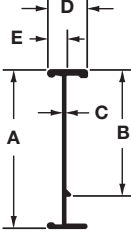
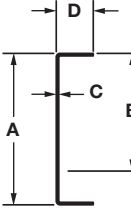
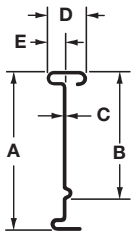


Reference Material - Side Rails

Cable Tray Side Rails

Design Data For One Rail

Aluminum Side Rails  A - Side Rail Height B - Loading Depth C - Web Thickness D - Flange Width	B-Line Series	Side Rail Height	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Sx (in. ³)	Ix (in. ⁴)	Area (in. ²)	Weight (lbs./ft.)
	24	4	4.12	3.05	.060	1.75	.740	.67	1.43	.525	.62
	M24	4	4.18	3.09	.080	1.75	.760	.84	1.93	.750	.83
	34	4	4.20	3.08	.100	1.75	.750	1.05	2.49	.902	1.06
	25	5	5.00	3.93	.068	1.75	.748	.90	2.31	.620	.72
	35	5	5.06	3.96	.090	1.75	.745	1.18	3.19	.857	.98
	26	6	6.12	5.04	.065	2.00	.745	1.26	3.95	.698	.82
	36	6	6.17	5.06	.075	2.00	.725	1.68	5.42	.903	1.05
	46	6	6.19	5.08	.085	2.00	.650	1.79	6.09	.989	1.17
	M46	6	6.20	5.09	.100	2.00	.750	1.89	6.36	1.116	1.30
	H46	6	6.24	5.09	.130	2.00	.750	2.67	8.65	1.473	1.74
	37	7	7.14	6.05	.075	2.00	.750	1.88	6.75	.904	1.06
	47	7	7.24	6.13	.100	2.00	.675	2.47	8.94	1.189	1.40
	H47	7	7.24	6.09	.125	2.00	.675	3.05	11.46	1.520	1.77
	57	7	7.40	6.23	.160	2.00	.875	3.86	16.43	2.114	2.46
S8A	8	8.00	6.17	.170	3.00	1.000	7.69	27.67	2.754	3.20	

Steel Side Rails  Series One Rail Only  All Other Steel Rails A - Side Rail Height B - Loading Depth C - Web Thickness D - Flange Width	B-Line Series	Side Rail Height	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	Sx (in. ³)	Ix (in. ⁴)	Area (in. ²)	Weight (lbs./ft.)
	148	4	3.625	3.125	.048	.875	--	.25	.45	.251	.84
	156	5	4.188	3.688	.060	.875	--	.36	.76	.340	1.16
	166	6	5.188	4.688	.060	.750	--	.46	1.20	.385	1.31
	176	7	6.188	5.688	.060	.750	--	.64	1.90	.444	1.52
	248	4	4.188	3.14	.048	1.000	.392	.32	.72	.313	1.17
	346	4	4.188	3.13	.060	1.500	.655	.48	1.11	.449	1.64
	444	4	4.188	3.11	.075	1.500	.670	.64	1.47	.561	2.02
	258	5	5.188	4.14	.048	1.000	.392	.45	1.22	.361	1.34
	356	5	5.188	4.13	.060	1.500	.655	.66	1.86	.509	1.86
	454	5	5.188	4.11	.075	1.500	.670	.87	2.48	.636	2.29
	268	6	6.188	5.14	.048	1.000	.392	.59	1.90	.409	1.52
	368	6	6.188	5.13	.048	1.500	.643	.71	2.39	.457	1.70
	366	6	6.188	5.14	.060	1.500	.655	.85	2.87	.569	2.08
	464	6	6.188	5.11	.075	1.500	.670	1.14	3.83	.711	2.56
	378	7	7.188	6.14	.048	1.500	.643	.89	3.45	.505	1.88
	476	7	7.188	6.13	.060	1.500	.655	1.07	4.15	.629	2.30
	574	7	7.188	6.11	.075	1.500	.670	1.43	5.55	.792	2.83

Design Factors: Ix = Moment of Inertia, Sx = Section Modulus

Cable Tray Bottom Members

Ladder Type Rungs

Rung Type	Design Factors	Material Type	Single Rung Uniform Load Capacity (in Lbs.) with safety factor of 1.5						
			Tray Width						
			6	9	12	18	24	30	36
	$I_x = .0361 \text{ in.}^4$ $S_x = .0707 \text{ in.}^3$	Aluminum				766	575		
	$I_x = .0432 \text{ in.}^4$ $S_x = .0877 \text{ in.}^3$	Aluminum						594	495
	$I_x = .0249 \text{ in.}^4$ $S_x = .0528 \text{ in.}^3$	Steel	2912	1941	1456	971	728		
	$I_x = .0312 \text{ in.}^4$ $S_x = .0661 \text{ in.}^3$	Steel						749	624
	$I_x = .0450 \text{ in.}^4$ $S_x = .0787 \text{ in.}^3$	Aluminum Strut Rung	3328	2219	1664	1109	832	666	555
	$I_x = .0445 \text{ in.}^4$ $S_x = .0782 \text{ in.}^3$	Steel Strut Rung	5172	3448	2586	1724	1293	1034	862
	$I_x = .0130 \text{ in.}^4$ $S_x = .0344 \text{ in.}^3$	Redi-Rail	1480	987	740	493	370	296	224
	$I_x = .0039 \text{ in.}^4$ $S_x = .0134 \text{ in.}^3$	Steel Series 1	981	654	491	327	245		
	$I_x = .0047 \text{ in.}^4$ $S_x = .0164 \text{ in.}^3$	Steel Series 1						230	192
	$I_x = .0353 \text{ in.}^4$ $S_x = .0708 \text{ in.}^3$	Aluminum Marine Rung	2996	1997	1498	999	749	599	499
	$I_x = .0347 \text{ in.}^4$ $S_x = .0685 \text{ in.}^3$	Steel Marine Rung	4530	3020	2265	1510	1133	906	755

Corrugated Bottoms (Ventilated and Solid)

Bottom Type	Design Factors	Material Type	Single Rung Load Capacity (in Lbs.) with safety factor of 1.5						
			Tray Width						
			6	9	12	18	24	30	36
	$I_x = .0455 \text{ in.}^4$ $S_x = .0898 \text{ in.}^3$	Aluminum	3141	2029	1491	970	726	660	594
	$I_x = .0348 \text{ in.}^4$ $S_x = .0667 \text{ in.}^3$	Steel	2973	1946	1445	955	711	650	590
	$I_x = .0185 \text{ in.}^4$ $S_x = .0503 \text{ in.}^3$	Series 148 Steel	2645	1763	1323	881	661		