

Cable Tray Selection - Strength

Cable Data

The cable load is simply the total weight of all the cables to be placed in the tray. This load should be expressed in lbs/ft.

The data on this page provides average weights for common cable sizes.

Multiconductor Cable Type TC, 600V with XHHW Conductors, Copper

Size	3 conductors with ground			4 conductors with ground		
	Diameter in.	Area in. ²	Weight lbs/ft	Diameter in.	Area in. ²	Weight lbs/ft
8	0.66	0.34	0.33	0.72	0.41	0.42
6	0.74	0.43	0.45	0.81	0.52	0.58
4	0.88	0.61	0.66	0.96	0.72	0.84
2	1.00	0.79	0.96	1.10	0.95	1.20
1	1.13	1.00	1.17	1.25	1.23	1.55
1/0	1.22	1.17	1.43	1.35	1.43	1.84
2/0	1.31	1.35	1.72	1.45	1.65	2.20
3/0	1.42	1.58	2.14	1.58	1.96	2.80
4/0	1.55		2.64	1.77		3.46
250	1.76		3.18	1.93		4.04
350	1.98		4.29	2.18		5.48
500	2.26		5.94	2.50		7.64
750	2.71		9.01	3.12		11.40
1000	3.10		11.70			

Multiconductor Cable Type MC, 600V with XHHW Conductors, Copper

Size	3 conductors with ground						4 conductors with ground					
	Diameter (in.)		Area (in. ²)		Weight (lbs/ft)		Diameter (in.)		Area (in. ²)		Weight (lbs/ft)	
	Without Jacket	With Jacket	Without Jacket	With Jacket	Alum. Armor	Steel Armor	Without Jacket	With Jacket	Without Jacket	With Jacket	Alum. Armor	Steel Armor
8	0.70	0.80	0.38	0.50	0.41	0.57	0.76	0.86	0.45	0.58	0.51	0.68
6	0.78	0.88	0.48	0.61	0.55	0.74	0.85	0.95	0.57	0.71	0.69	0.87
4	0.89	0.99	0.62	0.77	0.74	0.95	0.97	1.07	0.74	0.90	0.93	1.15
2	1.01	1.12	0.80	0.99	1.08	1.32	1.10	1.22	0.95	1.17	1.29	1.56
1	1.16	1.27	1.06	1.27	1.38	1.63	1.25	1.36	1.23	1.45	1.61	1.91
1/0	1.23	1.34	1.19	1.41	1.56	1.86	1.35	1.46	1.43	1.67	1.94	2.27
2/0	1.32	1.43	1.37	1.61	1.85	2.20	1.46	1.56	1.67	1.91	2.36	2.72
3/0	1.46	1.57	1.67	1.94	2.35	2.67	1.58	1.71	1.96	2.30	2.94	3.33
4/0	1.56	1.68			2.82	3.21	1.75	1.88			3.64	3.97
250	1.74	1.86			3.31	3.94	1.92	2.04			4.21	4.64
350	1.96	2.10			4.48	4.97	2.16	2.30			5.71	6.12
500	2.24	2.37			6.08	6.58	2.47	2.63			7.91	8.39
750	2.68	2.84			8.96	9.70	3.03	3.22			11.48	12.17

Single Conductor Cable 600V

Size	XHHW			THHN, THWN			TW, THW			USE, RHH, RHW		
	Diameter in.	Area in. ²	Weight lbs/ft	Diameter in.	Area in. ²	Weight lbs/ft	Diameter in.	Area in. ²	Weight lbs/ft	Diameter in.	Area in. ²	Weight lbs/ft
1/0	0.48		0.37	0.50		0.37	0.53		0.39	0.53		0.39
2/0	0.52		0.46	0.54		0.46	0.57		0.48	0.57		0.49
3/0	0.58		0.57	0.60		0.57	0.62		0.60	0.63		0.60
4/0	0.63		0.71	0.66		0.71	0.68		0.74	0.68		0.75
250	0.70	0.38	0.85	0.72	0.41	0.85	0.75	0.44	0.88	0.76	0.45	0.89
300	0.75	0.44	1.02	0.77	0.47	1.02	0.81	0.52	1.04	0.81	0.52	1.05
350	0.80	0.50	1.17	0.83	0.54	1.17	0.86	0.58	1.21	0.86	0.58	1.22
400	0.85	0.57	1.33	0.87	0.59	1.33	0.90	0.64	1.37	0.91	0.65	1.38
500	0.93	0.68	1.64	0.96	0.72	1.64	0.98	0.75	1.69	0.99	0.77	1.70
600	1.04	0.85	2.03	1.06	0.88	2.01	1.09	0.93	2.03	1.10	0.95	2.07
750	1.14	1.02	2.24	1.17	1.08	2.48	1.19	1.11	2.51	1.20	1.13	2.55
1000	1.29		2.52	1.32		3.30	1.34		3.31	1.35		3.33