BAR WEIGHT WALL PLANNER

ROUNDS

IMPERIAL

Size dia. (in)	1 ft (kg)	Feet per tonne	1 metre (kg)
3/16	0.426	23474	.1396
7/32	0.590	16949	.1899
1/4	0.757	13210	.2480
9/32	0.971	10298	.3140
5/16	.1184	8446	.3876
11/32	.1447	6910	.4690
3/8	.1706	5861	.5581
13/32	.2014	4965	.6550
7/16	.2318	4314	.7596
15/32	.2676	3736	.8721
½	.3030	3300	.9922
17/32	.3415	2928	1.1202
9/16	.3833	2608	1.2557
19/32	.4265	2344	1.3992
5/8	.4731	2113	1.550
21/32	.5212	1918	1.710
11/16	.5715	1749	1.876
23/32	.6251	1599	2.050
3/4	.6804	1469	2.232.
25/32	.7384	1354	2.422
13/16	.7983	1252	2.620
27/32	.8614	1161	2.826
7/8	.9253	1080	3.038
29/32	.9938	1006	3.260
15/16	1.0659	938	3.488
31/32	1.1353	880	3.724
1	1.2111	825	3.973
1 1/16	1.3653	732	4.485
1 1/8	1.5331	652	5.028
1 3/16	1.7100	584	5.604
1 1/4	1.8915	528	6.209
1 5/16	2.0865	479	6.845
1 3/8	2.906	436	7.513
1 7/16	2.5038	399	8.211
1 ½	2.7261	366	8.940
1 9/16	2.9574	338	9.702
1 5/8	3.1978	312	10.492
1 11/16	3.4473	290	11.315
1 3/4	3.7104	269	12.169
1 13/16	3.9780	251	13.054

Size dia. (in)	1 ft (kg)	Feet per tonne	1 metre (kg)
1 7/8	4.2592	234	13.969
1 15/16	4.5495	219	14.910
2	4.8444	206	15.890
2 1/8	5.4703	182	17.950
2 1/4	6.1325	163	20.12
2 3/8	6.8356	146	22.42
2 1/2	7.5705	132	24.83
2 5/8	8.3461	120	27.83
2 3/4	9.1580	109	30.06
2 7/8	10.0108	99	32.84
3	10.8998	91	35.76
3 1/8	11.8297	84	38.81
3 1/4	12.8004	78	41.96
3 3/8	13.7983	72	45.96
3 1/2	14.8370	67	48.67
3 5/8	15.9130	63	52.21
3 3/4	17.0290	59	55.37
3 7/8	18.1830	55	59.66
4	19.3760	52	63.57
4 1/4	21.875	46	71.76
4 1/2	24.522	41	80.45
4 3/4	27.323	37	89.64
5	30.275	33	99.32
5 1/4	33.378	30	109.50
5 1/2	36.632	27	120.18
5 3/4	40.038	25	131.35
6	43.596	23	143.20
6 1/4	47.304	21	155.19
6 1/2	51.164	20	167.85
6 3/4	55.176	18	181.02
7	59.339	17	194.67
7 1/2	68.118	15	223.48
8	77.504	13	245.27

METRIC

Size dia. (mm)	1 metre (kg)	Metres per tonne	1 ft (kg)
5.0	.154	6493	0467
6.0	.222	4504	0675
7.0	.302	3311	0921
8.0	.395	2531	.1200
9.0	.499	2004	.1519
10.0	.617	1621	.1878
11.0	.746	1340	.2272
12.0	.888	1126	.2703
13.0	1.040	961	.3170
14.0	1.210	826	.3687
15.0	1.390	719	.4236
16.0	1.580	633	.4817
17.0	1.780	562	.5425
18.0	2.000	500	.6096
19.0	2.230	448	.6795
20.0	2.470	405	.7529
21.0	2.720	367	.8282
22.0	2.980	335	.9081
23.0	3.260	306	.9938
24.0	3.550	281	1.0818
25.0	3.850	260	1.1734
26.0	4.170	239	1.2709
27.0	4.500	222	1.3716
28.0	4.830	207	1.4723
29.0	5.190	162	1.5818
30.0	5.550	180	1.6914
31.0	5.920	169	1.8044
32.0	6.310	158	1.9232
33.0	6.710	149	2.0452
34.0	7.130	140	2.1732
35.0	7.550	132	2.3011
36.0	7.990	125	2.4343
37.0	8.440	118	2.5723
38.0	8.900	112	2.7129
39.0	9.380	106	2.8590
40.0	9.86	101	3.0055
41.0	10.36	93	3.1576
42.0	10.88	92	3.3162
43.0	11.40	88	3.4745
44.0	11.94	84	3.6397
45.0	12.48	80	3.8043
46.0	13.05	76	3.9731
47.0	13.62	73	4.1513
48.0	14.21	70	4.3314
49.0	14.80	67	4.5110

Size dia. (mm)	1 metre (kg)	Metres per tonne	1 ft (kg)
50.0	15.14	65	4.6975
52.0	16.67	60	5.0812
55.0	18.65	54	5.684
56.0	19.33	52	5.892
58.0	20.74	48	6.321
60.0	22.20	45	6.766
62.0	23.70	42	7.224
65.0	26.05	38	7.940
68.0	28.51	35	8.690
70.0	30.21	33	9.208
72.0	31.93	31	9.741
75.0	34.68	29	10.571
78.0	37.51	27	11.433
80.0	39.46	25	12.028
83.0	42.47	23	12.954
85.0	44.54	22	13.576
88.0	47.74	21	14.551
90.0	49.94	20	15.222
95.0	55.594	18	16.945
100.0	61.600	16	18.776
105.0	67.914	15	20.700
110.0	74.536	13	22.718
115.0	81.466	12	24.831
120.0	88.704	11	27.037
125.0	96.250	10	27.337
130.0	104.104	10	31.731
135.0	112.266	9	34.218
140.0	120.736	8	36.800
145.0	129.514	8	39.476
150.0	138.600	7	42.245
155.0	147.994	7	45.108
160.0	157.696	6	48.065
165.0	167.706	6	51.116
170.0	178.024	6	54.261
175.0	188.650	5	57.500
180.0	199.854	5	60.833
185.0	210.826	5	64.260
190.0	222.376	4	67.780
195.0	234.234	4	71.394
200.0	246.400	4	75.102

HEXAGONS

IMPERIAL

Size A/F (in)	1 ft (kg)	Feet per tonne	1 metre (kg)
.248	.0835	11976	.2739
.282	.1057	9460	.3468
.312	.1306	7656	.4285
.324	.1406	7112	.4613
.338	.1524	6561	.4999
.375	.1869	5350	.6132
.413	.2268	4409	.7441
.437	.2540	3937	.8333
.445	.2681	3729	.8796
.500	.3357	2978	1.1014
.525	.3679	2718	1.2070
.562	.4218	2370	1.3838
.600	.4826	2072	1.5833
.625	.5246	1917	1.7113
.687	.6314	1583	2.0715
.710	.6718	1488	2.2040
.750	.7530	1328	2.4704
.812	.8818	1134	2.8930
.820	.8990	1112	2.9494
.875	1.0206	979	3.3484
.920	1.1281	886	3.7011
.937	1.1702	854	3.8392
1.000	1.3336	749	4.3753
1.010	1.3649	732	4.4780
1.062	1.5059	664	4.9406
1.100	1.6184	617	5.3096
1.125	1.6919	591	5.5508
1.200	1.9269	518	6.3218
1.250	2.0865	479	6.8454
1.300	2.2612	442	7.4185

Size A/F (in)	1 ft (kg)	Feet per tonne	1 metre (kg)
1.312	2.3006	434	7.5478
1.375	2.5251	396	8.2843
1.390	2.5800	387	8.4645
1.437	2.7533	363	9.0330
1.480	2.9202	342	9.5806
1.500	3.0050	332	9.8588
1.625	3.5267	283	11.5704
1.670	3.7249	268	12.2207
1.687	3.8034	262	12.4782
1.750	4.0905	244	13.4201
1.812	4.3876	227	14.3948
1.860	4.6226	216	15.1658
1.875	4.6992	212	15.4171
2.000	5.3433	187	17.5303
2.050	5.6019	178	18.3787
2.062	5.6744	176	18.6166
2.125	6.0328	165	19.7924
2.220	6.7358	148	22.0988
2.250	6.7631	147	22.1884
2.375	7.5387	132	24.4330
2.410	7.5719	129	25.4324
2.437	7.9378	125	26.0423
2.500	8.3506	119	27.3966
2.580	8.8450	113	29.0187
2.625	9.2079	108	30.2093
2.760	10.1287	98	33.2302
2.875	11.0358	91	36.2117
3.000	12.0163	83	39.4290

METRIC

Size A/F (mm)	1 metre (kg)	Metres per tonne	1 ft (kg)
7.0	.333	3003	.1016
7.5	.382	2618	.1166
8.0	.435	2299	.1324
8.5	.491	2036	.1497
9.0	.551	1815	.1678
9.5	.614	1628	.1873
10.0	.680	1470	.2073
10.5	.750	1333	.2286
11.0	.823	1215	.2508
11.5	.899	1112	.2739
12.0	.979	1021	.2984
12.5	1.060	943	.3230
13.0	1.150	869	.3506
13.5	1.240	806	.3378
14.0	1.330	752	.4055
14.5	1.430	699	.4359
15.0	1.530	653	.4663
16.0	1.740	574	.5302
17.0	1.960	510	.5974
18.0	2.200	454	.6704
19.0	2.450	408	.7466
20.0	2.720	368	.8292
21.0	3.000	333	.9144
22.0	3.290	304	1.0029
23.0	3.600	278	1.0972
24.0	3.920	255	1.1947
25.0	4.250	235	1.2955
26.0	4.600	217	1.4021
27.0	4.960	202	1.5118
28.0	5.330	187	1.6248
29.0	5.720	175	1.7436
30.0	6.120	163	1.8656
31.0	6.530	153	1.9904
32.0	6.960	143	2.1215
33.0	7.400	135	2.2557
34.0	7.860	127	2.3959
35.0	8.330	120	2.5392
36.0	8.810	113	2.6853
37.0	9.310	107	2.8377
38.0	9.820	102	2.9933

FORMULAE

WEIGHTS AND AREAS OF STEEL, IMPERIAL SIZES

Round steel	Diameter² x 2.67	= lb per lineal foot
	Diameter² x 0.7854	= Area
	Diameter² x 3.973	= Kgs per lineal metre
Square steel	Side²	= Area
	Area x 3.4	= lb per lineal foot
	Area x 5.059	= Kgs per lineal foot
Hexagon steel	Diameter² x 0.866	= Area
	Diameter² x 2.944	= lb per lineal foot
	Diameter² x 4.381	= Kgs per lineal metre
Weight of steel	Cubic inch	= 0.28331
	Cubic foot	= 490 lb
	Cubic centimetre	= 0.01729 lb
	Cubic centimetre	= 708417 grammes

METRIC SIZES

WEIGHT PER METRE OF STEEL FROM METRIC SIZES

Square steel	Side in mm²	x 0.00784 Kgs per metre
Round steel	Dia in mm²	x 0.00616 Kgs per metre
Hexagon steel	Dia in mm²	x 0.00680 Kgs per metre
Octagon steel	Dia in mm²	x 0.00649 Kgs per metre

For guidance only. Always check against the relevant standard.