

C and MC channel chart

American standard C channels and MC miscellaneous channels from the AISC Shapes Database v16.0.

Section	h (mm)	b (mm)	tw (mm)	tf (mm)	kg/m	lb/ft	A (cm ²)	I _x (cm ⁴)	I _y (cm ⁴)	Z _x (cm ³)
C3x3.5	76.2	34.8	3.35	6.93	5.20	3.50	7.03	65.30	7.03	17.00
C3x4.1	76.2	35.8	4.32	6.93	6.10	4.10	7.74	68.70	7.95	18.00
C4x4.5	102	38.6	3.18	7.52	6.70	4.50	8.65	147	11.00	29.00
C3x5	76.2	38.1	6.55	6.93	7.40	5.00	9.48	77.00	10.00	20.20
C4x5.4	102	40.1	4.67	7.52	8.00	5.40	10.20	160	13.00	31.50
C3x6	76.2	40.6	9.04	6.93	8.90	6.00	11.40	86.20	12.50	22.60
C4x6.25	102	41.9	6.27	7.52	9.30	6.25	11.90	174	15.60	34.40
C5x6.7	127	44.5	4.83	8.13	10.40	6.70	12.70	311	19.60	49.00
C4x7.25	102	43.7	8.15	7.52	10.80	7.25	13.70	191	17.70	37.50
C6x8.2	152	48.8	5.08	8.71	12.20	8.20	15.40	545	28.60	71.30
C5x9	127	48	8.26	8.13	13.00	9.00	17.00	370	26.00	58.30
C7x9.8	178	53.1	5.33	9.3	14.60	9.80	18.50	882	39.80	99.50
C6x10.5	152	51.6	7.98	8.71	15.60	10.50	19.80	629	35.80	82.60
C8x11.5	203	57.4	5.59	9.91	17.10	11.50	21.70	1,350	54.50	133
C7x12.25	178	55.6	7.98	9.3	18.20	12.25	23.20	1,010	48.30	113
C6x13	152	54.9	11.1	8.71	19.30	13.00	24.60	720	43.70	94.70
C9x13.4	229	61.7	5.92	10.5	19.90	13.40	25.40	1,990	72.80	174
C8x13.75	203	59.4	7.7	9.91	20.50	13.75	26.00	1,500	63.30	148
C9x15	229	63.2	7.24	10.5	22.00	15.00	28.40	2,120	79.50	185
C7x14.75	178	58.4	10.6	9.3	22.00	14.75	27.90	1,130	57.00	127
C10x15.3	254	66	6.1	11.1	22.80	15.30	28.90	2,800	94.50	221
C8x18.75	203	64.3	12.4	9.91	27.90	18.75	35.50	1,830	82.00	180
C10x20	254	69.6	9.63	11.1	30.00	20.00	37.90	3,280	117	259
C9x20	229	67.3	11.4	10.5	30.00	20.00	37.90	2,530	100	221
C12x20.7	305	74.7	7.16	12.7	30.80	20.70	39.20	5,370	161	352
C12x25	305	77.5	9.83	12.7	37.00	25.00	47.40	5,990	185	393
C10x25	254	73.4	13.4	11.1	37.00	25.00	47.40	3,790	139	298
C12x30	305	80.5	13	12.7	45.00	30.00	56.80	6,740	213	442
C10x30	254	77	17.1	11.1	45.00	30.00	56.80	4,290	164	339
C15x33.9	381	86.4	10.2	16.5	50.40	33.90	64.50	13,100	336	688
C15x40	381	89.4	13.2	16.5	60.00	40.00	76.10	14,500	382	762
C15x50	381	94.5	18.2	16.5	74.00	50.00	94.80	16,800	458	882

Section	h (mm)	b (mm)	tw (mm)	tf (mm)	kg/m	lb/ft	A (cm ²)	Ix (cm ⁴)	Iy (cm ⁴)	Zx (cm ³)
MC10x6.5	254	29.7	3.86	5.13	9.70	6.50	12.60	953	5.54	75.20
MC6x6.5	152	47	3.94	7.39	9.70	6.50	12.60	458	23.50	60.00
MC6x7	152	47.8	4.55	7.39	10.40	7.00	13.50	475	25.10	62.40
MC3x7.1	76.2	49.3	7.92	8.92	10.60	7.10	13.60	113	27.70	29.70
MC10x8.4	254	38.1	4.32	7.11	12.50	8.40	15.90	1,330	13.60	105
MC8x8.5	203	47.5	4.55	7.9	12.60	8.50	16.10	970	26.00	95.40
MC12x10.6	305	38.1	4.83	7.85	15.80	10.60	20.00	2,300	15.70	151
MC6x12	152	63.5	7.87	9.53	17.90	12.00	22.80	778	77.00	102
MC4x13.8	102	63.5	12.7	12.7	20.50	13.80	26.00	368	88.70	72.60
MC12x14.3	305	53.8	6.35	7.95	21.30	14.30	27.00	3,170	41.60	208
MC6x15.1	152	74.7	8.03	12.1	22.50	15.10	28.60	1,040	144	136
MC6x15.3	152	88.9	8.64	9.78	22.80	15.30	29.00	1,050	204	138
MC6x16.3	152	76.2	9.53	12.1	24.30	16.30	30.90	1,080	157	142
MC6x18	152	88.9	9.63	12.1	26.80	18.00	34.10	1,240	245	162
MC8x18.7	203	75.7	8.97	12.7	27.80	18.70	35.50	2,180	173	215
MC7x19.1	178	87.6	8.94	12.7	28.40	19.10	36.20	1,790	252	202
MC8x20	203	77	10.2	12.7	29.80	20.00	37.90	2,260	184	223
MC8x21.4	203	87.6	9.53	13.3	31.80	21.40	40.50	2,560	274	252
MC10x22	254	84.3	7.37	14.6	33.00	22.00	41.60	4,250	266	336
MC7x22.7	178	91.4	12.8	12.7	33.80	22.70	43.00	1,970	301	221
MC8x22.8	203	88.9	10.8	13.3	33.90	22.80	43.20	2,660	292	261
MC9x23.9	229	87.6	10.2	14	35.60	23.90	45.30	3,530	297	310
MC10x25	254	86.6	9.65	14.6	37.00	25.00	47.40	4,580	302	361
MC9x25.4	229	88.9	11.4	14	37.80	25.40	48.20	3,660	315	320
MC10x28.5	254	100	10.8	14.6	42.40	28.50	54.00	5,240	470	415
MC12x31	305	93.2	9.4	17.8	46.00	31.00	58.80	8,410	470	552
MC13x31.8	330	102	9.53	15.5	47.30	31.80	60.30	9,950	475	601
MC10x33.6	254	104	14.6	14.6	50.00	33.60	63.70	5,790	545	456
MC13x35	330	103	11.4	15.5	52.00	35.00	66.50	10,500	512	636
MC12x35	305	95.8	11.8	17.8	52.00	35.00	66.50	8,990	524	590
MC13x40	330	106	14.2	15.5	60.00	40.00	75.50	11,400	570	687
MC12x40	305	98.8	15	17.8	60.00	40.00	76.10	9,740	591	639
MC10x41.1	254	110	20.2	14.6	61.20	41.10	78.10	6,530	653	516
MC18x42.7	457	100	11.4	15.9	63.50	42.70	81.30	23,100	595	1,010
MC12x45	305	102	18	17.8	67.00	45.00	85.20	10,400	658	687

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MC18x45.8	457	102	12.7	15.9	68.20	45.80	87.10	24,100	620	1,050
MC13x50	330	112	20	15.5	74.00	50.00	94.80	13,100	683	791
MC12x50	305	105	21.2	17.8	74.00	50.00	94.80	11,200	724	736
MC18x51.9	457	104	15.2	15.9	77.20	51.90	98.70	26,100	678	1,140
MC18x58	457	107	17.8	15.9	86.00	58.00	110.00	28,100	733	1,230

Source: AISC Shapes Database v16.0. Nominal values for estimating; verify with the producer. steelweight-calculator.com