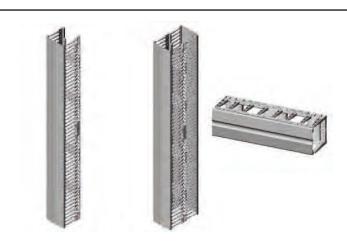
#### **VELOCITY™ CABLE MANAGEMENT**



### Q. Which CPI Rack Systems will Velocity™ Vertical Cable Managers attach to?

A. The single- and double-sided vertical cable managers will attach to Standard Rack 3"D (80 mm), Universal Rack, Adjustable Rail QuadraRack<sup>TM</sup> (ARQR), Adjustable Rail ServerRack (ARSR), Adjustable QuadraRack<sup>TM</sup> (AQR), Adjustable ServerRack (ASR), QuadraRack<sup>TM</sup> Server Frame and QuadraRack<sup>TM</sup> 4-Post Frame. The double-sided vertical cable managers should not be used on Standard Rack 6"D (150 mm) and the single- and double-sided vertical cable managers should not be used with Seismic Frame® Two-Post Rack because the T-shaped cable guides (fingers) will be covered by the side of the rack.

#### O. Are there any known interference issues between CPI Rack Systems and Velocity Vertical Cable Managers?

A. When the vertical cable managers are used with the ARQR and ARSR on the rear mounting channel of the rack, access to the vertical cable managers may be blocked by the rear mounting rail depending on where the rail is set. Also, the Velocity Vertical Cable Managers will not support the ARQR/ARSR Side Panel (P/N 15270-XXX). Additionally, if you use a double-sided vertical cable manager on the front and rear mounting channels of a four-post rack (QuadraRack, ServerRack), the rack should be a minimum of 21" deep (521 mm) plus the width of the manager to allow access to the rearfacing managers. Note that it will be difficult to access the rear-facing managers if the managers are used in between two bayed four-post racks.

# O. Can a Velocity Single-Sided Vertical Cable Manager be used back-to-back on a Standard Rack to create a front and rear cable pathway?

A. Yes and No. You can use two Velocity Single-Sided Vertical Cable Managers back-to-back on a Standard Rack 6"D (150 mm) (CPI P/N 663X3-X03), but you cannot use two Velocity Single-Sided Vertical Cable Managers back-to-back on a Standard Rack 3"D (80 mm) (CPI P/N 55053-XXX). However, when you use a single Velocity Single-Sided Vertical Cable Manager on a Standard Rack 3"D (80 mm) (CPI P/N 55053-XXX), you can add a Velocity Cable Ring Kit (P/N 13934-7XX) to the back of the manager to create a rear cable pathway.

## Q. How far do the T-shaped cable guides (fingers) on Velocity Vertical Cable Managers extend past the front or rear of the rack?

A. Velocity Vertical Cable Managers extend no more than 7.4" (188 mm) past the front or rear of the rack channel they are attached to when the door is shut assuming the rack channel is 3" deep (76 mm). When the door is removed, the T-shaped cable guides (fingers) extend approximately 6.5" (165 mm) past the front or rear of the rack channel assuming the rack channel is 3" deep (76 mm).

# Q. Can the Velocity Horizontal Cable Manager be used in CPI Cabinets? If so, what is the required equipment mounting rail setback?

A. Yes, the Velocity Horizontal Cable Manager can be used in CPI Cabinets or non-CPI cabinets that have 19" EIA-310-D compliant equipment mounting rails with a Universal Hole Pattern. The Velocity Horizontal Cable Manager is 5.9" deep (150 mm). CPI recommends a minimum 6" deep (152 mm) setback for equipment mounting rails in cabinets so that there is no interference between the cable manager and front door.

# O. Can CPI shelves be added to racks that use the Velocity Vertical Cable Manager? Are there any known interferences between the T-shaped cable guides (fingers) and rack-mount equipment?

A. Yes, CPI shelves can be added to racks that use the Velocity Vertical Cable Manager. The T-shaped cable guides (fingers) on Velocity Cable Managers do not block the rack-mount

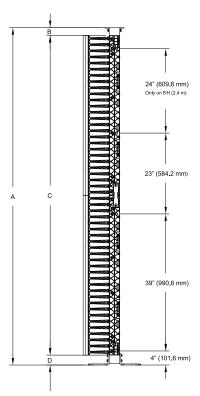


#### **VELOCITY™ CABLE MANAGEMENT**

space at the front of the rack's mounting channels. Shelves and other equipment mounted to the rack that do not project past the 19" wide (482.6 mm) EIA panel spacing will not interfere with the cable management fingers.

#### Q. Will Velocity Vertical Cable Managers attach to non-CPI racks?

A. Yes, if the mounting holes on the sides of the non-CPI rack are located at the correct locations. See the image and dimension table below for details. The hole centers for mounting the managers are listed on the right side of the image. The manager is not the same height as the rack. The difference is shown as dimensions B and D in the dimension table below.



Rack/CM	Height Dimensions					
Model	Α	В	C	D		
-701	72"	1"	70"	1"		
	(1828.8 mm)	(25.4 mm)	(1778 mm)	(25.4 mm)		
-703	84"	0.7"	80.5"	2.8"		
	(2133.6 mm)	(17.78 mm)	(2044.7 mm)	(71.12 mm)		
-715	96"	2.2"	91"	2.8"		
	(2438.4 mm)	(55.88 mm)	(2311.4 mm)	(17.12 mm)		

#### Q. How long does it take to assemble a Velocity Vertical Cable Manager?

A. It takes approximately 3-to-5 minutes to unpack and assemble a Velocity Vertical Cable Manager. The cable manager delivers as four side components, four mid panels and two or four door components. First, two side components are connected with two mid panels forming the top and bottom half of the manager. Next, the top and bottom halves snap together. Then, the doors snap on.

#### Q. What is the cable fill capacity of Velocity Cable Management?

A. Download the CPI Cable Fill Table at www.chatsworth.com/cablefill. You can search the table by part number and change the cable size and fill ratio to estimate loose cable fill for each manager.

# Q. How many patch cords will pass through the 1U openings between the T-shaped cable guides (fingers) on Velocity Vertical Cable Managers?

A. The number of patch cords that will pass through each opening depends on the diameter of the patch cords and their position in the opening. The opening between the T-shaped cable guides (fingers) on the Velocity Vertical Cable Managers has an open area of 5.9 in² (3810 mm²). The opening tapers from .89" high (23 mm) at the rear to 1.25" high (32 mm) at the front and is 5.5" long (140 mm). Estimated cable fill values for several size patch cords are listed in the table below. Note that these are estimates and actual cable fill depends on placement of the cords in the manager.

Outside Diameter of the Patch Cord	.20"	.25"	.30"	.35"
	(5.1 mm)	(6.4 mm)	(7.6 mm)	(8.9 mm)
Estimated Number of Patch Cords	47	30	21	15

#### **VELOCITY™ CABLE MANAGEMENT**

### Q. Is Velocity Vertical Cable Management larger than similar CPI vertical cable managers?

A. Velocity Vertical Cable Management has a larger cross sectional area for storing cable than standard size versions of CPI's GVCS Global Vertical Cabling Section, MCS Master Cabling Section and the front-side of the CCS Combination Cabling Section. Velocity Vertical Cable Management also has a larger cross section than the 6" wide (152 mm) VCS Vertical Cabling Section. The table below compares the interior (usable) depth and cross sectional area of CPI single-sided cabling sections and the front-side of CCS. Velocity is an excellent choice for standard premise cabling applications. The −EFX models and Evolution™ Cable Management are typically used for high-density cabling applications in the data center.

Comparison of Interior Depth and Cross Section Area of Single-Sided CPI Vertical Cable Managers								
CPI Cable Manager	Internal Depth	Internal Cross Section Area by Overall Width						
		3.6" (91 mm)	6" (152 mm)	10" (254 mm)	12" (305 mm)			
CCS*	5.2" (132 mm)	16.6 in <sup>2</sup> (10 710 mm <sup>2</sup> )	29.1 in <sup>2</sup> (18 770 mm <sup>2</sup> )	49.9 in <sup>2</sup> (32 190 mm <sup>2</sup> )	-			
GVCS	5.5" (140 mm)	17.6 in <sup>2</sup> (11 350 mm <sup>2</sup> )	30.8 in <sup>2</sup> (19 870 mm <sup>2</sup> )	-	-			
VCS	6.0" (152 mm)	21.0 in <sup>2</sup> (13 550 mm <sup>2</sup> )	33.6 in <sup>2</sup> (21 680 mm <sup>2</sup> )	-	-			
MCS	6.7" (170 mm)	-	35.2 in <sup>2</sup> (22 710 mm <sup>2</sup> )	62.3 in <sup>2</sup> (40 190 mm <sup>2</sup> )	-			
Velocity	7.5" (191 mm)	18.5 in² (11 940 mm²)	37.0 in <sup>2</sup> (23 870 mm <sup>2</sup> )	67.7 in <sup>2</sup> (43 680 mm <sup>2</sup> )	83.1 in <sup>2</sup> (53 610 mm <sup>2</sup> )			
CCS-EFX*	7.8" (198 mm)	-	42.1 in <sup>2</sup> (27 200 mm <sup>2</sup> )	73.7 in <sup>2</sup> (47 550 mm <sup>2</sup> )	88.9 in <sup>2</sup> (57 350 mm <sup>2</sup> )			
GVCS-EFX	8.0" (203 mm)	24.8 in <sup>2</sup> (16 000 mm <sup>2</sup> )	43.2 in <sup>2</sup> (27 900 mm <sup>2</sup> )	-	-			
MCS-EFX	9.3" (236 mm)	-	46.1 in <sup>2</sup> (29 740 mm <sup>2</sup> )	83.4 in <sup>2</sup> (53 810 mm <sup>2</sup> )	102.0 in² (65 810 mm²)			
Evolution	10.6" (269 mm)	-	49.5 in <sup>2</sup> (31 900 mm <sup>2</sup> )	91.7 in² (59 200 mm²)	112.9 in <sup>2</sup> (72 840 mm <sup>2</sup> )			

Note: CCS and CCS-EFX are double-sided only cable managers. The sizes listed for CCS and CCS-EFX are for the front-facing cable pathway.

### **Q.** Can individual T-shaped cable guides be removed to make a larger opening for cables?

A. No, individual T-shaped cable guides cannot be removed.

# Q. Why is there a different overall depth for each width of the Velocity Vertical Cable Managers? Does the difference in overall depth affect the cable fill capacity?

A. The doors on the Velocity Vertical Cable Manager are beveled. The bevel is slightly different for each width causing a difference in overall depth. However, the depth of the T-shaped cable guides (fingers) and the internal depth used to determine the cross section for calculating the cable fill capacity is the same for single-sided or double-sided managers respectively. So, cable fill capacity is not affected by the slight differences in overall depth.

#### Q. Is Velocity Cable Management made of plastic?

A. The sides of the vertical cable managers are made of plastic and the entire horizontal cable manager is made of plastic.

#### O. Does the plastic used to make Velocity Cable Management made of UL94-HB flame rated material?

A. Yes, the body is made from UL94-HB flame rated material.

#### Q. Is Velocity Cable Management UL Listed?

A. No, Velocity Cable Management is not UL Listed.

#### Q. When opened, does the cover stay in the opened position?

A. Yes, at full swing the cover hinge mechanism has a pawl that holds it in the open position making it easier to dress cables without removing the cover.

#### Q. How far does the cover swing open?

A. The cover on the vertical cable manager opens to 95°. The cover on the horizontal cable manager opens to 90°.

#### Q. Are the covers made from plastic or metal?

A. The covers on the 3.6" wide (91 mm) and 6" wide (152 mm) vertical cable managers are plastic. The covers on the 10" wide (254 mm) and 12" wide (305 mm) vertical cable managers are metal with plastic edges. The covers on the horizontal managers are plastic.



#### **VELOCITY™ CABLE MANAGEMENT**

#### Q. Is there a lock on the cover?

A. No, the cover snaps closed, but there is no mechanical latch or lock on the cover.

### O. Is there a front and rear side on the Velocity Double-Sided Vertical Cable Managers?

A. No, the front and rear of the Velocity Double-Sided Vertical Cable Manager are different sizes. One side is 7.5" deep (191 mm) and the other side is 5.5" deep (140 mm), but the manager can be attached to the rack so that either side faces the front or rear of the rack. On the CPI Cable Fill Table, the deeper side is identified as the front side.

#### Q. Are custom sizes available?

A. The vertical cable managers can be made in different widths, but not in different heights or depths. Widths greater than 8" wide require a metal door. Contact CPI Technical Support for assistance with custom configurations.