SEISMIC FRAME® TWO-POST RACK

KEY FEATURES

- Welded, steel network equipment rack engineered specifically to protect equipment in areas with seismic activity

- Independently seismic-tested and certified; meets industry-recognized Telcordia® Technologies, Inc. GR-63-CORE Network Equipment Building Systems (NEBS) Zone 4 requirements

- 1,000 lb (453.6 kg) load rating for seismic areas

- Supports 19" EIA-310-D compliant rack-mount equipment like patch panels and network switches; 23" wide version also available

- 19" wide rack fits within a 24" (610 mm) raised access floor tile

- Available with #12-24 threaded or square-punched adjustable-depth equipment mounting rails

- Equipment mounting rails have marked and numbered RMU spaces; numbering can start at the top or bottom of the rack

- Fully bonded rack has two masked grounding locations and includes a Two Mounting Hole Ground Terminal Block for easy connection to the Telecommunications Grounding Busbar

- Vertical Power Strips and T-shaped Cable Management Fingers attach directly to the rack channel to provide power and cable distribution for equipment

APPLICATIONS

- Support rack-mount network equipment in data centers and premise networks where seismic activity exists

USE WITH

- Seismic Frame® Two-Post Rack Vertical Cabling Section
- Top-Mount Cable Waterfall Tray
- Cable Management Fingers Kit
- Seismic Frame® Two-Post Rack Concrete Floor Anchor Kit

RELATED ACCESSORIES

- Heavy Duty Equipment Shelf for 6" (150 mm) Channel
- Vertical Power Strip Mounting Hardware Kit for Vertical Power Strips for Racks
- Vertical Cabling Section Offset Mounting Bracket Kit for Single-Sided Wide Vertical Cabling Section
- 3" (80 mm) Channel Rack-To-Runway Mounting Plate
- Cable Runway J-Bolt Kit

1,000 lb (453.6 kg) Seismic NEBS Zone 4 Load Rating

Adjustable Depth Mounting Rails

Set 6" (150 mm) or 3" (80 mm) apart

CPI Vertical Power Strips and Cable Management

Built-in locations on Rack

Two Mounting Hole Ground Terminal Block

Included for easy connection to the Telecommunications Grounding Busbar

CPI's Seismic Frame® Two-Post Rack is designed specifically to support network equipment in areas with seismic activity. When earthquakes occur, equipment racks move back-and-forth with the building causing violent vibration through racks and equipment. An earthquake can easily damage or destroy non-seismic racks and equipment that are not carefully braced. The welded, steel Seismic Frame Two-Post Rack resists the swaying motion caused by earthquakes to reduce the amount of vibration transferred through the rack to equipment and is less likely to be damaged during a seismic event, which means faster network recovery.

The Seismic Frame Two-Post Rack supports 19" EIA-310-D compliant or 23" wide equipment with two pairs of mounting rails that can be spaced 6" (150 mm) or 3" (80 mm) apart. The mounting rails are marked and numbered with RMU spaces and can be attached so that numbering starts at the bottom or top of the rack mount space. Choose threaded or square-punched mounting rails with a painted or zinc-plated finish. The mounting holes in threaded mounting rails are tapped with #12-24 threads to speed installation of panel-mount equipment with #12-24 screws. The square-punched rails accept cage nut hardware allowing you to change threads at each RMU to match equipment mounting requirements.

CPI's Seismic Frame Two-Post Rack ships fully assembled and includes a Two Mounting Hole Ground Terminal Block for bonding the rack to the Telecommunications Grounding Busbar and 50 each equipment mounting screws or cage nuts and screws. The rack is rated for a 1,000 lb (453.6 kg) seismic Zone 4 load per Section 4.4 of the Telcordia® Technologies, Inc. GR-63-CORE Network Equipment Building Systems (NEBS) requirements.
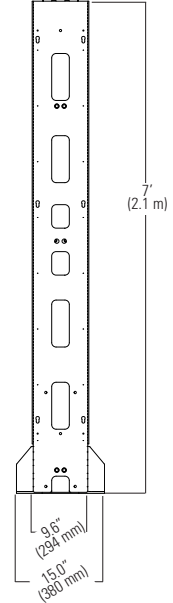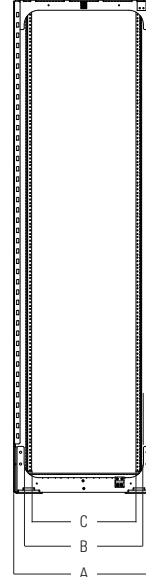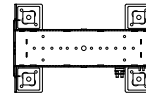
See reverse for product details. Contact CPI Technical Support or visit the CPI Website (www.chatsworth.com/seismic) for configuration assistance.

CHATSWORTH PRODUCTS, INC.

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SPECIFICATIONS

- Open, two-post, seismic-rated rack supports 19" EIA or 23" wide rack-mount equipment
- For indoor use only, in environmentally controlled areas; may not be used outdoors, in industrial or harsh environments, or in plenum spaces
- Includes:
  - Welded, steel frame
  - Equipment mounting rails, two pairs
  - 50 each equipment mounting screws/cage nuts
  - 1 each Two Mounting Hole Ground Terminal Block
- Available sizes (2):
  - Height: 7' (2.1 m)
  - Widths: 24" (610 mm) and 28" (710 mm)
  - Depth: 15" (380 mm) at base; 9.6" (244 mm) vertical channels
- Equipment space:
  - Height: 44 RMU
  - Width: 19" EIA or 23"
  - Rail depths: 6" (150 mm) or 3" (80 mm)
- Equipment Support:
  - Two pairs of L-shaped equipment mounting rails fixed in place at 6"D (150 mm) or 3"D (80 mm)
  - 19" Wide EIA-310-D compliant or 23" Wide
  - Universal Hole Pattern, 5/8"-5/8"-1/2" alternating vertical mounting hole spacing
  - Threaded #12-24 or square-punched equipment mounting holes
  - Includes 50 each mounting screws or cage nuts and mounting screws
- Load Capacity:
  - 1,000 lb (453.6 kg) of equipment in seismic areas
- Bonding and Grounding
  - Rack components are bonded through welds
  - Mounting rails are bonded to the rack through attachment hardware; optional zinc-plated mounting rails provide direct metal contact with rack-mount equipment
  - Includes two masked ground connection points located at the top and base of the rack
  - Includes one Two Mounting Hole Ground Terminal Block for connection to the Telecommunications Grounding Busbar
- Certifications:
  - EIA-310-D compliant
  - UL Listed NWIN per UL 60950, File E227626
  - GR-63-CORE, NEBS, Zone 4
- Material:
  - Steel
- Construction:
  - Welded
  - Mounting rails attach with hardware
- Finish:
  - Epoxy-polyester hybrid powder coat paint in black, gray or computer white
  - Mounting rails are painted or zinc-plated
- Installation:
  - Each rack must be secured to the structural floor
  - Order a seismic-rated, concrete anchor kit separately
  - Use M12 x 5-1/8" Hilti HSL-3-G Heavy Duty Sleeve Anchors or equivalent
  - When bayed in a continuous row, the spacing between racks should be determined by a licensed structural engineer familiar with seismic applications and codes. Each installation requirement varies.
  - Minimum recommended thickness of the concrete slab on the ground floor is 5-1/2" (140 mm)

DIMENSIONS

Item	Description	19"W	23"W
A	Overall Width	24.0" (610 mm)	28.0" (710 mm)
B	Frame Opening	19.3" (490 mm)	23.3" (592 mm)
C	Rail Clearance	17.75" (450 mm)	21.75" (552 mm)

ORDERING INFORMATION

Seismic Frame® Two-Post Rack		
Part Number	**Description**	**Shipping Weight**
13853-703	19"W x 7'H (2.1 m) 44 RMU, Tapped #12-24 Zinc Rails, Black	180 lb (81.6 kg)
13854-703	19"W x 7'H (2.1 m) 44 RMU, Square-Punched Zinc Rails, Black	178 lb (80.7 kg)
13855-703	19"W x 7'H (2.1 m) 44 RMU, Tapped #12-24 Painted Rails, Black	180 lb (81.6 kg)
13856-703	19"W x 7'H (2.1 m) 44 RMU, Square-Punched Painted Rails, Black	178 lb (80.7 kg)
13883-703	23"W x 7'H (2.1 m) 44 RMU, Tapped #12-24 Zinc Rails, Black	185 lb (83.9 kg)
13884-703	23"W x 7'H (2.1 m) 44 RMU, Square-Punched Zinc Rails, Black	183 lb (83.0 kg)
13885-703	23"W x 7'H (2.1 m) 44 RMU, Tapped #12-24 Painted Rails, Black	185 lb (83.9 kg)
13886-703	23"W x 7'H (2.1 m) 44 RMU, Square-Punched Painted Rails, Black	183 lb (83.0 kg)

Also avialable in gray and white. Install using four seismic-rated concrete anchors (sold separately).

Notes:

Cable Management:
- The top of the rack is punched with attachment points for the CPI Top-Mount Cable Waterfall Tray and Cable Runway
- Attach 9" (230 mm), 12" (300 mm), 15" (380 mm) and 18" wide (460 mm) Cable Runway to racks in perpendicular (front-to-back) orientation with the Cable Runway J-Bolt Kit; 23" wide racks will also support 20" wide (510 mm) Cable Runway
- Attach 12" (300 mm) to 24" wide (610 mm) Cable Runway in parallel (side-to-side) orientation with the 3" (80 mm) Channel Rack-To-Runway Mounting Plate.
- The front of the rack is punched with attachment points for the CPI Cable Management Fingers Kits
- The sides of the rack are punched with three pairs of centered, 1/2-20 threaded attachment points for CPI Seismic Frame Two-Post Rack Vertical Cabling Section
- Attach a CPI Single-Sided Wide Vertical Cabling Section to the side of the rack with the CPI Vertical Cabling Section Offset Mounting Bracket Kit
- Evolution™ Cable Management and MCS-EFX Master Cabling Section with Extended Fingers will also attach to the side of the rack

Power Distribution:
- Each side (corner) of the rack frame is punched with a set of keyhole slots for Vertical Power Strips
- Attach CPI Vertical Power Strips to the rack with the CPI Vertical Power Strip Mounting Hardware Kit

Shelves:
- Use CPI Heavy Duty Equipment Shelf for 6" (150 mm) Channel with the rack's mounting rails set 6" (150 mm) apart
- When rails are set 3" (80 mm) apart, the maximum shelf width on 19" wide racks is 19.3" (490 mm) and the maximum shelf width on 23" wide racks is 23.3" (592 mm)
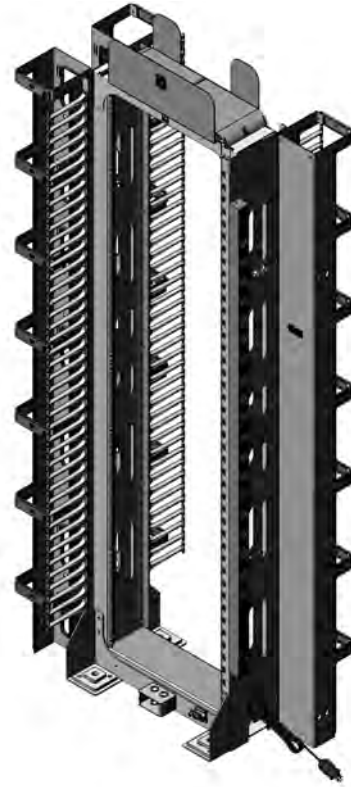
ACCESSORIES

Seismic Frame® Two-Post Rack Vertical Cabling Section

Provide a double-sided, front and rear cable pathway next to Seismic Frame Two-Post Rack.
- Separate front and rear 6"W x 6.38"D (150 mm x 162 mm) cable managers attach with included offset brackets to align with the front and rear of the rack
- Large cable pass-through ports on the back of each manager align with ports in the side of the frame; spin-open plastic latches secure cables inside the managers
- Keyhole slots on the back of the managers allow two CPI Vertical Power Strips for Cabinets to be mounted on the back of each manager using the Seismic Frame Two-Post Rack Vertical Power Strip Mounting Hardware Kit
- Includes one Single-Sided Cable Management Fingers Kit to organize cables by RMU
- Made of aluminum
- Includes installation hardware

Part Number	Description	Shipping Weight
13704-X03	Seismic Frame Two-Post Vertical Cabling Section	35 lb (15.9 kg)

X=color: 1=Gray, 2=White, 7=Black

Cable Management Fingers Kit

Organize patch cords and jumper cables by RMU.
- 7 RMU T-shaped plastic cable guides snap onto the front and rear of the rack frame
- Openings between the T-shaped guides align with each RMU on the rack
- Single-Sided Kit includes 12 cable guides for one side (front or rear) of the rack
- Double-Sided Kit includes 24 cable guides for both sides (front and rear) of the rack

Part Number	Description	Shipping Weight
13696-001	Cable Management Fingers Kit, Single-Sided	7 lb (3.2 kg)
13696-002	Cable Management Fingers Kit, Double-Sided	14 lb (6.4 kg)

Color is Black.

Vertical Power Strip Mounting Hardware Kit

Attach CPI Vertical Power Strips to the side of Seismic Frame Two-Post Rack or the back of the Seismic Frame Two-Post Rack Vertical Cabling Section.
- Includes mounting hardware that allows two CPI Vertical Power Strips to attach to the keyholes on the sides of the Seismic Frame Two-Post Rack
- All CPI Vertical Power Strips can attach to the outside of the rack channel unless a vertical cable manager is used in the same space
- CPI Vertical Power Strips that are 1.6"W (41 mm) or less can attach inside the rack channel unless a Cable Management Fingers Kit is used in the same corner

Part Number	Description	Shipping Weight
13697-001	Vertical Power Strip Mounting Hardware Kit	1 lb (0.5 kg)

Finish is clear (machined aluminum).

Top-Mount Cable Waterfall Tray

Guides patch cords and jumper cables side-to-side or rack-to-rack.
- Attaches to the top of the Seismic Frame Two-Post Rack; can be centered or overhang the front of the rack
- The tray is 6"W x 5.2"D (152 mm x 132 mm) with adjustable radius bends that align with the tops of side-mounted vertical cable managers
- Made of steel
- Includes installation hardware

Part Number	Description	Shipping Weight
15275-X01	Top-Mount Cable Waterfall Tray	14 lb (6.4 kg)

X=color: 1=Gray, 2=White, 7=Black

Vertical Cabling Section (VCS) Offset Mounting Bracket Kit

Attach a CPI Single-Sided Wide Vertical Cabling Section to the side of the Seismic Frame Two-Post Rack so that it aligns with the front of the rack.
- Kit includes four Offset Mounting Brackets
- Use two brackets per side to attach the Vertical Cabling Section
- Brackets are slotted allowing front-to-rear adjustment
- Made of steel

Part Number	Description	Shipping Weight
13699-701	VCS Offset Mounting Bracket Kit	2 lb (0.9 kg)

Color is Black.

Other CPI Accessories are compatible with this rack, please see CPI Mini Catalog for part number information on Vertical Power Strips, J-Bolt Kit and Single-Sided Wide Vertical Cabling Section.

ACCESSORIES

Duplex Electrical Outlet Box

Provides a location for a power connection at the base of the rack.
- Includes a single-gang electrical outlet box for a single duplex receptacle and two self-tapping Torx head T25 installation screws
- Outlet box is welded steel, 3-3/4"H x 1-13/16"W x 2-1/2"D (95 mm x 46 mm x 64 mm) with a 15.5 in³ (250 cm³) wiring capacity, has eight (four accessible) concentric knockouts for 1/2" or 3/4" conduit, and is zinc galvanized for corrosion protection
- UL Listed

Part Number	Description	Shipping Weight
13698-001	Duplex Electrical Outlet Box	1 lb (0.5 kg)

Color is zinc.

Seismic Frame Two-Post Rack Concrete Floor Anchor Kit

Attach Seismic Frame® Two-Post Rack to a concrete slab floor.
- Includes four M12 x 5-1/8" Hilti HSL-3-G Heavy Duty Sleeve Anchors
- When bayed in a continuous row, spacing between racks should be determined by a licensed engineer familiar with seismic applications and codes.
- Minimum recommended thickness of the concrete slab on the ground floor is 5-1/2" (140 mm)

Part Number	Description	Shipping Weight
13702-001	Concrete Floor Anchor Kit	3 lb (1.4 kg)

Zinc-plated finish.

Seismic Frame® Two-Post Rack Floor Drilling Template

Quickly and easily locate and drill holes for Seismic Frame Two-Post Rack floor anchors.
- Durable 28"W x 15"D (710 mm x 380 mm) aluminum template locates floor mounting holes for 19"W and 23"W Seismic Frame Two-Post Racks
- Notched to indicate outside width of the 19"W rack for easy alignment when installing multiple racks

Part Number	Description	Shipping Weight
13703-701	Floor Drilling Template	6 lb (2.7 kg)

Color is Black.

Equipment Mounting Hardware

Attach rack-mount equipment and shelves to the rack.
- Use #12-24 Combination Pan Head, Pilot Point, Mounting Screws with threaded equipment mounting rails
- Use #12-24, #10-32 or M6 Cage Nuts and Screws with square-punched equipment mounting rails
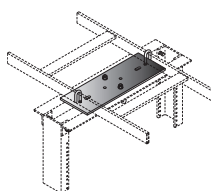
Part Number	Description	Shipping Weight
40605-001	#12-24 Screws, Pack of 50, Zinc	1 lb (0.5 kg)
40605-005	#12-24 Screws, Pack of 50, Black	1 lb (0.5 kg)
12637-001	M6 Cage Nuts and Screws, pack of 25, Gold	1 lb (0.5 kg)
12638-001	#10-32 Cage Nuts and Screws, Pack of 25, Zinc	1 lb (0.5 kg)
12639-001	#12-24 Cage Nuts and Screws, Pack of 25, Black	1 lb (0.5 kg)

3" (80 mm) Channel Rack-To-Runway Mounting Plate

Attach Cable Runway to the top of the rack in a parallel (side-to-side) orientation.
- Kit includes one mounting plate and four 5/16-18 x 2-1/4" J-bolts with hardware
- Select to match the cable runway width; use with 12"W (300 mm) or wider cable runway only
- Order installation hardware separately; installation requires two 5/16" x 1-1/4" L hex head cap screws, four 5/16" flat washers, two 5/16" split lock washers and two 5/16" hex nuts

Part	Runway	Shipping
10595-X12	9" to 12" (230 mm to 300 mm)	5 lb (2.3 kg)
10595-X18	15" to 18" (380 mm to 460 mm)	7 lb (3.2 kg)
12408-X24	20" to 24" (510 mm to 610 mm)	4 lb (1.8 kg)

X=color; 1-Gray, 2=White, 7=Black. P/N 12408-X24 adds 1.25" (31.8 mm) to the height of the rack.

Heavy Duty Equipment Shelf for 6" (150 mm) Channel

Support equipment that does not rack-mount.
- Use with rack rails set 6" (150 mm) apart
- 19"W rack-mount shelf is 20"D (510 mm) and uses 5 RMU
- Supports up to 200 lb (90.7 kg)
- Made of strong, lightweight aluminum
- Use with Tower CPU Adjustable Tie-Down Bracket to secure equipment to the shelf

Part Number	Description	Shipping Weight
12293-X19	Equipment Shelf for 6" (150mm) Channel	10 lb (4.5 kg)
12086-X19	Tower CPU Adjustable Tie-Down Brackets	5 lb (2.3 kg)

x=Color: 1-Gray, 2=White, 7=Black

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