

3" NEMA VE 1 Loading Depth 4" Side Rail Height

Straight Section Part Numbering

Example: ^{Prefix} **24 A 09 - 24 - 144**

Series

● 24

● H24

● 34

Material

● A = Aluminum

*Type

Ladder-

- 06 = 6" rung spacing
- 09 = 9" rung spacing
- 12 = 12" rung spacing

Trough-

6" thru 36" wide

- VT = Ventilated Trough
- ST = Non-Ventilated Trough

*Width

- 06 = 6"
- 09 = 9"
- 12 = 12"
- 18 = 18"
- 24 = 24"
- 30 = 30"
- 36 = 36"

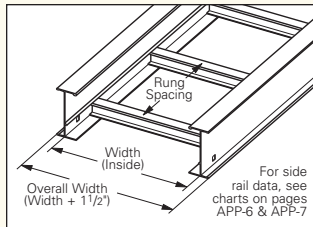
Length

- ① 144 = 12 ft. 24
- ② 120 = 10 ft. H24
- ① 240 = 20 ft. 34
- ② 144 = 12 ft.

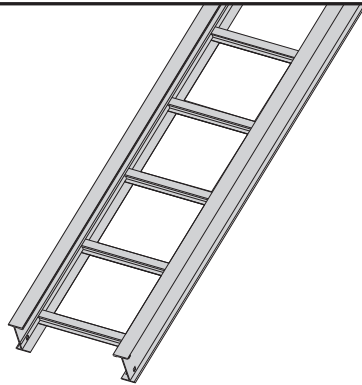
① Primary Length.

② Secondary Length.

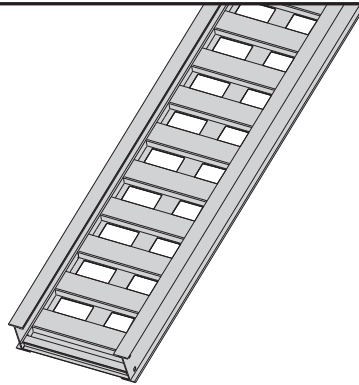
See page C-23 for explanation of lengths.



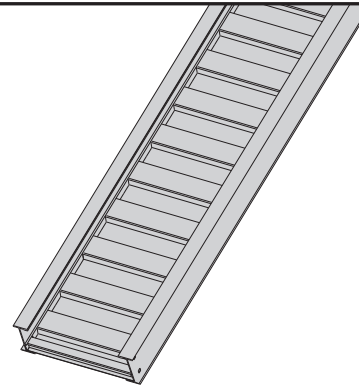
See page APP-1 for additional rung options. *Special sizes available.



Ladder Type
(Specify Rung Spacing)



Ventilated Trough



Non-Ventilated Trough

● Green = Fastest shipped items ● Black = Normal lead-time items ● Red = Normally long lead-time items

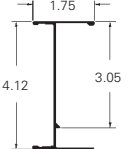
All dimensions in parentheses are millimeters unless otherwise specified.

Series 2, 3, 4, & 5 Aluminum - Straight Sections

3" NEMA VE 1 Loading Depth 4" Side Rail Height

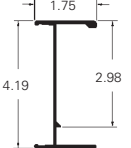
Values are based on simple beam tests per NEMA VE 1 on 36" wide cable tray with rungs spaced on 12" centers. Cable trays will support without collapse a 200 lb. (90.7 kg) concentrated load over and above published loads. Published load safety factor is 1.5. To convert 1.5 safety factor to 2.0, multiply the published load by 0.75. To obtain mid-span deflection, multiply a load by the deflection multiplier. Cable tray must be supported on spans shorter than or equal to the length of the cable tray being installed.

Individual rungs will support without collapse a 200 lb. (90.7 kg) concentrated load applied at the mid-span of the rung, over and above the NEMA rated cable load with a 1.5 safety factor for highlighted NEMA spans and loads.

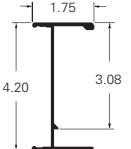
B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
24		NEMA: 16A, 12C CSA: 277 kg/m 3.0m D-3m UL Cross-Sectional Area: 1.00 in ²	6	487*	0.001	Area = 1.05 in ² Sx = 1.34 in ³ Ix = 2.85 in ⁴	1.8	725*	0.017	Area = 6.77 cm ² Sx = 21.96 cm ³ Ix = 118.63 cm ⁴
			8	284	0.003		2.4	422	0.055	
			10	181	0.008		3.0	270	0.136	
			12	126	0.016		3.7	187	0.279	
			14	93	0.030		4.3	138	0.618	
			16	71	0.052		4.9	105	0.883	

When trays are used in continuous spans, the deflection of the tray is reduced by as much as 50%. Design factors: Ix = Moment of Inertia, Sx = Section Modulus.

* When using 18" rung spacing, load capacity is limited to 394 lbs/ft (586.27 kg/m) for 30" tray width and 325 lbs/ft (483.6 kg/m) for 36" tray width.

B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
H24		NEMA: 20A CSA: 84 kg/m 6.1m D-6m UL Cross-Sectional Area: 1.00 in ²	10	225	0.006	Area = 1.32 in ² Sx = 1.57 in ³ Ix = 3.69 in ⁴	3.0	330	0.106	Area = 8.52 cm ² Sx = 25.73 cm ³ Ix = 153.59 cm ⁴
			12	156	0.013		3.7	226	0.222	
			14	115	0.023		4.3	171	0.400	
			16	88	0.040		4.9	129	0.693	
			18	70	0.064		5.5	103	1.093	
			20	56	0.098		6.1	83	1.682	

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B-Line Series	Side Rail Dimensions	NEMA, CSA & UL Classifications	Span ft	Load lbs/ft	Deflection Multiplier	Design Factors for Two Rails	Span meters	Load kg/m	Deflection Multiplier	Design Factors for Two Rails
34		NEMA: 20B, 16C CSA: 112 kg/m 6.0m E-6m UL Cross-Sectional Area: 1.50 in ²	10	320	0.005	Area = 1.82 in ² Sx = 2.10 in ³ Ix = 4.98 in ⁴	3.0	476	0.077	Area = 11.74 cm ² Sx = 34.41 cm ³ Ix = 207.28 cm ⁴
			12	222	0.009		3.7	331	0.160	
			14	163	0.017		4.3	243	0.296	
			16	125	0.030		4.9	186	0.505	
			18	99	0.047		5.5	147	0.810	
			20	80	0.072		6.1	119	1.234	

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