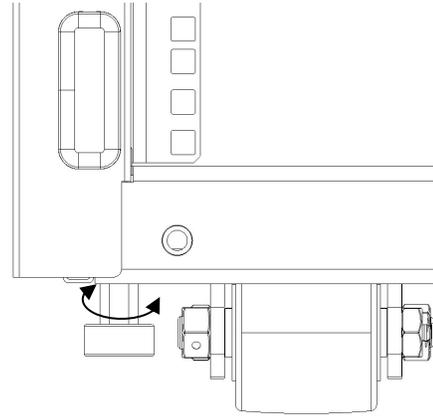
Installation

Moving the Cabinet

⚠ **CAUTION**: The ZetaFrame cabinet ships on casters. Move the cabinet by pushing on the front or the rear of the cabinet. Do not push the cabinet from the sides.

The ZetaFrame cabinet has been provided with four (4) casters to allow the cabinet to be rolled into position.

Once the cabinet has been moved to the final location, level and anchor the cabinet per the instructions below.

5mm Ball
Hex Driver Access

13mm Open-Ended
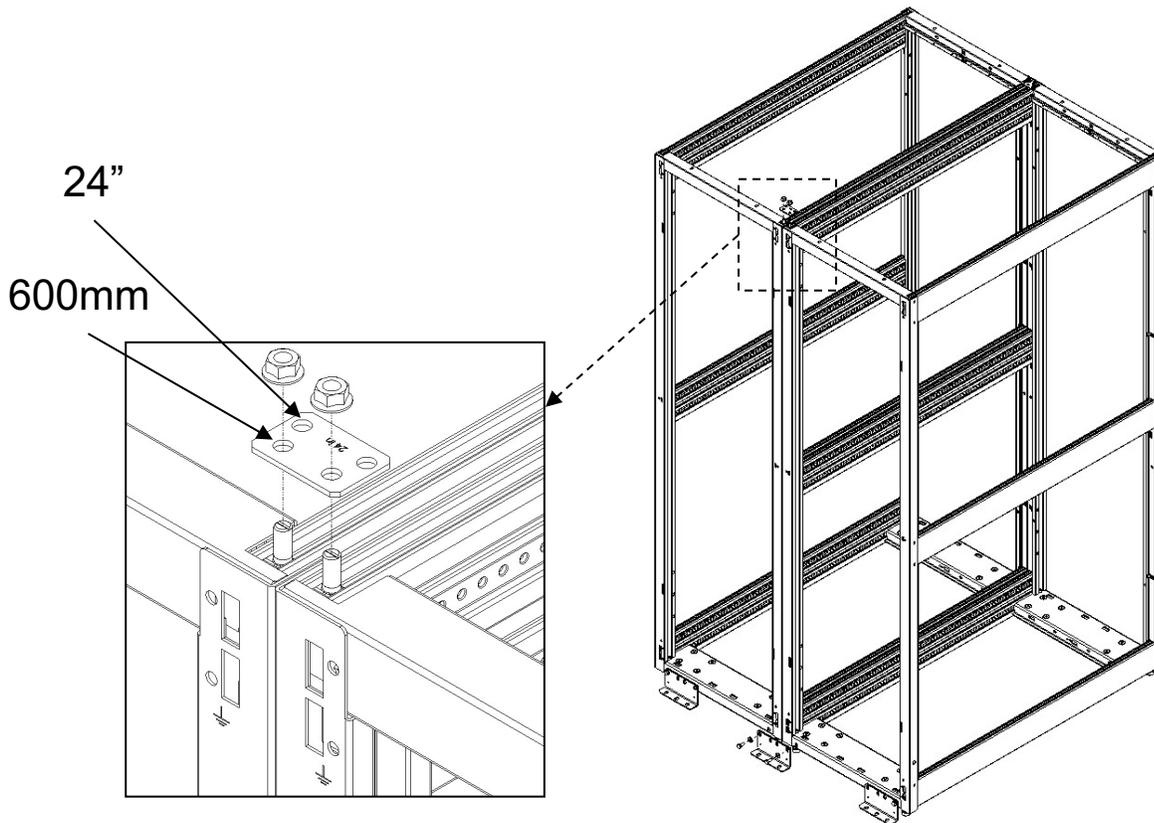Wrench Access

Leveling the Cabinet

Ensure that the cabinet has been properly leveled. All four (4) leveling feet should be in firm contact with the floor and the cabinet should not rock in any direction. A level placed on the cabinet frame should confirm that the cabinet is level.

Once the cabinet is positioned, lower the leveling feet with a 12" (300 mm) long 5 mm hex ball driver (CPI P/N 39150-001, ordered separately) until they just contact the floor. The ball driver should not be used to try to lift/level the cabinet when it is loaded. Then, adjust leveling feet with 13 mm open-end wrench until the cabinet is level and the cabinet will not rock in any direction.

Baying Cabinets Together

ZetaFrame Cabinets can be bayed (fastened) together with solid side panels in place, with a shared solid or brush side panel between cabinets, or with no side panels, depending on installation requirements. Cabinets must be the same height and depth.
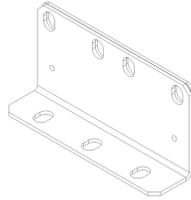
1. Use the supplied hardware and a 13mm Socket wrench to attach the top baying bracket (included in the hardware kit) to the first cabinet. Make sure to use the correct set of holes for the desired cabinet spacing (24" or 600 mm). The 24" spacing will center two 600 mm wide cabinets over a 24" access floor tile – spaces cabinets approximately 0.4" (10 mm) apart. The 600 mm spacing will bay any two cabinets side-by-side.

2. Move the second cabinet so that the cabinets are aligned. This may also require adjusting the leveling feet if the second cabinet was not set at the same level as the first cabinet.

3. Use the supplied hardware to attach the top baying bracket to the second cabinet.

4. For 600 mm spacing, use one floor anchor to bay two cabinets at the bottom. For 24" spacing, no baying available using floor anchors at bottom, so each cabinet requires two floor anchors on both front and rear.

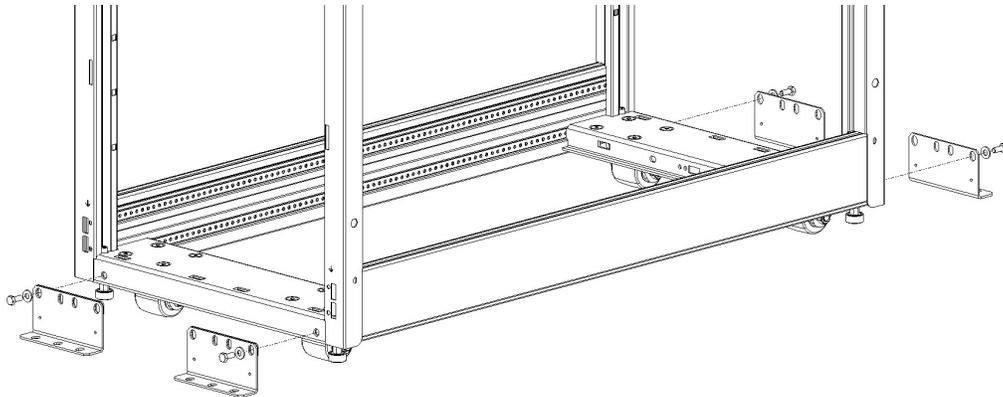5. Repeat steps 1-3 for the other end of the cabinet.

Anchoring the Cabinet to the Floor

ZetaFrame Cabinets, whether bayed together or standing alone, should be anchored to the floor. The anchor brackets that secured the cabinet to the pallet (shown below) are used to anchor the cabinet to the floor. The brackets attach to the outside of the frame (as they were on the pallet) using M8 hardware tightened to 212 in-lb (24 N-m). Installation requires four anchors, either 3/8" or M10 hardware.

Anchor Bracket

The mounting locations for the anchor brackets are shown in the figure below. If used as part of an aisle containment solution, install the Floor Seal Kits (P/Ns 39996-XXX and 39997-XXX) before attaching the anchor brackets.
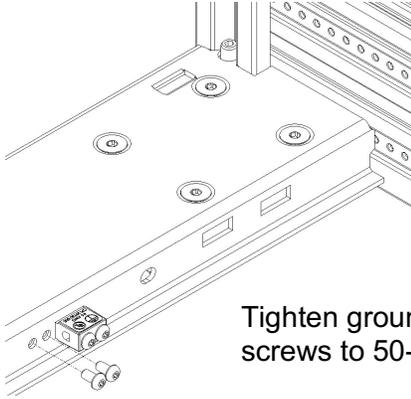

Attach the cabinet to the floor with 3/8" or M10 hardware appropriate for your type of flooring.

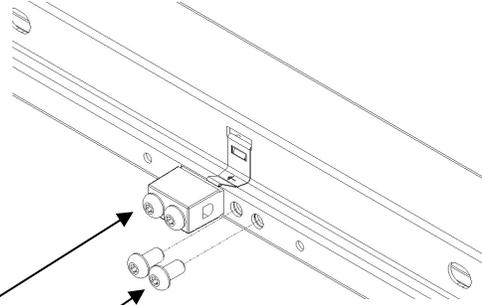## Bonding the Cabinet to the Telecommunications Busbar

ZetaFrame Cabinets should be bonded to the telecommunications busbar. The top panel, side panels, doors and mounting rails on the ZetaFrame cabinet are electrically bonded to the frame. To bond the cabinet to the telecommunications busbar, use the Ground Terminal Connector (included) to connect a 6 AWG solid or stranded copper conductor to the telecommunications busbar or signal reference grid. Secure bonding wire to the terminal connector using a T25 Torx screwdriver and two M6 Torx screws (included) tightened to 50-55 in-lb (5.6-6.2 N-m). Apply generous coating of gray antioxidant (included) to the ribbed section on the connector with threaded holes to mount to cabinet. Attach the connector to the cabinet frame (bottom or top) with two M6 Torx screws (included) tightened to 90 in-lb (10 N-m). Replacement Ground Terminal Connectors (P/N 39730-000) may be purchased from Chatsworth Products.

Bottom Frame Mounting

Top Frame Mounting

Tighten ground conductor wire binding screws to 50-55 in-lb (5.6-6.2 N-m)

Tighten ground connector frame mounting screws to 90 in-lb (10 N-m)

Cleaning the Cabinet

⚠ **CAUTION**: ZetaFrame cabinets are constructed and finished with a variety of materials. A dry or damp cloth is recommended for light-duty cleaning. A vacuum may be necessary to remove heavy dust accumulation. Avoid use of chemical-based products as they may damage some cabinet finishes. Color-matched touch-up paint is available to cover minor scrapes and scuffs.

Configuring the Cabinet

The ZetaFrame Cabinet can easily be configured for a variety of applications. Not only can the standard cabinet components be adjusted or removed, but a broad range of accessories can be installed to create a cabinet solution that meets all the needs of your installation requirements.
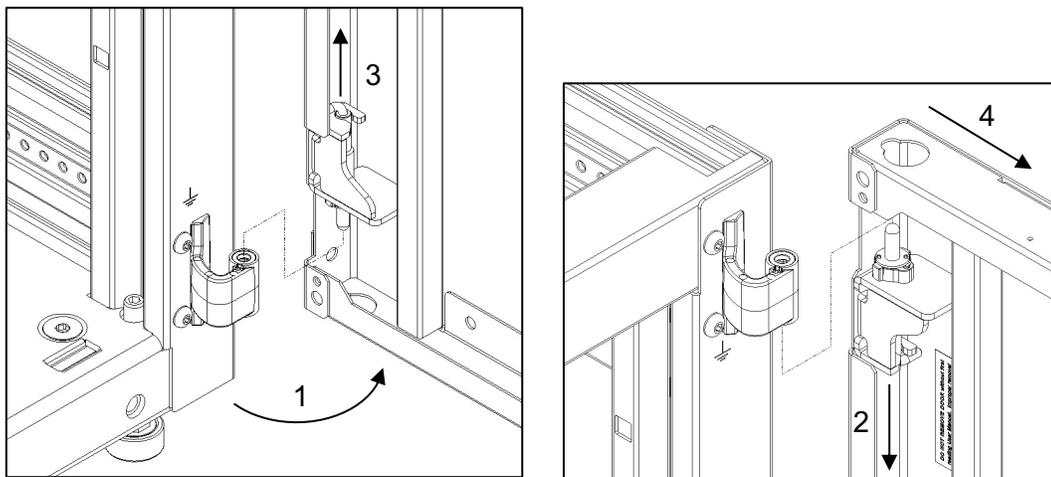
Removing and Installing the Front Door

⚠ **CAUTION**: To avoid personal injury and reduce the risk of damaging the door or the cabinet, one person should support the door while another person retracts the hinge pins and removes the door from the frame.
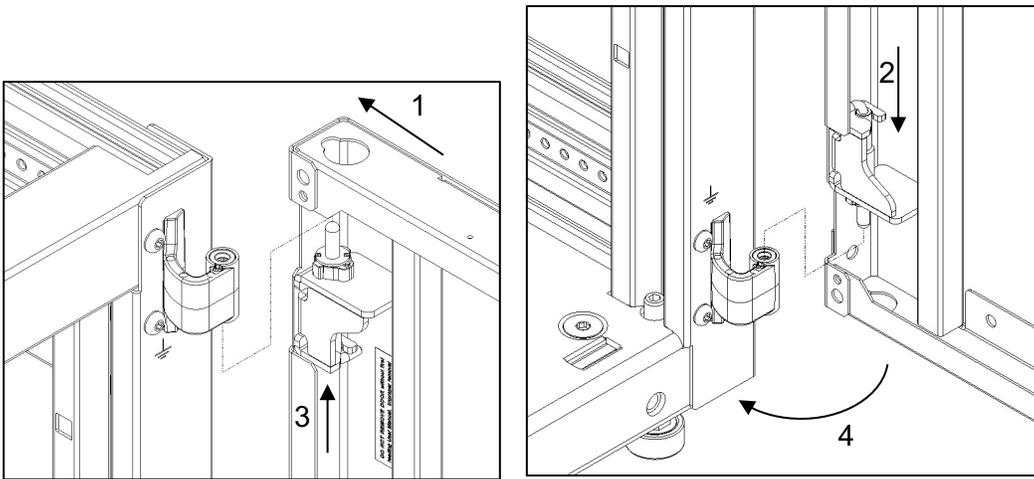
Removing the Front Door:

1. Open the front door to 90 degrees so that it is perpendicular to the cabinet. The door is perpendicular to the cabinet when it is parallel with the side of the cabinet.

2. While supporting the door, retract the hinge pin from the upper hinge. Note: the door, hinge pin and/or hinge may be damaged if the door is not properly supported while being removed. Hold the door so that it does not lean.

3. Retract the hinge pin from the lower hinge. Lift the door off the bottom hinge and move toward the side of the cabinet. Support the door while lifting and moving the door. The hinge is captive in a pocket on the door.

4. Once the door is free of the hinges, move the door away from the frame.
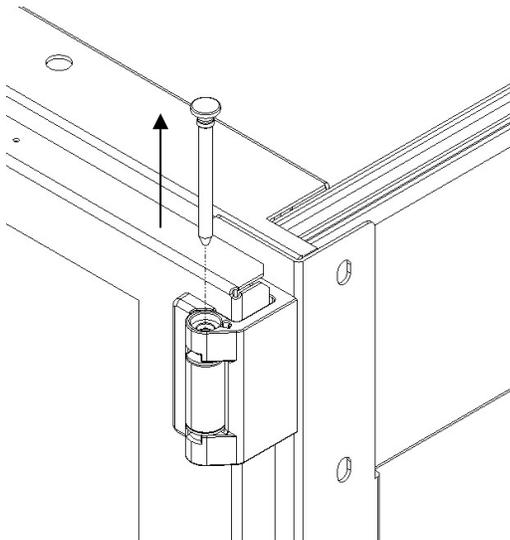

Installing the Front Door:

1. Hold the door so that it is perpendicular to the cabinet and align the hinge pins on the door with the hinge barrels on the cabinet. The door is perpendicular to the cabinet when it is parallel with the side of the cabinet.

2. Lift the door and move it toward the hinges. Align the lower hinge pin with the lower hinge barrel. Insert the lower hinge pin into the lower hinge barrel. Continue to support the door, keeping it vertical and perpendicular to the cabinet frame. The door must be supported to prevent damage to the hinges.

3. While supporting the door, retract the upper hinge pin, and then align and insert the pin into the upper hinge barrel. Check that both hinge pins are inserted into the hinge barrels before releasing the door. Note: on tall cabinets, you may need to insert the upper hinge pin first.

4. Close the front door.

Removing and Installing the Rear Doors
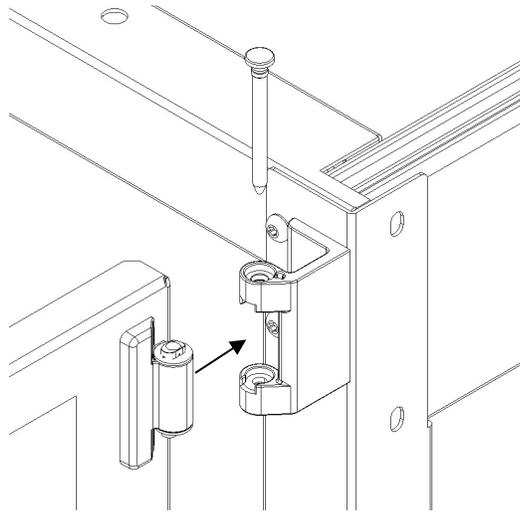
Removing the Rear Doors:

1. With the doors closed, lift and remove the hinge pins from both the upper and lower hinges on the door that you want to remove.

2. Open the door to exactly 90 degrees and pull the door away from the cabinet frame.

Installing the Rear Doors:

1. Hold the door in a 90-degree open position.

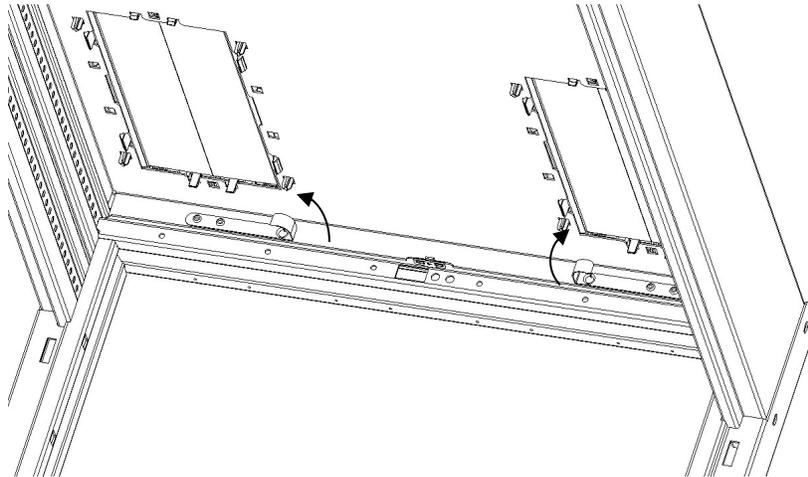2. Align the hinges on the door with the hinges on the frame and slide the hinges together.

3. Rotate the door to the closed position.

4. Insert the hinge pins (from the top of the hinge) into both the upper and lower door hinges.

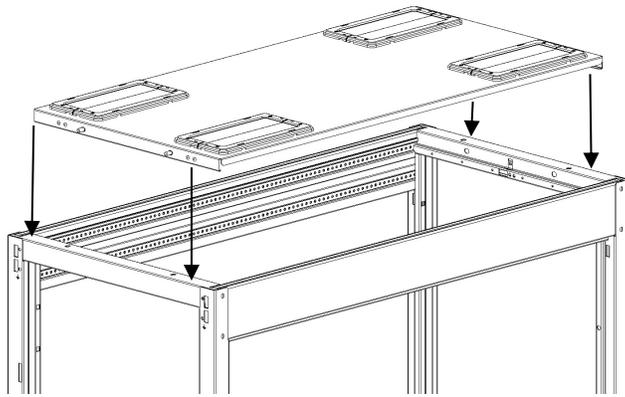## Removing and Installing the Top Panel

Removing the One-Piece Top Panel:

1. Open the rear door(s) of the cabinet.

2. Depress and hold the two (2) spring retainers that hold the top panel to the frame.
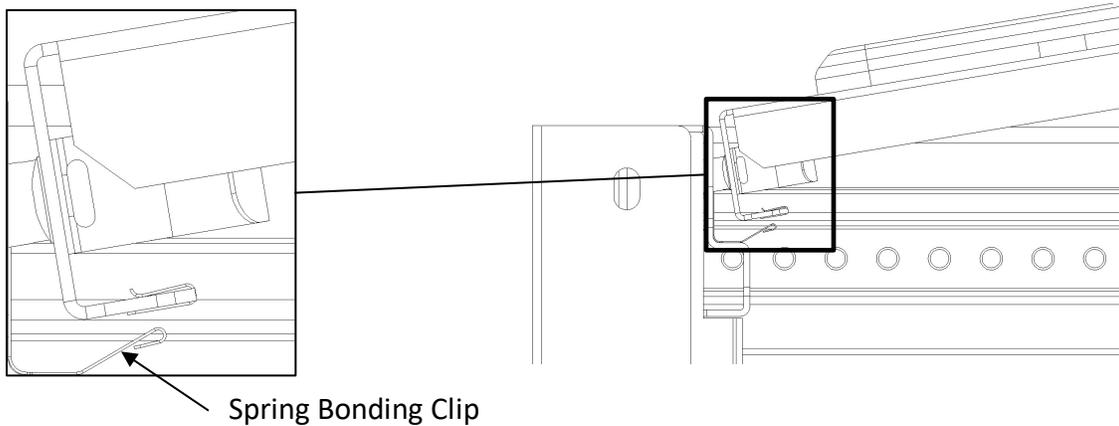
3. Push up on the top panel and remove.

Installing the Top Panel:

1. Align the front edge of the top panel with the frame.

2. Lower the top panel onto the frame.

3. Pull the four (4) spring retainers until the top panel has snapped in place and secure the top panel from lifting.

Note: There are two spring clips (one centered per top cross member) on the interior ledge of the frame that supports the top panel. These clips create the bonded connection between the frame and the top panel. Be careful when lowering the top panel to not bend or damage the clip.
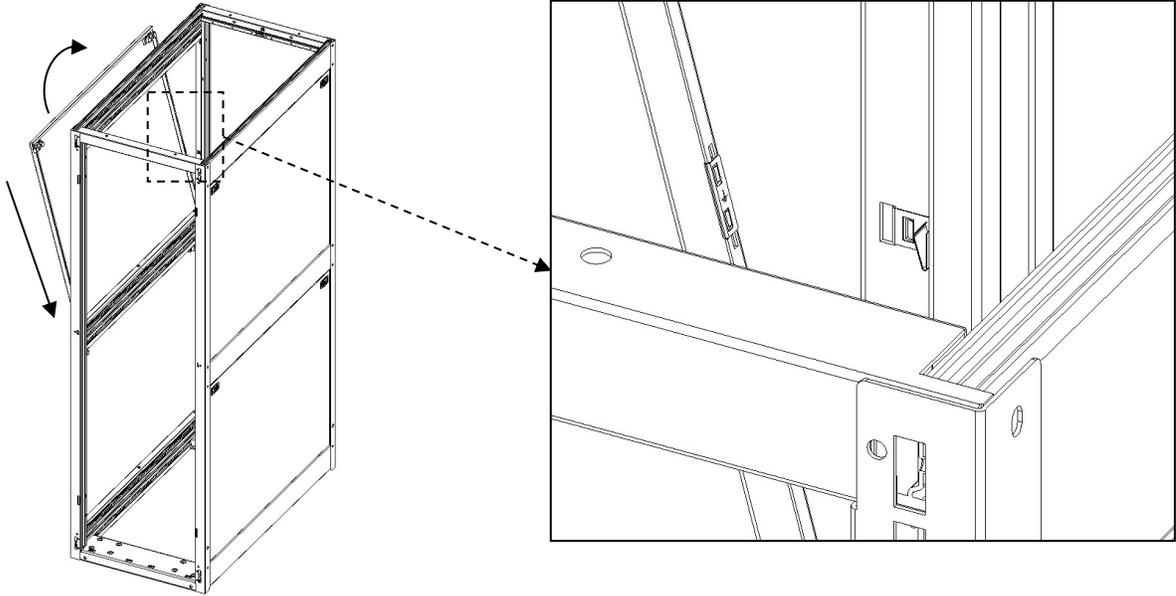

Spring Bonding Clip

Removing and Installing the Side Panels

Removing the Side Panels:

1. Unlock the side panel latches with the key (if necessary).

2. Retract the side panel latches by pushing towards the center and allow the side panel to tilt away from the cabinet.

3. Lift up on the side panel and remove it from the cabinet.
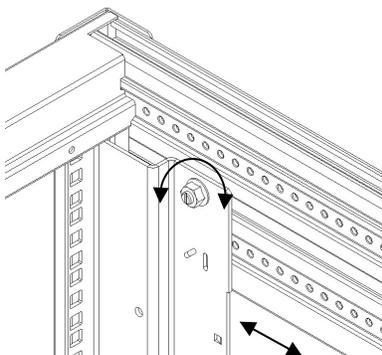
Installing the Side Panels:

1. Align the side panel with the cabinet frame and slip the side panel into the side of the frame. Allow the side panel to move downwards so that the tabs on the bottom of the panel engage the front-to-rear frame member below the side panel.
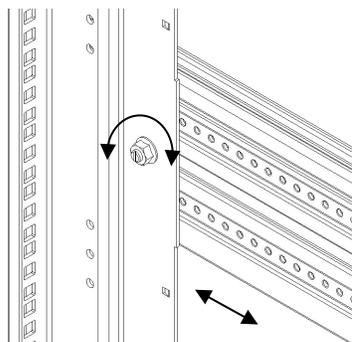

2. Rotate the side panel up to meet the frame and push until the side panel latches engage the vertical frame members next to the side panel.

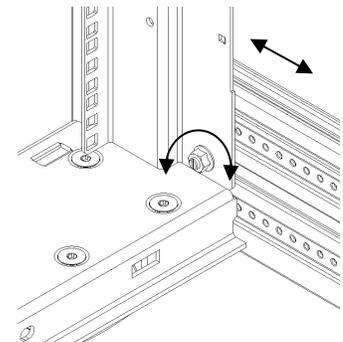3. Lock the side panel with the key (if necessary).

Adjusting the Equipment Rails

1. Use a 13 mm socket wrench to loosen (but do not remove) the nuts securing the equipment rail to the frame in three (3) locations on the cabinet.
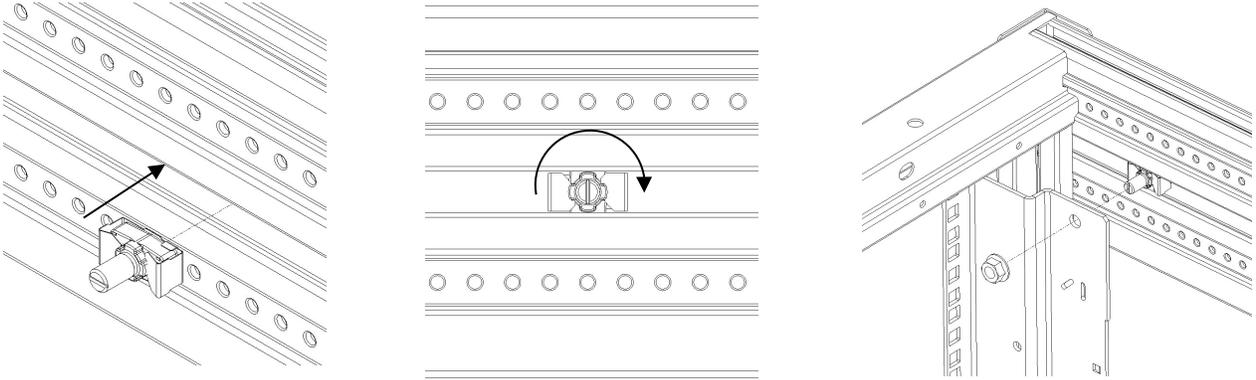

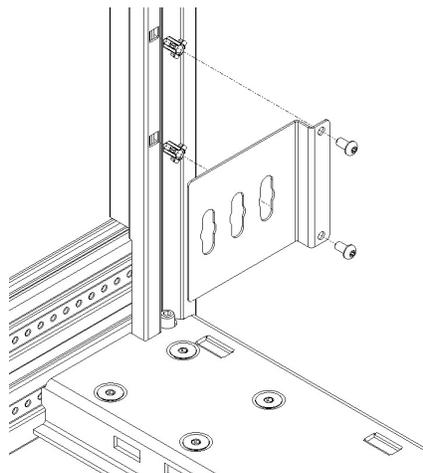| Top Slide Nut | Center Slide Nut | Bottom Slide Nut |

2. Move the equipment rail forward or backward to the desired location.

3. Tighten the nuts to 300 in-lb (34 N-m) in all three (3) locations on the cabinet.

Note: To insert support hardware turn the captive nut to align with the groove in the support, insert into the groove and turn 90 degrees to lock into the groove. Adjust to location and attach the mounting rail.

Installing the Standard PDU Brackets

1. Choose the desired corner of the cabinet to install the PDU Brackets and install front mount cage nuts in square holes.

2. Position PDU bracket against vertical frame member and install 2 screws through holes into cage nuts. Torque screws to 168 in-lb (19 N-m) using a Phillips screw driver.

3. Repeat for second PDU Bracket.

Installing Equipment

The ZetaFrame Cabinet supports all manufacturers' equipment that conforms to the EIA/ECA-310E standard. Most equipment attaches directly to the equipment mounting rails; however, some manufacturers may provide brackets or slide assemblies that require additional installation.

Rack-mount unit (U) markings are clearly printed on the equipment rails to simplify installation of components. Align equipment with the U markings on each side of the cabinet before securing the equipment.

> **NOTE**: Equipment rails should be adjusted to the desired location (front to rear) prior to installing equipment. See "Adjusting the Equipment Rails" on page 22.

The ZetaFrame Cabinet is provided with hardware to secure equipment to the mounting rails. This hardware includes 50 sets of M6 cage nuts and screws. Additional hardware is available for purchase (see "Other Accessories" on page 29).

Cable Management

CPI cable management products provide the proper cable bend radii for better data transmission; fewer tangled cords and cable damage; and ease in moving, adding, and changing connections. The products assist in complying with ANSI/TIA installation of Category 5/5e/6/6a and fiber cables.

Separate the cables by type, gather into bundles, and fasten loosely with hook and loop fasteners. CPI offers Saf-T-Grip Straps to fasten cable bundles (P/N 0200X-series).
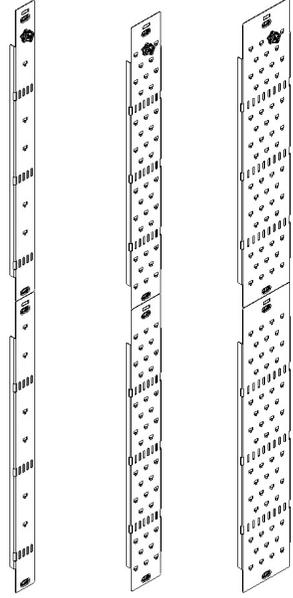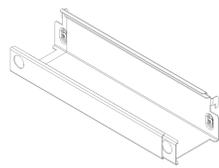
See "Accessories – Cable Management" on page 25 for more information.
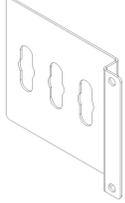
Accessories

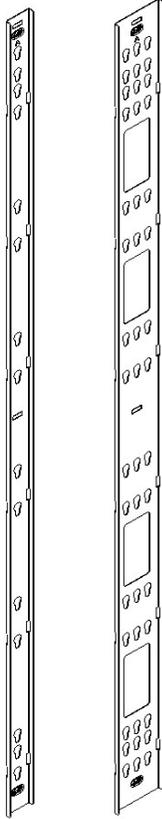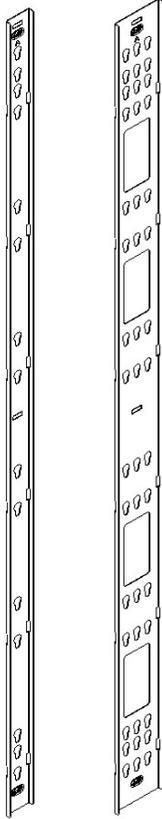## Cable Management

Vertical Cable Manager, Short Finger For 23.6" (600 mm) wide cabinets Fingers, attaches to equipment rail (Fits other width cabinets also.)	42U x 600 - **39835-X00** 45U x 600 - **39835-X03** 48U x 600 - **39835-X06** 52U x 600 - **39835-X10**	
Finger Cable Manager, Short Finger For 27.6" (700 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 700 - **38646-X11** 45U x 700 - **38646-X14** 48U x 700 - **38646-X17** 52U x 700 - **38646-X21**	
Finger Cable Manager, Short Finger For 29.5" (750 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 750 - **38646-X22** 45U x 750 - **38646-X25** 48U x 750 - **38646-X28** 52U x 750 - **38646-X32**	
Finger Cable Manager, Short Finger For 31.5" (800 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 800 - **38646-X33** 45U x 800 - **38646-X36** 48U x 800 - **38646-X39** 52U x 800 - **38646-X43**	39835-XXX 38646-XXX
Finger Cable Manager, Long Finger For 27.6" (700 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 700 - **38647-X11** 45U x 700 - **38647-X14** 48U x 700 - **38647-X17** 52U x 700 - **38647-X21**	
Finger Cable Manager, Long Finger For 29.5" (750 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 750 - **38647-X22** 45U x 750 - **38647-X25** 48U x 750 - **38647-X28** 52U x 750 - **38647-X32**	
Finger Cable Manager, Long Finger For 31.5" (800 mm) wide cabinets Fingers, Attaches to equipment rail	42U x 800 - **38647-X33** 45U x 800 - **38647-X36** 48U x 800 - **38647-X39** 52U x 800 - **38647-X43**	38647-XXX
X = Color (7=Black, E=Glacier White)		

Cable Management (cont'd)

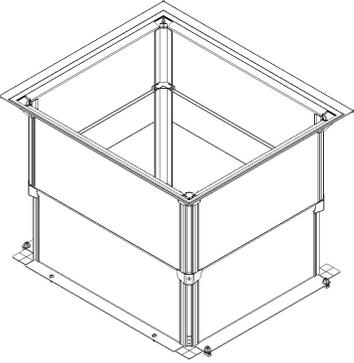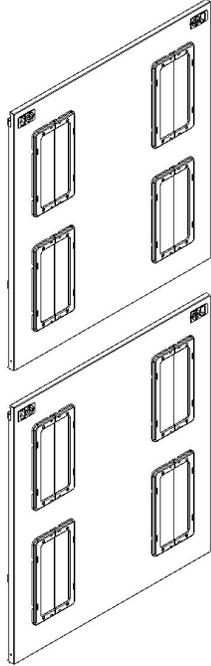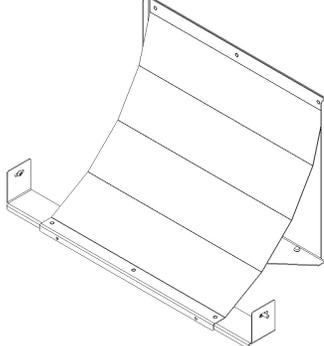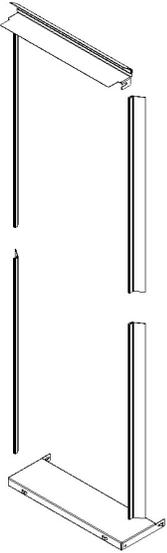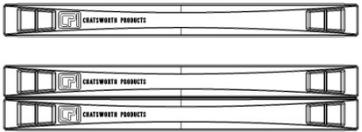|		
Cable Lashing Panel, 2.75in Two (2) half-height panels Attaches to the cabinet frame	42U - **38634-X00** 45U - **38634-X03** 48U - **38634-X06** 52U - **38634-X10**	
Cable Lashing Panel, 4.5in Two (2) half-height panels Attaches to the cabinet frame	42U - **38635-X00** 45U - **38635-X03** 48U - **38635-X06** 52U - **38635-X10**	
Cable Lashing Panel, 7in Two (2) half-height panels Attaches to the cabinet frame	42U - **38636-X00** 45U - **38636-X03** 48U - **38636-X06** 52U - **38636-X10**	38634-XXX 38635-XXX 38636-XXX
Front-to-Rear Cable Manager Attaches to the mounting rails	700W - **38648-X01** 750W - **38648-X02** 800W - **38648-X03**	
X = Color (7=Black, E=Glacier White)		

Power Management

One set of standard PDU brackets is included with the ZetaFrame Cabinet. Additional PDU brackets are available as well as a wide range of power strips and PDU's, including monitored and switched versions.

Standard PDU Brackets **38645-700** Two (2) brackets Attaches to the cabinet vertical frame member		
Full Height PDU Bracket, Single Attaches to the cabinet frame	42U x 2.2in - **38637-X00** 45U x 2.2in - **38637-X03** 48U x 2.2in - **38637-X06** 52U x 2.2in - **38637-X10** 42U x 2.7in - **38637-X11** 45U x 2.7in - **38637-X14** 48U x 2.7in - **38637-X17** 52U x 2.7in - **38637-X21**	
Full Height PDU Bracket, Dual Attaches to the cabinet frame	42U x 2.2in - **38638-X00** 45U x 2.2in - **38638-X03** 48U x 2.2in - **38638-X06** 52U x 2.2in - **38638-X10** 42U x 2.7in - **38638-X11** 45U x 2.7in - **38638-X14** 48U x 2.7in - **38638-X17** 52U x 2.7in - **38638-X21**	
X = Color (7=Black, E=Glacier White)		

Thermal Management

Vertical Exhaust Duct 15" – 20" (381 – 508 mm)	600W - **39873-X00** 700W - **39873-X01** 750W - **39873-X02** 800W - **39873-X03**	
Vertical Exhaust Duct 20" – 34" (508 – 863 mm)	600W - **39873-X04** 700W - **39873-X05** 750W - **39873-X06** 800W - **39873-X07**	
Vertical Exhaust Duct 34" – 60" (863 – 1523 mm)	600W - **39873-X08** 700W - **39873-X09** 750W - **39873-X10** 800W - **39873-X11**	
Side Panel with Grommet Sealed Cable Openings Pair of Panels For one side of cabinet Includes one (1) key	42U x 800D - **39774-X00** 42U x 1000D - **39774-X08** 42U x 1050D - **39774-X10** 42U x 1100D - **39774-X12** 42U x 1200D - **39774-X16** 45U x 800D - **39774-X51** 45U x 1000D - **39774-X59** 45U x 1050D - **39774-X61** 45U x 1100D - **39774-X63** 45U x 1200D - **39774-X67** 48U x 800D - **39774-XAC** 48U x 1000D - **39774-XAL** 48U x 1050D - **39774-XAN** 48U x 1100D - **39774-XAR** 48U x 1200D - **39774-XAW** 52U x 800D - **39774-XDL** 52U x 1000D - **39774-XDW** 52U x 1050D - **39774-XEA** 52U x 1100D - **39774-XEC** 52U x 1200D - **39774-XEG**	
Airflow Director Use in conjunction with Vertical Exhaust Duct	600W - **39802-X00** 700W - **39802-X01** 750W - **39802-X02** 800W - **39802-X03**	
X = Color (7=Black, E=Glacier White)		

Thermal Management (cont'd)

Air Dam For 23.6" (600 mm), 27.6" (700 mm), 29.5" (750 mm), and 31.5" (800 mm) wide cabinets	42U x 600 - **38649-X44** 45U x 600 - **38649-X47** 48U x 600 - **38649-X50** 52U x 600 - **38649-X54** 42U x 700 - **38649-X55** 45U x 700 - **38649-X58** 48U x 700 - **38649-X61** 52U x 700 - **38649-X65** 42U x 750 - **38649-X66** 45U x 750 - **38649-X69** 48U x 750 - **38649-X72** 52U x 750 - **38649-X76** 42U x 800 - **38649-X77** 45U x 800 - **38649-X80** 48U x 800 - **38649-X83** 52U x 800 - **38649-X87**	
Equipment Mounting Rail Grommet Kit Set of 8 grommets, black	700/750 - **39731-001** 800 - **39731-002**	
Snap-In Filler Panel	1U X19, Black, 6 EA - **34537-001** 2U X19, Black, 6 EA - **34538-001** 1U X19, Black, 50 EA - **34537-002** 2U X19, Black, 50 EA - **34538-002**	
Cable Port Brush Kit Brushes for two (2) large cable knock-outs in cabinet top panel	**25190-001**	
X = Color (7=Black, E=Glacier White)		

Shelves, Trays and other accessories

Clik-Nuts & Screws **76543-001** (25) M6 cage nuts and screws	
Low Profile Fixed Shelf **12610-719** 1U x 19"W Telescopes 20"- 36" (510 mm - 910 mm) in depth	
Rack-Mount Cable Shelf **13517-701** 1U x 19"W brush sealed openings on front for cable pass-through	
Concrete Floor Installation Kit 3/8" - **40604-001** Four (4) floor anchors M10 - **40604-004**	