

Rebar weight chart

Weight of reinforcing steel bars per foot and per metre. For metric bars, weight in kg/m = $d^2 / 162$ with d in mm; for US bars the bar number is the diameter in eighths of an inch.

US rebar sizes (ASTM A615)

Bar	Diameter (in)	Diameter (mm)	lb/ft	kg/m	20 ft bar (lb)
#3 rebar	0.375	9.5	0.376	0.560	7.5
#4 rebar	0.5	12.7	0.668	0.994	13.4
#5 rebar	0.625	15.9	1.043	1.552	20.9
#6 rebar	0.75	19	1.502	2.235	30.0
#7 rebar	0.875	22.2	2.044	3.042	40.9
#8 rebar	1	25.4	2.670	3.973	53.4
#9 rebar	1.128	28.7	3.400	5.060	68.0
#10 rebar	1.27	32.3	4.303	6.404	86.1
#11 rebar	1.41	35.8	5.313	7.907	106.3
#14 rebar	1.693	43	7.650	11.384	153.0
#18 rebar	2.257	57.3	13.600	20.239	272.0

Metric rebar and TMT bars

Bar	Area (mm ²)	kg/m	12 m bar (kg)	Bars per tonne (12 m)
6 mm rebar	28.3	0.222	2.66	375.4
8 mm rebar	50.3	0.395	4.74	211.0
10 mm rebar	78.5	0.617	7.40	135.1
12 mm rebar	113	0.888	10.66	93.8
14 mm rebar	154	1.210	14.52	68.9
16 mm rebar	201	1.580	18.96	52.7
20 mm rebar	314	2.470	29.64	33.7
25 mm rebar	491	3.850	46.20	21.6
28 mm rebar	616	4.830	57.96	17.3
32 mm rebar	804	6.310	75.72	13.2
40 mm rebar	1257	9.860	118.32	8.5
50 mm rebar	1963	15.400	184.80	5.4

Why $d^2 / 162$?

A round bar of diameter d mm has an area of $\pi d^2 / 4 \text{ mm}^2$. One metre of it is $\pi d^2 / 4 \times 10^{-6} \text{ m}^3$, and at 7850 kg/m^3 that is $0.006165 \times d^2 \text{ kg}$, which is $d^2 / 162.2$. Rounded to $d^2 / 162$, it is accurate to about 0.1 %.

US bar data adapted from Wikipedia, "Rebar" (CC BY-SA 4.0). Metric masses are nominal values; Indian TMT bars follow IS 1786 with the same nominal masses.