

RACK ANGLES OVERVIEW



All Rack Angles have two mounting surfaces that serve as mounts for both rack equipment and rack accessories. Rack Angles are furnished in pairs and are available with tapped holes that directly accommodate 10-32 screws or square holes for use with cage nuts and M5, M6 or 10-32 screws. Rack Angles comply with ANSI/EIA RS-310-D rack mounting standards.

Rack Angles can be mounted directly to the enclosure frame or on grid system straps at almost any depth location. Rack Angles are plated. All mounting hardware to install Rack Angles is included. Order cage nuts for square hole Rack Angles separately.)

- The standard rack angle position is 44 mm behind the door opening. Rack Angles can be moved forward if desired. Deeper positions require the use of grid straps. 1200-mm and 1600-mm frames require center uprights to mount Rack Angles in right bay
- For joining cabinets with Rack Angles in the full forward position, use Joining Kit PJ2FF.
- Shelves, drawer, guides and pull-out shelves require two sets of Rack Angles or frame accessory brackets installed in the frame.

Static Load Notes

It is important to comply with manufacturers' recommendations for rack mounting support.

Follow mounting directions for individual equipment.

Max. 20 lb. (9.1 kg) per rack unit for equipment under 20-in. (508-

Equipment over 20-in. (508-mm) deep or over 20 lb. (9.1 kg) per rack unit requires rear support.

19-INCH RACK ANGLES



APPLICATION

19-in. Rack Angles can easily be mounted in a modular enclosure. Furnished in pairs, Rack Angles have two mounting surfaces (left and right) that serve as mounts for both rack equipment and rack accessories. Rack Angles can be attached to the frame in the front and/or the back. Adjustable Rack-Mounting Rails can be used to position Rack Angles anywhere within the modular enclosure frame.

FEATURES

- Comply with ANSI/EI A RS-310-D rack mounting standards
- Can be mounted directly to the enclosure frame or to a Grid Strap Network (Rail System) at almost any depth location
- Furnished in pairs and are available with tapped holes that directly accommodate 10-32 screws or square holes for use with cage nuts and M5, M6 or 10-32 screws

SPECIFICATIONS

- Tapped Rack Angles are 12 gauge (2.5mm) steel with 10-32 tapped holes
- Square-Hole Rack Angles are 14 gauge (1.75 mm) steel designed to accept metric or English cage nuts
- Attach directly into a 600-mm wide enclosure frame
- To mount in 800-mm wide frames, use frame reducing brackets (not included)
- 1200-mm frames require center uprights (not included) to mount in right or left section; 1600-mm frames require both center uprights and two sets of frame reducing brackets
- Optional rack mounted shelves, drawers, guides and pull-out shelves require two sets of Rack Angles or frame accessory brackets installed in the frame
- All mounting hardware to install Rack Angles is included (Hardware to attach items to the Rack Angles are either included with the item or purchased separately if necessary)

FINISH

Plated

LOAD RATING

- 20 lbs. (9.1 kg) per rack unit for equipment under 20 in. (508 mm)
- Equipment over 20 in. (508 mm) deep or over 20 lb. (9.1 kg) per rack unit requires rear support

ACCESSORIES

- Frame-Reducing Brackets
- Center Upright
- Rack Panels
- Pull-out Shelf
- Fixed Shelf Rack Angle Mounted Drawer
- Writing Surface
- Adjustable Rack-Mounting Rails
- Frame Accessory Bracket
- Guides
- Slides
- Filler Panel for Rack Angles
- Rack Angle Adapter Bracket
- Screw Package
- Cage Nut Package

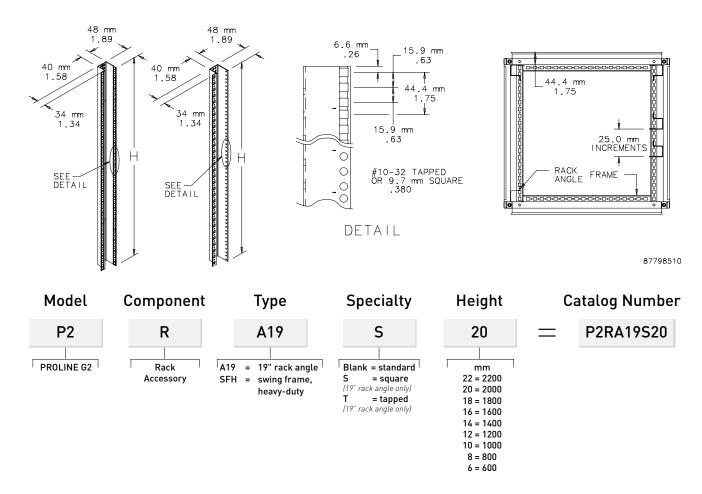
BULLETIN: P40

Standard Product

Catalog Number	Hole Type	H (mm)	H (in.)	Fits Frame Height	Rack Units
P2RA19S6	SQUARE	490	19.3	600	11
P2RA19T6	TAPPED	490	19.3	600	11
P2RA19S8	SQUARE	667	26.3	800	15
P2RA19T8	TAPPED	667	26.3	800	15
P2RA19S10	SQUARE	890	35.0	1000	20
P2RA19T10	TAPPED	890	35.0	1000	20
P2RA19S12	SQUARE	1067	42.0	1200	24
P2RA19T12	TAPPED	1067	42.0	1200	24
P2RA19S14	SQUARE	1290	50.8	1400	29
P2RA19T14	TAPPED	1290	50.8	1400	29
P2RA19S16	SQUARE	1467	57.8	1600	33
P2RA19T16	TAPPED	1467	57.8	1600	33
P2RA19S18	SQUARE	1690	66.5	1800	38
P2RA19T18	TAPPED	1690	66.5	1800	38
P2RA19S20	SQUARE	1867	73.5	2000	42
P2RA19T20	TAPPED	1867	73.5	2000	42
P2RA19S22	SQUARE	2090	82.3	2200	47
P2RA19T22	TAPPED	2090	82.3	2200	47

Frame height dimensions are nominal mm





FRAME-REDUCING BRACKETS



APPLICATION

- Frame-Reducing Brackets are used to reduce wider frames to 600mm, allowing 19-in. rack angles to fit.
- Brackets can also be used to left- or right- justify the rackmounted equipment

SPECIFICATIONS

- Furnished in sets of four
- 14 gauge (1.75 mm) steel
- Mounting hardware is included

FINISH

Plated

BULLETIN: P40

Standard Product

Catalog Number	D (mm)	D (in.)	Converts Frame Width (mm)
P2AFRB50	50	2.0	
P2AFRB100	100	3.9	From 800 to 600
P2AFRB200	200	7.9	From 1000 to 600 From 1000 to 800



ADJUSTABLE RACK-MOUNTING RAILS



APPLICATION

PROLINE G2 Adjustable Rack-Mounting Rails allow 19-in. Rack Angles to be positioned anywhere within the modular enclosure frame.

SPECIFICATIONS

- Includes two right-hand and two left-hand mounting rails
- 12 gauge (2.5 mm) steel
- Mounting hardware is included

FINISH

Plated

BULLETIN: P40

FRAME ACCESSORY BRACKETS



APPLICATION

Frame Accessory Brackets mount directly to the PROLINE G2 frame and are used in place of rack angles to mount rack accessories such as shelves and pull-out shelves.

SPECIFICATIONS

- Furnished in sets of four
- 14 gauge (1.75 mm) steel
- Mounting hardware is included

FINISH

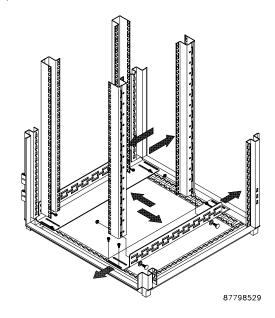
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BULLETIN: P40

Standard Product

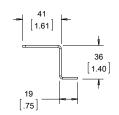
Catalog Number	Fits Frame Depth	Fits Frame Width
P2GARA4	400	
P2GARA5	500	400
P2GARA6	600	
P2GARA7		600
P2GARA8	800	
P2GARA9		800
P2GARA10	1000	

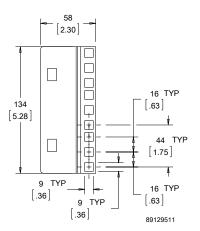
Frame Depth and Width dimensions are nominal mm.



Standard Product

Catalog Number	Description
P2AFB19	Frame Accessory Bracket, 19in.







RACK PANELS



Rack Panels are available in aluminum and painted steel. Aluminum Rack Panels are .125-in.-thick 5052-H32 alloy. Steel Rack Panels are 12 gauge steel and finished in RAL 7035 textured light-gray polyester powder paint. All panels are flat with oblong holes positioned at EIA standard spacing. Mounting hardware is sold separately.

BULLETIN: P20

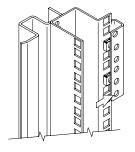
Catalog Number	Material	Rack Angle Size	Rack Units
P19RP1UA	Aluminum	19 in.	1
P19RP1UP	Steel		1
		19 in.	
P19RP2UA	Aluminum	19 in.	2
P19RP2UP	Steel	19 in.	2
P19RP3UA	Aluminum	19 in.	3
P19RP3UP	Steel	19 in.	3
P19RP4UA	Aluminum	19 in.	4
P19RP4UP	Steel	19 in.	4
P19RP5UA	Aluminum	19 in.	5
P19RP5UP	Steel	19 in.	5
P19RP6UP	Steel	19 in.	6
P19RP6UA	Aluminum	19 in.	6
P19RP7UA	Aluminum	19 in.	7
P19RP7UP	Steel	19 in.	7
P19RP8UP	Steel	19 in.	8
P19RP8UA	Aluminum	19 in.	8
P19RP9UA	Aluminum	19 in.	9
P19RP9UP	Steel	19 in.	9
P19RP10UA	Aluminum	19 in.	10
P19RP10UP	Steel	19 in.	10
P19RP11UA	Aluminum	19 in.	11
P19RP11UP	Steel	19 in.	11
P19RP12UA	Aluminum	19 in.	12
P19RP12UP	Steel	19 in.	12
P19RP16UA	Aluminum	19 in.	16
P19RP16UP	Steel	19 in.	16
P23RP1UA	Aluminum	23 in.	1
P23RP1UP	Steel	23 in.	1
P23RP2UP	Steel	23 in.	2
P23RP3UA	Aluminum	23 in.	3
P23RP3UP	Steel	23 in.	3
P23RP4UA	Aluminum	23 in.	4
P23RP4UP	Steel	23 in.	4
P24RP2UA	Aluminum	24 in.	2
P24RP2UP	Steel	24 in.	2
P24RP3UP	Steel	24 in.	3
P24RP4UA	Aluminum	24 in.	4
P24RP4UP	Steel	24 in.	4
P24RP5UA	Aluminum	24 in.	5
P24RP5UP	Steel	24 in.	5
P24RP6UP	Steel	24 in.	6
P24RP8UA	Aluminum	24 in.	8
P23RP2UA	Aluminum	23 in.	2
P24RP8UP	Steel	24 in.	8
P24RP3UA	Aluminum	24 in.	3
F Z4NF JUA	Atummum	44 III.	J

RACK ANGLE ADAPTER BRACKET

Rack Angle Adapter Brackets mount to PROLINE Rack Angles. They bring out the rear leg mounting surface to allow traditional Rack Mount Slides (A16SL2U, sold separately) to be used. Fits 19-, 23- and 24-in. tapped or through-hole PROLINE Rack Angles. Rack Angle Adapter Brackets come in a quantity of four and are 14 gauge steel. They have a plated finish.

BULLETIN: P20

Catalog Number	Gauge	Use With
PBRAA	14	Rack-Mount Slides A16SL2U



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CENTER UPRIGHT



APPLICATION

Center Uprights are vertical channels that attach to the frame (top and bottom). They are frequently used in wider frame to facilitate the installation of 19-in. rack accessories.

FEATURES

- The vertical hole pattern matches the vertical hole pattern in the
- Sold individually and include mounting hardware

SPECIFICATIONS

- Can be used in 800-, 1000-, 1200- and 1600-mm wide frames to facilitate the installation of accessories for 600-mm wide frames and 19-in. rack accessories

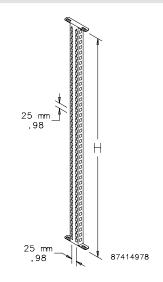
 12 gauge (2.5 mm), mild steel

FINISH

- Polyester powder paint; RAL 7035 textured light gray standard
- Custom colors available

BULLETIN: P40 Standard Product

Catalog Number	H (mm)	H (in.)	Fits Frame Height
P2ACU6	544	21.4	600
P2ACU8	744	29.3	800
P2ACU10	944	37.2	1000
P2ACU12	1144	45.0	1200
P2ACU14	1344	52.9	1400
P2ACU16	1544	60.8	1600
P2ACU18	1744	68.7	1800
P2ACU20	1944	76.5	2000
P2ACU22	2144	84.4	2200

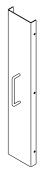


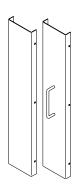
FILLER PANEL KIT

Used when mounting the PROLINE G2 Heavy-Duty Swing-Out Rack Frames in 800-mm wide frames. The Filler Panel occupies the extra space between the frame and the swing frame. Includes a handle and all the hardware for mounting to the Swing-Out Rack Frame.

BULLETIN: P20

	Swing		
	Frame	Enclosure	
Catalog Number	Height	Width	Mounting
PFPK77LR	700	700	Left or Right
PFPK78LR	700	800	Left or Right
PFPK78C	700	800	Center
PFPK147LR	1400	700	Left or Right
PFPK148C	1400	800	Center
PFPK167LR	1600	700	Left or Right
PFPK168LR	1600	800	Left or Right
PFPK168C	1600	800	Center
PFPK187LR	1800	700	Left or Right
PFPK188LR	1800	800	Left or Right
PFPK188C	1800	800	Center
PFPK208LR	2000	800	Left or Right
PFPK208C	2000	800	Center
PFPK227LR	2200	700	Left or Right
PFPK228LR	2200	800	Left or Right
PFPK228C	2200	800	Center





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SCREW PACKAGE

20 plated screws are included in each package. Screws attach rack panels to rack mounting angles. Available in #10-32, #12-24, M5 and M6.

BULLETIN: A80, DACCY, X20

CAGE NUT PACKAGE

20 plated cage nuts are included in each package. Available in #10-32, #12-24, M5 and M6, these cage nuts fit all PROLINE rack angles with square holes.

BULLETIN: DACCY

Catalog Number	Description	Pkg. Qty.	
AS1032	10-32 x .75	20	
ES1224	12-24 x .5	20	
ASM5	Metric M5 x 20	20	
ASM6	Metric M6 x 16	20	
ASM6250	Metric M6 x 16	250	

Catalog Number	Description	Pkg. Qty.	
P1032CN	10-32 thread	20	
P1224CN	12-24 thread	20	
PM5CN	Metric M5 thread	20	
PM6CN	Metric M6 thread	20	