

REINFORCING BAR DEFORMATION REQUIREMENTS

ASTM Standard: Deformed Bar Designation Numbers,
Nominal Dimensions & Deformation Requirements



Premium Steel Reinforcement Solutions

www.FalconSteelMill.com

Bar Designation No.	Nominal Weight lb/ft [kg/m]	Diameter in. [mm]	Cross-Sectional Area in. ² [mm ²]	Perimeter in. [mm]	Max. Average Spacing in. [mm]	Min. Average Height in. [mm]	Max. Gap (Chord of 12.5% of Nom. Perimeter) in. [mm]
#3 [10]	0.376 [0.560]	0.375 [9.5]	0.11 [71]	1.178 [29.9]	0.262 [6.7]	0.015 [0.38]	0.143 [3.6]
#4 [13]	0.668 [0.994]	0.500 [12.7]	0.20 [129]	1.571 [39.9]	0.350 [8.9]	0.020 [0.51]	0.191 [4.9]
#5 [16]	1.043 [1.552]	0.625 [15.9]	0.31 [199]	1.963 [49.9]	0.437 [11.1]	0.028 [0.71]	0.239 [6.1]
#6 [19]	1.502 [2.235]	0.750 [19.1]	0.44 [284]	2.356 [59.8]	0.525 [13.3]	0.038 [0.97]	0.286 [7.3]
#7 [22]	2.044 [3.042]	0.875 [22.2]	0.60 [387]	2.749 [69.8]	0.612 [15.5]	0.044 [1.12]	0.334 [8.5]
#8 [25]	2.670 [3.973]	1.000 [25.4]	0.79 [510]	3.142 [79.8]	0.700 [17.8]	0.050 [1.27]	0.383 [9.7]
#9 [29]	3.400 [5.060]	1.128 [28.7]	1.00 [645]	3.544 [90.0]	0.790 [20.1]	0.056 [1.42]	0.431 [10.9]
#10 [32]	4.303 [6.404]	1.270 [32.3]	1.27 [819]	3.990 [101.3]	0.889 [22.6]	0.064 [1.63]	0.487 [12.4]
#11 [36]	5.313 [7.907]	1.410 [35.8]	1.56 [1006]	4.430 [112.5]	0.987 [25.1]	0.071 [1.80]	0.540 [13.7]
#14 [43]	7.650 [11.38]	1.693 [43.0]	2.25 [1452]	5.320 [135.1]	1.185 [30.1]	0.085 [2.16]	0.648 [16.5]
#18 [57]	13.60 [20.24]	2.257 [57.3]	4.00 [2581]	7.090 [180.1]	1.580 [40.1]	0.102 [2.59]	0.864 [21.9]
#20 [64]	16.69 [24.84]	2.500 [63.5]	4.91 [3167]	7.850 [199.5]	1.750 [44.5]	0.113 [2.86]	0.957 [24.3]



Units shown in
Imperial and **Metric**
measurements.



Values represent nominal
dimensions and deformation
limits according to
ASTM standards.



Note: The nominal dimensions of a deformed bar
are equivalent to those of a plain round bar having
the same weight (mass) per foot (metre) as the
deformed bar.



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