

STEEL PLATE WEIGHT CALCULATION FORMULA (MS, Carbon Steel, Stainless Steel & other alloys)

Fabricators & engineers use below MS plate weight formula. This is an easy way to calculate the weight quickly. Check the example for steel plate weight calculation for a few most common metals. Also refer density on 3rd page of this PDF which will help to calculate the exact weight using below formula.



$$W \times L \times T \times \text{Density}$$

MILD STEEL PLATE WEIGHT CALCULATION FORMULA

Width x **Length** (in Inch) x **Thickness** (in Inch) x Density **.2833** (Pounds/cubic Inch)



$$W \times L \times T \times \text{Density}$$

CARBON STEEL PLATE WEIGHT CALCULATION

Width x **Length** (in Inch) x **Thickness** (in Inch) x Density **.2836** (Pounds/cubic Inch)



$$W \times L \times T \times \text{Density}$$

STAINLESS STEEL PLATE WEIGHT CALCULATION

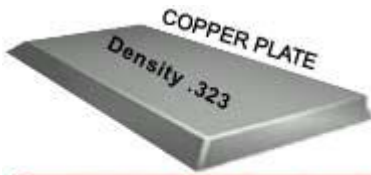
Width x **Length** (in Inch) x **Thickness** (in Inch) x Density **.285** (Pounds/cubic Inch)



$$W \times L \times T \times \text{Density}$$

ALUMINUM PLATE WEIGHT CALCULATION

Width x **Length** (in Inch) x **Thickness** (in Inch) x Density **.0975** (Pounds/cubic Inch)



$W \times L \times T \times \text{Density}$

COPPER PLATE WEIGHT CALCULATION

$\text{Width} \times \text{Length (in Inch)} \times \text{Thickness (in Inch)} \times \text{Density } .323 \text{ (Pounds/cubic Inch)}$



$W \times L \times T \times \text{Density}$

BRASS PLATE WEIGHT CALCULATION

$\text{Width} \times \text{Length (in Inch)} \times \text{Thickness (in Inch)} \times \text{Density } .307 \text{ (Pounds/cubic Inch)}$



$W \times L \times T \times \text{Density}$

INCONEL 625 PLATE WEIGHT CALCULATION

$\text{Width} \times \text{Length (in Inch)} \times \text{Thickness (in Inch)} \times \text{Density } .305 \text{ (Pounds/cubic Inch)}$

DENSITY OF A to Z METALS AT A GLANCE

Refer below density to calculate the weight of steel plate using the formula given above

Metal	Pounds per Cubic Inch (lb/in ³)	Metal	Pounds per Cubic Inch (lb/in ³)
Aluminium	0.098	Manganin	0.303
Antimony	0.242	Mercury	0.489
Barium	0.127	Molybdenum	0.371
Bell Metal (Bronze, 22% Tin)	0.310	Neodymium	0.253
Beryllium	0.067	Nichrome	0.303
Beryllium Copper	0.298	Nickel	0.322
Bismuth	0.353	Nimonic 75	0.302
Brass	0.303 - 0.315	Nimonic 90	0.296
Bronze (Aluminum Bronze)	0.260	Niobium	0.310
Bronze (Phosphor Bronze)	0.320	Osmium	0.816
Bronze (Silicon Bronze)	0.308	Palladium	0.434
Bronze (8% - 14% Tin)	0.267 - 0.322	Platinum	0.775
Cadmium	0.313	Potassium	0.032
Calcium	0.056	Praseodymium	0.245
Cast Iron	0.260	Rhenium	0.759
Cesium	0.068	Rhodium	0.448
Chromium	0.260	Rubidium	0.055
Cobalt	0.322	Ruthenium	0.450
Constantan	0.321	Samarium	0.272
Copper	0.324	Scandium	0.108
Cupronickel	0.320 - 0.323	Silver	0.379
Dysprosium	0.309	Sodium	0.035
Gallium	0.214	Stainless Steel (200 Series)	0.282
Germanium	0.192	Stainless Steel (300 Series eg. SS 304)	0.279 - 0.289
Gold	0.698	Stainless Steel (400 Series)	0.275 - 0.282
Gunmetal (Red Brass)	0.315	Stainless Steel (500 Series)	0.278 - 0.282
Hafnium	0.481	Steel (Carbon Steel)	0.284
Hastelloy alloy C276	0.321	Steel (Mild Steel, Structural Steel)	0.284
Holmium	0.318	Tantalum	0.603
Incoloy alloy 825	0.294	Terbium	0.297
Inconel alloy 625	0.305	Thorium	0.423
Indium	0.264	Tin (White Tin, Metallic Tin)	0.262
Iridium	0.815	Titanium	0.163
Iron	0.284	Tungsten	0.697
Lanthanum	0.223	Uranium	0.690
Lead	0.410	Vanadium	0.221
Lithium	0.019	Wrought Iron	0.278
Magnesium	0.063	Ytterbium	0.249
Manganese	0.260	Yttrium	0.162
Monel 400	0.318	Zinc	0.258
Monel 450	0.322	Zirconium	0.236
Monel 502	0.305		