

A. DIMENSIONS AND MASS

NOMINAL DESIGNATION	DIMENSIONS AND MASSES			
	Nominal Diameter	Nominal Cross Sectional Area	Unit Weight	
	(mm)	(cm ³)	Kg/m	Kg/12m
10	11.30	1.00	0.785	9.42
15	16.00	2.00	1.570	18.84
20	19.50	3.00	2.355	28.26
25	25.20	5.00	3.925	47.10
30	29.90	7.00	5.495	65.94
35	35.70	10.00	7.850	94.20
45	43.70	15.00	11.775	141.30

B. CHEMICAL COMPOSITION AND MECHANICAL PROPERTIES

GRADE	CHEMICAL COMPOSITION						MECHANICAL PROPERTIES	
	%C (Max)	%Si (Max)	%Mn(Max)	%P(Max)	%S (Max)	%CE (C+Mn/6) (Max)	Yield Strength	Tensile Strength
Grade 420				0.060	0.060		420	620
Grade 520				0.060	0.060		520	790

Deformed Br Designation Numbers, Nominal Weights, Nominal Dimensions, and Deformation Requirements, inch-pound units

Bar Designation No. a	Nominal Weights Lb/ft	Nominal Dimensions A			Deformation Requirements, in		
		Diameter in.	Cross sectional area in ²	Parimeter in.	Maximum Average Spacing	Minimal Average Height	Maximum Gap (Chord of 12.5% of nominal Parimeter)
3	0.376	0.375	0.11	1.178	0.262	0.015	0.143
4	0.668	0.500	0.20	1.571	0.350	0.020	0.191
5	1.043	0.625	0.31	1.963	0.437	0.028	0.239
6	1.502	0.750	0.44	2.358	0.525	0.038	0.288
7	2.044	0.876	0.60	2.749	0.612	0.044	0.334
8	2.670	1.000	0.79	3.142	0.700	0.050	0.383
9	3.400	1.128	1.00	3.544	0.790	0.058	0.431
10	4.303	1.270	1.27	3.990	0.888	0.064	0.487
11	5.313	1.410	1.56	4.430	0.987	0.071	0.540
14	7.65	1.693	2.25	5.32	1.185	0.085	0.648
18	13.60	2.257	4.00	7.09	1.58	0.102	0.864

A The Nominal dimensions of deformed are equivalent to those of a plain round bar having the same weight per foot as the deformed bar.

a Bar numbers are based on the number of eights of an inch included in the nominal diameter of the bar.