

Deformed Bar (Rebar) Characteristics

Diameter	From 8 mm to 36 mm	
Commercial Length	6 & 12 meters	
Specification	British Standard	BS 449:1997 Grade 460B
	American Standard	ASTM A 615 Grade 60
	German Standard	DIN 488-1:2009-08 Grade B500B

Standard Grade	Chemical Composition % Max				Mechanical Properties				Guage Length	Bending Test		Rebending Test	
	%C	%Mn	%S	%P	Ys N/mm2 Min	T.S. N/mm2 Min.	E at Fractur e	Agt % Min		Bending Angle Degree	Bending Dia mm	RE- bending Angle Degree	Re-bending Dia mm
BS 4449:1997 Gr.460B	0.25	--	0.050	0.050	460	YSx1.08	14	5	Sd	--	--	45 ° to 23°	≤ 16 mm -5d ≥ 16 mm 7d
BS 4449:2005 Gr.B 500B	0.22	--	0.050	0.050	500	YSx1.08	--	5	--	--	--	90 ° to20°	≤ 16 mm -4d ≥ 16 mm 7d
ASTM A 615 Grade 60	--	--	0.060	--	420	620	≤ 20 -9 22-25 mm -8	--	200 mm	180 °	≤ 16 mm -3.5d 18-25 mm	--	--
DIN 488 :2009 Gr B500B	0.22	--	0.050	0.050	500	YSx1.08	--	5	Sd	--	--	90 ° to20°	≤ 16 mm -5d 16-28 mm -8d ≥ 28 -32 mm -

YS - Yield Strength : TS- Tensile Strength ,E- Elongation :Agt -Total Elongation at maximum force

Mill Standard Bar Count 12 meter Length

Nominal Dia	Unit Mass (Kg/Mtr)	Nominal Mass (Kg/piece)	Pieces/Bundle	Weight/Bundle (M.T.)
08	0.395	4.74	422	2.000
10	0.617	7.40	270	1.999
12	0.888	10.66	188	2.003
14	1.210	14.52	138	2.004
16	1.580	18.96	106	2.010
18	2.000	24.00	84	2.016
20	2.470	29.64	68	2.016
22	2.980	35.76	56	2.003
25	3.850	46.20	44	2.033
28	4.830	57.96	34	1.971
32	6.310	75.72	26	1.969
Rebar can be Supplied in 6.0 mtr or 12 mtr Length				
Plain Round Bars are produced in 6.0 mtr & 12 Mtrs in 16 to 50 mm Dia				

Permissible Deviation From Nominal Mass

Standard	Size (mm)	Deviation(%)
BS 4449:1997 Gr.460B	8 to 10	± 6.5
	> 10	± 4.5
BS 4449:2005 Gr.B 500B	Up to 8	± 6.0
	> 8	± 4.5
ASTM A 615 Grade 60	Up to 10	± 8.0
	> 10	± 6.0
DIN 488 :2009 Gr B500B	Up to 8	± 6.0
	> 8	± 4.5

Bundle Characteristics	
Weight	1.2 M.T.
Diameter of Bundle	150 to 300 mm (varies according to dia of rebar 8 mm to 36 mm)
Straps Per Bundle	Minimum 4 (Two end straps will be 0.50 Mtr from the End)