

Technical Data Sheet

Hot Rolled Carbon and Low Alloy Steel Rebars

Grade B500B

Size: 8-32 mm

Delivery Standard: BS 4449:2005+A3:2016, ISO 6935-2

Shape:



1-Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weighth	12m bar weighth	Transverse rib (mm)		Longitudinal rib (mm)		Rib spacing
d	An(mm2)	(kg/m)	w (kg)	b1	h1	b2	h2	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1.0	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1.3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1.5	1.8	6.1-8.3
14	154	1.15-1.27	13.79-15.25	1.4-2.8	0.91	2.0	2.1	7.1-9.7
16	201	1.50-1.66	18.01-19.91	1.6-3.2	1.04	2.0	2.4	8.2-11.0
18	254	1.90-2.10	22.80-25.20	1.8-3.6	1.17	2.0	2.7	9.2-12.4
20	314	2.35-2.59	28.16-31.12	2.0-4.0	1.30	2.0	3	10.2-13.8
22	380	2.83-3.13	33.97-37.55	2.2-4.4	1.43	2.0	3.3	11.2-15.2
25	491	3.70-4.00	44.35-48.05	2.5-5.0	1.63	2.0	3.8	12.8-17.3
28	616	4.64-5.02	55.64-60.28	2.8-5.6	1.82	2.5	4.2	14.3-19.3
32	804	6.06-6.56	72.69-78.75	3.2-6.4	2.08	3.0	4.5	16.3-22.1

2-Chemical Analysis

Grade	Standard	C	Si	Mn	P	S
B500B	BS 4449:2005	0.18-0.22	≤0.3	0.6-0.8	≤0.050	≤0.050

3-Mechanical Properties

		Yield Strength	Tensile Strength	Stress Ratio	Elongation (%)		
Grade	Symbol	ReH, N/mm ²	R _m , N/mm ²	R _m /ReH≥	A ₅	A ₁₀	Agt
B500B	B500B	≥500	-	1.08	-	-	≥5