COLOCATIONQUOTES

Rack Elevation Template

Printable front and rear rack elevation diagrams for 42U and 48U racks, a row layout page, and the checks to run before you install or move equipment.

How to use this. Print the blank elevation for each rack, or use the free Excel version, which draws the front and rear views from a device list and totals U, weight and power for you. Download it at colocationquotes.com/resources/templates/rack-elevation-template. One rack unit (1U) is 1.75 in (44.45 mm).

What to record for each device

Device name and hostname, asset tag, bottom U and height in U, front or rear mount (or full depth), airflow direction, PDU A and PDU B outlets, measured watts, weight, rail type and notes. For each rack: rack ID and location, height, empty weight, load rating, and each circuit's voltage, breaker and phase.

Ten things to get right

Check	Why it matters
Count from the bottom	Rack units are numbered from U1 at the bottom. Record each device at its lowest U and its height, so a 2U server in U10 and U11 is "U10, 2U."
Draw both faces	Switches, PDUs and cable managers often mount on the rear only. A front-only drawing hides them, and rear-mounted gear gets missed in moves.
Record airflow direction	Network gear can blow back to front. Note it so a switch is not installed backward and exhausting into the cold aisle.
Keep blanking panels and managers	List blanking panels, cable managers and shelves like devices. They go missing in moves, and empty U lets hot air recirculate.
Heavy gear low	Put UPS units, storage and the heaviest servers in the lower U to keep the center of gravity down, especially for racks that roll.
Use real weights and watts	Use spec-sheet or scale weights and measured watts from the PDU. Estimates are how racks end up over the rack or floor rating.
Check one feed can carry the load	With A and B power, the whole rack must fit on one circuit if the other fails. Keep measured load at or below 80% of one circuit's breaker rating.
Map PDU outlets	Write which outlet on PDU A and PDU B each power supply uses. It is the fastest way to find what a tripped breaker took down.
One current version	Update the elevation with every add, move or removal, keep it in one shared place and spot-check it against the rack.
Label to match	Label each device, rail and cable with the rack ID and U position so the rack can be rebuilt exactly after a move.

Rack elevation: 42U Rack ID _____ Location _____ Date _____

U	Front: device	kW	lb	U	Rear: device	PDU	U
42				42			42
41				41			41
40				40			40
39				39			39
38				38			38
37				37			37
36				36			36
35				35			35
34				34			34
33				33			33
32				32			32
31				31			31
30				30			30
29				29			29
28				28			28
27				27			27
26				26			26
25				25			25
24				24			24
23				23			23
22				22			22
21				21			21
20				20			20
19				19			19
18				18			18
17				17			17
16				16			16
15				15			15
14				14			14
13				13			13
12				12			12
11				11			11
10				10			10
9				9			9
8				8			8
7				7			7
6				6			6
5				5			5
4				4			4
3				3			3
2				2			2
1				1			1

U used _____ Total kW _____ Total weight incl. empty rack (lb) _____ Rack rating (lb) _____ Checked by _____

Rack elevation: 48U Rack ID _____ Location _____ Date _____

U	Front: device	kW	lb	U	Rear: device	PDU	U
48				48			48
47				47			47
46				46			46
45				45			45
44				44			44
43				43			43
42				42			42
41				41			41
40				40			40
39				39			39
38				38			38
37				37			37
36				36			36
35				35			35
34				34			34
33				33			33
32				32			32
31				31			31
30				30			30
29				29			29
28				28			28
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12				12			12
11				11			11
10				10			10
9				9			9
8				8			8
7				7			7
6				6			6
5				5			5
4				4			4
3				3			3
2				2			2
1				1			1

U used _____ Total kW _____ Total weight incl. empty rack (lb) _____ Rack rating (lb) _____ Checked by _____

Row layout

One line per rack, in floor order. Use it to balance power and weight across a row and to plan cable runs.

Facility _____ Cage or room _____ Row _____ Hot aisle side _____

#	Rack ID	Height (U)	U used	Measured kW	Circuit kW (one feed)	Total lb	Notes
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Sign-off after install or move

Check	Done	Notes
Every device matches the elevation (U, face, airflow)		
Blanking panels in all empty U		
Every power supply on the PDU outlet recorded		
A and B feeds on separate PDUs and circuits		
Labels on devices, rails and cables		
Elevation updated and saved to the shared copy		

Planning a move or a new cage? Compare colocation quotes or use the data center checklist to evaluate providers.

Installed by, date

Verified by, date