



L277 Series

19"W x 27"D Ganging Rack System



L277 Series Racks

27"D / Adj. Rails / 10RU Top / Rear Door

Racks Include:

- <u>Rear Door:</u> Recessed with vents and lock.
- Mounting Rails: 2-pr, adj. 2-sided w printing (10-32, 12-24, 6mm)
- Flush Closure Panels for 10RU Top: 3RU and 7RU solid.
- <u>Removable Knockout Panels</u>: Above and below rear door.
- <u>Panel Hardware:</u> PilotPoint[™] screws with captive washers.
- <u>Wrinkle Powder Epoxy Finish:</u> Black

Ordering Option: (suffix model number)

 Seismic Certified version. Same as above plus reinforced base, 'X'-style sides and P.E. Certified install manual per UBC, CBC and IBC code compliance. Also certified by OSHPD for healthcare facilities in California and by IBC for Essential Facilities.

Accessories (order separately - see page 3):

- Side Panels: Vented
- Front Doors (surface): Choose solid, plexiglas or perforated.
- Fan Panels: Choose 3RU or 7RU styles.
- <u>Platform Bases</u>: Choose mobile or stationary. Bases will not mount seismic models.
- <u>Cable Raceway:</u> 4"W x 77"H mounts between racks.

See also: panels & accessories, thermal & wire mngmt plus the Power section.

Description

Lowell's UL Listed (Standard 1678) ganging rack frame systems are engineered for efficient installation and reliable support of rack mounted equipment. System approach with itemized list of included features, ordering options and accessories allows you to order and install with confidence. Clean design with beveled edge corners, front and rear, combines with high quality black wrinkle powder epoxy finish for great looks and durability.

Robust Support. L277 Series racks are rated by UL to support up to 3150lbs. They are welded 16-gauge US steel with seamless side-frame construction, a 14-gauge steel bottom, and reinforcement at load-bearing junctures. Equipment mounts to adjustable rails that are recessed to provide 1.75" clearance to the outside of the rack and 2.5" from the rails to the inside of an optional surface front door. Unique, 2-sided rails are installed with the tapped (10-32) side in the primary position and may be field reversed to expose the square punched side for use with cage nuts and 12-24, 6mm or 10-32 screws. Rails are also printed with easy-to-read rack unit increments. Threaded, 10-32 PilotPoint[™] screws/washers with 5.1 hardness are included.

<u>Cable Management.</u> Features include rear vertical arrays of 2" holes and 4" x 1.5" openings front to rear along the bottom for cabling between racks. Top entry is provided by the open access top and a 6" deep rear conduit plane having knockouts for conduit size 2"-1" (3) and 1.5"-1" (2), plus room to use a *Greenlee*style punch to make a 4" conduit opening. Top also features .5" knockouts (6) for BNC style wireless antennas. Rear entry is provided via removable knockout panels above and below the rear door (see detail drawing on page 2). Bottom entry is provided via a full-size opening. Each rack also features abundant cable lacing points and a generous wire management space of nearly 2" between the front rails and the front-to-rear rail supports.

<u>Open-access Top with Flush Closure Panels</u> is 10RU with integral E.I.A. rackrail for 19"W cooling and panel accessories (solid panels are included).

<u>Open-access Bottom</u> features a 14-gauge frame with a full-size opening to facilitate floor entry of cable. Base frame includes T-nuts for optional leg levelers, holes for optional anchor bolts (by others) and a grounding lug in the rear left corner. The bottom will accept an optional stationary or mobile platform base if desired. *Bases will not mount seismic (-S) versions.*

<u>Ventilation</u> is achieved through vents in the rear door and vents above and below the front door. Solid top panels (included) may be changed to vented (order separately).

<u>Seismic P.E. Certified Versions (-S)</u> are available with welded brackets in each corner of the base, holes for anchors (by others), new 'X'-style side frame and most importantly P.E. Certified installation documents. <u>Note: there are three different sets of P.E.</u> <u>Certified documents; please specify the code to which your rack</u> <u>must comply when ordering:</u>

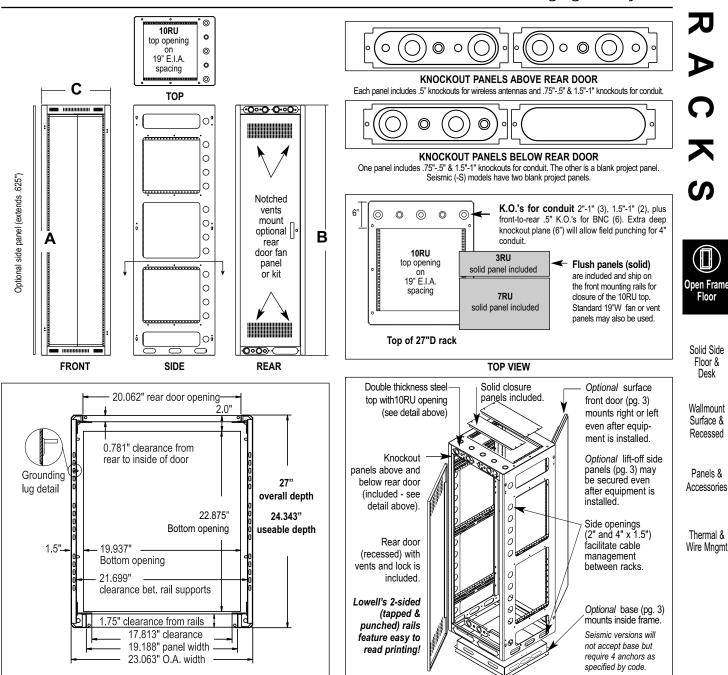
- * IBC/UBC/CBC Anchorage to meet life safety requirements in seismic zones 1, 2, 3, 4A, 4B, and 4C.
- * **IBC Anchorage and Structure for Essential Facilities** (Ip= 1.5) to ensure the survival and operability of critical equipment following a seismic event.
- * OSHPD for fixed equipment anchorage in healthcare facilities in California.

For additional information request seismic technical summary #1AT-100.

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REAR ASSEMBLY VIEW



BOTTOM FOOTPRINT & RACK CROSS-SECTION (see tech sheet #1AT-100 for seismic -S base detail)

19"W Rack Model L277-42* L277-61* L277-70* L277-77* "**^**' 42.125 Panel Space 61.375 70.125' 77.125' Rack Units (1.75") 24RU 35RU 40RU 44RU **Overall Height***** "B" 48.125' 67.375" 76.125' 83.125' "C" **Overall Width** 23.062 23.062' 23.062 23.062 **Overall Depth** 27" 27" 27" 27' Usable Depth** 24.343' 24.343' 24.343' 24.343' 2 Pair adjustable Mounting Rails (tapped & punched**** 2 Pair adjustable 2 Pair adjustable 2 Pair adjustable Panel Hardware (PilotPoint™) Screws & washers (25qty) Screws & washers (50qty) Screws & washers (50qty) Screws & washers (50qty) Recessed Rear Door (vented) included included included included Top Closure Panels (solid) 3RU & 7RU included included included included

* Order options: Suffix rack Model: -S for Seismic.

****2-sided printed rails are tapped for 10-32 screws and may be field reversed to expose the square punched side for 12-24, 6mm, 10-32 screws with cage nuts.

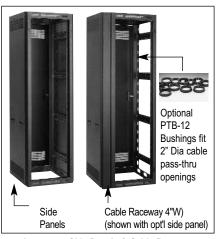
Ganging Racks

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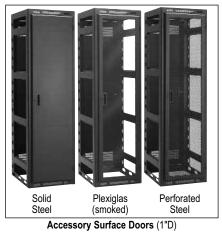


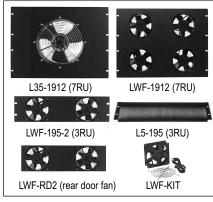
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Accessory Side Panels & Cable Raceway







Accessory Laminate Top

Rackware® System Accessories - Order separately

<u>Side Panels.</u> Beveled edge panels feature lift-off convenience with pocket grips and unique guide-post/keyhole mounts. <u>Panels may also be secured with screws (provided)</u> <u>before or after equipment is installed</u> at the easily accessible anchor points in the front and rear of the frame. Each panel (sold in pairs) extends .625" from the frame and is 18-gauge steel finished in wrinkle powder epoxy. Side panels include vents top and bottom.

<u>Cable Raceway and Cable Bushings.</u> Raceway extension mounts 77" (44RU) racks to provide a 4"W space for wire or AC management between racks or on the side of a rack with side panel closure. Three pieces plus hardware. PTB-12 2" bushings also available.

Surface Front Doors. All racks include pre-threaded hinge inserts to mount a door on the right or left even after equipment is in place. Beveled edge doors provide 180° open-swing access, extend 1" from the rack frame and provide .75" of space from the frame on the inside to accommodate equipment with protruding knobs/handles. *Note: the front rails are recessed 1.75" from the front frame providing a full 2.5" clearance from the rail to the inside of the closed door.* Surface front doors are keyed differently than the rear door. See also dual door Series L46 frame that accepts two doors (separate spec sheet).

- Solid Door. Series L2150 is precision-formed from a single sheet of 16-gauge steel.
- Plexiglas Door. Series L2150-P is a smoked 3/16" thick Plexiglas panel mounted within a 16-gauge steel frame for installations that desire security and visibility.
- Perforated Door. Series L2150-PF is a fully perforated door formed from a single sheet of 16-gauge perforated steel providing ventilation, visibility and locking security.
 Cooling and Vent Panels for 10RU Top Opening (solid panels ship with rack).
- Fan Panels. Flush mounting models L35-1912 and LWF-1912 are 7RU with one 10" 550 cfm fan and four 4.7" 50 cfm whisper fans respectively. Models LWF-195-2 and LWF-195-3 are 3RU with two or three 4.7" 50 cfm whisper fans.
- Perforated Vent Panels. Series L5 mounts flush. Choose 1RU 10RU sizes. Cooling Fans for Rear Door.
- Fan Panel. Model LWF-RD2 with two 4.7" 50 cfm whisper fans mounts to notches in the top and bottom of the rear door. Single fan unit LWF-KIT may also be used.

Platform Bases for NON-SEISMIC Racks (center wire opening size 11" x 12.96").

- **Mobile Base.** Model MB227 mounts inside rack frame, flush to bottom rack space to support heavy equipment. 3" swivel casters raise rack height by only 1.25".
- Stationary Base. Models mount inside rack frame. Model PB227 is flush to bottom rack space; PBS227 is 2.25" below the bottom rack space. No height increase.

Laminate Top. 24.687"W x 29.062"D x 1"H with rubber edge installs into top rails. Graphite color.

ACCESSORY SELECTION AND ORDER GUIDE FOR L277 SERIES RACKS

ACCESSORY SELECTION AND ORDER GUIDE FOR L2/7 SERIES RACKS				
Accessories Mount Rack Model:	L277-42	L277-61	L277-70	L277-77
Side Panels (pair)	L277-42SP	L277-61SP	L277-70SP	L277-77SP
4"W Cable Raceway (77"H, 44RU only)				L277-77CR
Cable Bushings (set of 12) fits rear 2" openings	PTB-12	PTB-12	PTB-12	PTB-12
Surface Front Doors (1"D)				
Solid steel	L2150-42	L2150-61	L2150-70	L2150-77
Plexiglas with steel Frame	L2150-42P	L2150-61P	L2150-70P	L2150-77P
Perforated steel	L2150-42PF	L2150-61PF	L2150-70PF	L2150-77PF
Fans and Panels for 10RU Top Opening				
7RU Fan Panel (10" fan)	L35-1912	L35-1912	L35-1912	L35-1912
7RU Fan Panel (four 4.7" fans)	LWF-1912	LWF-1912	LWF-1912	LWF-1912
3RU Fan Panels (two or three 4.7" fans***)	LWF-195***	LWF-195***	LWF-195***	LWF-195***
3RU Perforated Panel	L5-195	L5-195	L5-195	L5-195
Fan for Rear Door				
Panel (two 4.7" fans)	LWF-RD2	LWF-RD2	LWF-RD2	LWF-RD2
Kit (one 4.7" fan)	LWF-KIT	LWF-KIT	LWF-KIT	LWF-KIT
Platform Bases or Levelers				
Mobile Base w 3" Casters (adds only 1.25"H)	MB227	MB227	MB227	MB227
Stationary Base	PB227	PB227	PB227	PB227
Stationary Base Shallow	PBS227	PBS227	PBS227	PBS227
Levelers (2 pair heavy duty)	L195	L195	L195	L195
Extra Mounting Rails (2 pair supplied)	L212-42	L212-61	L212-70	L212-77
Laminate Top (1"H) Graphite	GT227	GT227	-	-
Extra Panel Mounting Hardware PilotPoint [™] 10-32	RSP-500 (500 qty jar), RSP-100 (100 qty bag), RSP50 (50qty bag)			
***Suffix model with quantity of fans: LWF-195-2 has two 4.7" whisper fans: LWF-195-3 has three.				

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A & E Specifications

Ganging rack frame(s) shall be Lowell Model

(L277-42, L277-61, L277-70, L277-77) Rack frame(s) shall measure 23.062"W x 27"D x _____"H with ____RU panel space for mounting 19"W E.I.A. standard components. Rack(s) shall include a vented rear door, solid top closure panels and two pair of adjustable and reversible mounting rails tapped 10-32 on one side and square punched on the other.

Each welded assembly shall be UL Listed under Standard 1678 and be of 16-gauge US Certified steel with seamless side-frame construction and a 14-gauge steel bottom with reinforcement at all load-bearing junctures. Rack frame shall include compound knockouts on the top for conduit size 2"-1" and 1.5"-1", .5" knockouts for BNC wireless antennas, and a 10RU top opening with integral E.I.A. rackrail to accept 19" wide fan or panel accessories (solid closure panels included). Bottom shall include a grounding lug and provisions for optional leg levelers (order separately), optional anchors (by others), or optional platform base (order separately). Frame shall be equipped with 2" diameter cable passage holes located top to bottom along the rear side for wire management between racks. Additionally, there shall be 4" x 1.5" obround openings front to rear along the bottom of the rack to manage cable bundles between racks. Rear frame shall include removable knockout panels for passage of large cable bundles above and below the rear door. Knockout panels shall be equipped with .5" knockouts for wireless microphone antennas and include compound knockouts for conduit size .75"-.5" and 1.5"-1". Front frame shall include vents above and below the door opening. Finish shall be wrinkle powder epoxy in black.

Ordering options:

<u>Suffix -S</u> (seismic) P.E. Certified version shall have welded brackets in each corner of the base, holes for anchors (by others), 'X'-style side frame and P.E. Certified installation documents. Note: there are three different sets of P.E. Certified documents; please specify the code to which the rack must comply_____[IBC/UBC/CBC Anchorage, IBC Anchorage and Structure for Essential Facilities (Ip= 1.5), OSHPD]. For additional information, request seismic technical summary #1AT-100.

Optional rack system accessories shall include a pair of vented side panels Model _____, surface front door Model _____, fan panel Model _____, cable raceway model _____, platform base Model _____ or leg leveler set Model L195, laminate top Model _____. Additionally, the rack shall include the following panel and accessory Models ____, thermal and wire management Models ____, AC power distribution Models ____.

Lowell racks and cabinets are manufactured in the USA using Certified US steel. For quality assurance, they are precision formed and finished to the same exacting standards to provide trouble-free installation and professional appearance.



Remember to specify Lowell Rackware® accessories to meet your project requirements.



See also Lowell's complete section of AC power products including rackmount panels, strips, controllers, sequencers, filters and surge suppressors.

