

Important Note: Samples as supplied to us have been tested. BRTC does not have any responsibility as to the representative character of the samples required to be tested. It is recommended that the samples are sent in a secure and sealed cover/packet/container under the signature of a competent authority. In order to avoid fraudulent fabrication of test results, this report has been printed on a security paper. It is also recommended that the test results be collected by a duly authorized person.

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[illegible]

Conversion factor: $1.0 \text{ MPa} = 1.0 \text{ N/mm}^2 = 145 \text{ psi}$. Strengths are based on nominal area

BS ISO 6935-2:2016 weight requirements	nominal area, cm ²	6	8	10	12	14	16	20	22*	25	28	32	40	50
Nominal bar dia., mm		6	8	10	12	14	16	20	22*	25	28	32	40	50
Nominal cross sectional area, sq. mm		283	503	785	113	154	201	314	380	491	616	804	1257	1964
Nominal mass per unit length		0.222	0.399	0.616	0.887	1.21	1.58	2.46	2.98	3.85	4.84	6.31	9.87	15.42
Permissible deviation, %		±8	±8	±6	±6	±5	±5	±5	±5	±4	±4	±4	±4	±4

unit length	I0	I0	I0	I0	I0	I0	I0	I0
Permissible deviation,%								

Actual diameter is the diameter of a perfectly round plain bar having same mass per unit length.

BDS ISO 6935-2 Tensile Requirements for Common Steel Grades

Steel Grade	Yield Strength, R_{el} , MPa		Ductility Properties		
	Min.	Max.	R_m/R_{el} min.	Elongation, % (min.)	At R_m
B400C-R	400	..	1,15	14	7
B400CWR	400	..	1,15	14	7
B500C-R	500	..	1,15	14	7
B500CWR	500	..	1,15	14	7
B600C-R	600	..	1,15	10	7
B550CWR	450	1,25 R_{el} (min.)	1,15	..	7,5
B400DWR	400	1,3 R_{el} (min.)	1,25	17	8
B420DWR	420	1,3 R_{el} (min.)	1,25	16	8
B500DWR	500	1,3 R_{el} (min.)	1,25	13	8

Countersigned by:

Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge

Dept. of Civil Engng., BUET, Dhaka-1000, Bangladesh

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25 June 2023

Test performed by:

Dr. Md. Ferdous Alam

Assistant Professor, Dept. of Civil Engng., B

