Theoretical weights of Materials

All steel, aluminum and other metals are quoted and sold to a theoretical weight but this may not be the exact weight of material you receive. This is because theoretical weight is calculated by nominal dimensions (volume) and density and does not account for manufacturing deviations. All materials are produced within a tolerance and allow deviations in the materials resulting in weights that can be more or less than the theoretical weight. Actual weight call only be obtained by weighing the material with a scale.

Formulas for Theoretical Weight of Steel and Aluminum

	Steel (Docol, 4130, DOM, EW, SS, etc.)	Aluminum
Round Tube	lbs. / ft = 10.68 x (O.D. - wall thickness) x wall thickness	lbs. / ft = 3.70 x (O.D. - wall thickness) x wall thickness
Square / Rect. Tube	lbs. / ft = 13.60 x [(width + height) / 2 - wall thickness] x wall thickness	lbs. / ft = 4.65 x [(width + height) / 2 - wall thickness] x wall thickness
Round Bar	lbs. / ft = 2.6729 x diam.^{2}	lbs. / ft = .924 x diam.^{2}
Square / Flat Bar	lbs. / ft = 3.4032 x width x height	lbs. / ft = 1.18 x width x height
Angle	lbs. / ft = 13.60 (side 1 + side 2 - wall thickness) x wall thickness	lbs. / ft = 4.65 (side 1 + side 2 - wall thickness) x wall thickness
Sheet / Plate	lbs. / sq. ft = 3.4032 x thickness x 12	lbs. / sq. ft = 1.18 x thickness x 12

AED Motorsport Products Ltd

www.aedmotorsport.com

5373 W. 86th St. Indianapolis, IN 46268 USA

Ph. 317.334.0569