BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)

DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: (8802) - 55167100, 55167228-57 Ext. 7226, Info: http://brtc.ce.buet.ac.bd/#/home, Report verification: http://verify.ce.buet.ac.bd

STRENGTH OF MATERIALS LABORATORY

BRTC
Bureau of Research Testing & Consultatio

TEST OF DEFORMED M.S. BARS [BDS ISO 6935-2:2016]

Sent by: Engr. Md. Maksudul Karim, General Manager (Plant)
Shahriar Steel Mills Ltd., Konapara, Jatrabari, Dhaka
Project: - - -

BRTC No.: 1102-97526/CE/23-24; Dt. 6/8/2023
Ref.: Letter; Dt. 6/8/2023
Date of Test: 7/8/2023
Contractor/supplier: - - -
Samples were received in UNSEALED condition.

Sl. No.	Frog Mark / Identification	Nominal dia.	Actual dia.	Mass Per Unit Length	Average Mass Per Unit Length	Yield or Proof Load	Yield or Proof Strength R_{eH}	Average Yield Strength, R_{eH}	Tensile Load	Tensile Strength R_m	Average Tensile Strength, R_m	R_m/R_{eH}	Total Elongation (%) (G.length = 5d)	Average Total Elongation (%)	Bend Test (Seperate samples)	Rebend Test (Separa samples
		mm	mm	kg/m	kg/m	kN	MPa	MPa	kN	MPa	MPa					
1	SSRM B500 CWR	10	9.8	0.591		43.2	545		49.3	625			24		Satisfactory	Satisfact
2	SSRM B500 CWR	10	9.7	0.583	0.585	43.2	545	545	49.3	625	625	1.15	24	25	Satisfactory	Satisfact
3	SSRM B500 CWR	10	9.7	0.580		42.2	535		49.3	625			26		Satisfactory	Satisfact
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BDS ISO 6935-2:2016 Weight Requirements, Nominal Area etc. (Table 2).

Nominal bar dia., mm		6	8	10	12	14	16	20	*22*	25	28	32	40	50
Nominal cross sectional area, sq.mm		28.3	50.3	78.5	113	154	201	314	*380*	491	616	804	1257	1964
Nominal mass per unit length	Nominal, kg/m	0.222	0.395	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

*22mm dia. bar is not covered in BDS ISO 6935-2:2016. Its properties are derived following the principle used for other bar sizes.
Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016.
Actual diameter is the diameter of a perfectly round plain bar having same mass per unit length.

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

BDS ISO 6935-2 Tensile Requirements for Common Steel Grades

Steel Grade	Yield Strength, R_{eH}, MPa		Ductiliy Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.) Total	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
B450CWR	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400DWR	400	1.3 R_{eH} (min.)	1.25	17	8
B420DWR	420	1.3 R_{eH} (min.)	1.25	16	8
B500DWR	500	1.3 R_{eH} (min.)	1.25	13	8

44
PrNNNGENW

07 August 2023

Countersigned by:
Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge
Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

Test performed by:
Dr. Md. Shafiul Bari
Professor, Dept. of Civil Engg., BUET

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 fradulent fabrication of test results, this report has been printed on a security pap It is also recommended that the test results be collected by a duly authorized person.*

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)

DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: (8802) - 55167100, 55167228-57 Ext. 7226, Info: http://brtc.ce.buet.ac.bd/#/home, Report verification: http://verify.ce.buet.ac.bd

STRENGTH OF MATERIALS LABORATORY

BRTC Bureau of Research Testing & Consultatio

TEST OF DEFORMED M.S. BARS [BDS ISO 6935-2:2016]

Sent by: Engr. Md. Maksudul Karim, General Manager (Plant)
Shahriar Steel Mills Ltd., Konapara, Jatrabari, Dhaka

Project: - - -

BRTC No.: 1102-97526/CE/23-24; Dt. 6/8/2023
Ref.: Letter; Dt. 6/8/2023
Date of Test: 7/8/2023
Contractor/supplier: - - -
Samples were received in UNSEALED condition.

Sl. No.	Frog Mark / Identification	Nominal dia.	Actual dia.	Mass Per Unit Length	Average Mass Per Unit Length	Yield or Proof Load	Yield or Proof Strength R_{eH}	Average Yield Strength, R_{eH}	Tensile Load	Tensile Strength R_m	Average Tensile Strength, R_m	R_m/R_{eH}	Total Elongation (%) (G.length = 5d)	Average Total Elongation (%)	Bend Test (Seperate samples)	Rebend Test (Seperate samples)
		mm	mm	kg/m	kg/m	kN	MPa	MPa	kN	MPa	MPa					
1	SSRM B500 CWR	**12**	12.1	0.898		59.5	**525**		68.6	**605**			**22**		**Satisfactory**	**Satisfact**
2	SSRM B500 CWR	**12**	12.1	0.902	**0.899**	60.5	**535**	**530**	69.6	**615**	**615**	**1.16**	**22**	**22**	**Satisfactory**	**Satisfact**
3	SSRM B500 CWR	**12**	12.1	0.898		59.5	**525**		69.6	**615**			**22**		**Satisfactory**	**Satisfact**
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-

BDS ISO 6935-2:2016 Weight Requirements, Nominal Area etc. (Table 2).

Nominal bar dia., mm		6	8	10	12	14	16	20	*22**	25	28	32	40	50
Nominal cross sectional area, sq.mm		28.3	50.3	78.5	113	154	201	314	*380*	491	616	804	1257	1964
Nominal mass per unit length	Nominal, kg/m	0.222	0.395	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

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

*22mm dia. bar is not covered in BDS ISO 6935-2:2016. Its properties are derived following the principle used for other bar sizes.
Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016.
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_{eH}, MPa		Ductiliy Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.) Total	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
B450CWR	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400DWR	400	1.3 R_{eH} (min.)	1.25	17	8
B420DWR	420	1.3 R_{eH} (min.)	1.25	16	8
B500DWR	500	1.3 R_{eH} (min.)	1.25	13	8

45

rjHFMQdng

07 August 2023

Countersigned by:
Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge
Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

Test performed by:
Dr. Md. Shafiul Bari
Professor, Dept. of Civil Engg., BUET

Department of Civil Engg. BUET, Dhaka-1000, Bangla

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 fradulent fabrication of test results, this report has been printed on a security pap It is also recommended that the test results be collected by a duly authorized person.*

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)
DEPARTMENT OF CIVIL ENGINEERING
Mobile: 01819557964; PABX: (8802) - 55167100, 55167228-57 Ext. 7226, Info: http://brtc.ce.buet.ac.bd/#/home, Report verification: http://verify.ce.buet.ac.bd

STRENGTH OF MATERIALS LABORATORY

BRTC
Bureau of Research
Testing & Consultat

TEST OF DEFORMED M.S. BARS [BDS ISO 6935-2:2016]

Sent by: Engr. Md. Maksudul Karim, General Manager (Plant)
Shahriar Steel Mills Ltd., Konapara, Jatrabari, Dhaka

Project: - - -

BRTC No.: 1102-97526/CE/23-24; Dt. 6/8/2023
Ref.: Letter; Dt. 6/8/2023
Date of Test: 7/8/2023
Contractor/supplier: - - -
Samples were received in UNSEALED condition.

Sl. No.	Frog Mark / Identification	Nominal dia.	Actual dia.	Mass Per Unit Length	Average Mass Per Unit Length	Yield or Proof Load	Yield or Proof Strength R_{eH}	Average Yield Strength, R_{eH}	Tensile Load	Tensile Strength R_m	Average Tensile Strength, R_m	R_m/R_{eH}	Total Elongation (%) (G.length = 5d)	Average Total Elongation (%)	Bend Test (Seperate samples)	Rebend Test (Sepera sample
		mm	mm	kg/m	kg/m	kN	MPa	MPa	kN	MPa	MPa					
1	SSRM B500 CWR	**16**	15.8	1.547		112	**560**		138	**685**			**20**		**Satisfactory**	**Satisfact**
2	SSRM B500 CWR	**16**	15.8	1.536	**1.543**	115	**575**	**565**	136	**675**	**675**	**1.19**	**21**	**20**	**Satisfactory**	**Satisfact**
3	SSRM B500 CWR	**16**	15.8	1.547		112	**560**		135	**670**			**19**		**Satisfactory**	**Satisfact**
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-

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

BDS ISO 6935-2:2016 Weight Requirements, Nominal Area etc. (Table 2).

Nominal bar dia., mm		6	8	10	12	14	16	20	22*	25	28	32	40	50
Nominal cross sectional area, sq.mm		28.3	50.3	78.5	113	154	201	314	380	491	616	804	1257	1964
Nominal mass per unit length	Nominal, kg/m	0.222	0.395	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

*22mm dia. bar is not covered in BDS ISO 6935-2:2016. Its properties are derived following the principle used for other bar sizes.
Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016.
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_{eH}, MPa		Ductility Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.) Total	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
B450CWR	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400DWR	400	1.3 R_{eH} (min.)	1.25	17	8
B420DWR	420	1.3 R_{eH} (min.)	1.25	16	8
B500DWR	500	1.3 R_{eH} (min.)	1.25	13	8

46
eL7BfGhK2

Countersigned by:
Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge
Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

07 August 2023
Test performed by:
Dr. Md. Shafiul Bari
Professor, Dept. of Civil Engg., BUET

Department of Civil Eng... BUET, Dhaka-1000, Bangla...

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 fradulent fabrication of test results, this report has been printed on a security pa*
It is also recommended that the test results be collected by a duly authorized person.

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)

DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: (8802) - 55167100, 55167228-57 Ext. 7226, Info: http://brtc.ce.buet.ac.bd/#/home, Report verification: http://verify.ce.buet.ac.bd

STRENGTH OF MATERIALS LABORATORY

BRTS
Bureau of Research Testing & Consultati

TEST OF DEFORMED M.S. BARS [BDS ISO 6935-2:2016]

Sent by: Engr. Md. Maksudul Karim, General Manager (Plant)
Shahriar Steel Mills Ltd., Konapara, Jatrabari, Dhaka

Project: - - -

BRTC No.: 1102-97526/CE/23-24; Dt. 6/8/2023
Ref.: Letter; Dt. 6/8/2023
Date of Test: 7/8/2023
Contractor/supplier: - - -
Samples were received in UNSEALED condition.

Sl. No.	Frog Mark / Identification	Nominal dia.	Actual dia.	Mass Per Unit Length	Average Mass Per Unit Length	Yield or Proof Load	Yield or Proof Strength R_{eH}	Average Yield Strength, R_{eH}	Tensile Load	Tensile Strength R_m	Average Tensile Strength, R_m	R_m/R_{eH}	Total Elongation (%) (G.length = 5d)	Average Total Elongation (%)	Bend Test (Seperate samples)	Rebend Test (Separa sample
		mm	mm	kg/m	kg/m	kN	MPa	MPa	kN	MPa	MPa					
1	SSRM B500 CWR	**20**	19.9	2.448		182	**580**		212	**675**			**22**		**Satisfactory**	**Satisfact**
2	SSRM B500 CWR	**20**	19.9	2.437	**2.440**	175	**555**	**570**	206	**660**	**670**	**1.18**	**21**	**22**	**Satisfactory**	**Satisfact**
3	SSRM B500 CWR	**20**	19.9	2.435		179	**570**		210	**670**			**22**		**Satisfactory**	**Satisfact**
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BDS ISO 6935-2:2016 Weight Requirements, Nominal Area etc. (Table 2).

Nominal bar dia., mm		6	8	10	12	14	16	20	*22**	25	28	32	40	50
Nominal cross sectional area, sq.mm		28.3	50.3	78.5	113	154	201	314	*380*	491	616	804	1257	1964
Nominal mass per unit length	Nominal, kg/m	0.222	0.395	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

*22mm dia. bar is not covered in BDS ISO 6935-2:2016. Its properties are derived following the principle used for other bar sizes.
Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016.
Actual diameter is the diameter of a perfectly round plain bar having same mass per unit length.

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

BDS ISO 6935-2 Tensile Requirements for Common Steel Grades

Steel Grade	Yield Strength, R_{eH}, MPa		Ductiliy Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.) Total	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
B450CWR	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400DWR	400	1.3 R_{eH} (min.)	1.25	17	8
B420DWR	420	1.3 R_{eH} (min.)	1.25	16	8
B500DWR	500	1.3 R_{eH} (min.)	1.25	13	8

47

J7XhCBfPW

07 August 2023

Countersigned by:
Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge
Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

Test performed by:
Dr. Md. Shafiul Bari
Professor, Dept. of Civil Engg., BUET

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 fradulent fabrication of test results, this report has been printed on a security pap It is also recommended that the test results be collected by a duly authorized person.*

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY (BUET)
DEPARTMENT OF CIVIL ENGINEERING

Mobile: 01819557964; PABX: (8802) - 55167100, 55167228-57 Ext. 7226, Info: http://brtc.ce.buet.ac.bd/#/home, Report verification: http://verify.ce.buet.ac.bd

BRTC Bureau of Research Testing & Consultat

STRENGTH OF MATERIALS LABORATORY

TEST OF DEFORMED M.S. BARS [BDS ISO 6935-2:2016]
Sent by: Engr. Md. Maksudul Karim, General Manager (Plant)
Shahriar Steel Mills Ltd., Konapara, Jatrabari, Dhaka
Project: - - -

BRTC No.: 1102-97526/CE/23-24; Dt. 6/8/2023
Ref.: Letter; Dt. 6/8/2023
Date of Test: 7/8/2023
Contractor/supplier: - - -
Samples were received in UNSEALED condition.

Sl. No.	Frog Mark / Identification	Nominal dia.	Actual dia.	Mass Per Unit Length	Average Mass Per Unit Length	Yield or Proof Load	Yield or Proof Strength R_{eH}	Average Yield Strength, R_{eH}	Tensile Load	Tensile Strength R_m	Average Tensile Strength, R_m	R_m/R_{eH}	Total Elongation (%) (G.length = 5d)	Average Total Elongation (%)	Bend Test (Seperate samples)	Rebend Test (Sepera sample
		mm	mm	kg/m	kg/m	kN	MPa	MPa	kN	MPa	MPa					
1	SSRM B500 CWR	25	24.7	3.759		275	560		326	665			22		Satisfactory	Satisfact
2	SSRM B500 CWR	25	24.6	3.739	3.748	273	555	560	323	655	660	1.18	22	22	Satisfactory	Satisfact
3	SSRM B500 CWR	25	24.7	3.747		274	560		324	660			22		Satisfactory	Satisfact
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-		-	-		-	-			-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-		-	-		-	-			-		-	-

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

BDS ISO 6935-2:2016 Weight Requirements, Nominal Area etc. (Table 2).

Nominal bar dia., mm		6	8	10	12	14	16	20	22*	25	28	32	40	50
Nominal cross sectional area, sq.mm		28.3	50.3	78.5	113	154	201	314	380	491	616	804	1257	1964
Nominal mass per unit length	Nominal, kg/m	0.222	0.395	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

*22mm dia. bar is not covered in BDS ISO 6935-2:2016. Its properties are derived following the principle used for other bar sizes.
Actual diameter of bars are shown for informative purpose only. It is not a requirement of BDS ISO 6935-2:2016.
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_{eH}, MPa		Ductiliy Properties		
	Min.	Max.	R_m/R_{eH} min.	Elongation, % (min.) Total	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
B450CWR	450	1.25 R_{eH} (min.)	1.15	--	7.5
B400DWR	400	1.3 R_{eH} (min.)	1.25	17	8
B420DWR	420	1.3 R_{eH} (min.)	1.25	16	8
B500DWR	500	1.3 R_{eH} (min.)	1.25	13	8

48
dAfW9bTT4

07 August 2023

Countersigned by:
Prof. Dr. Hasib Mohammed Ahsan, Test-in-Charge
Dept. of Civil Engg., BUET, Dhaka-1000, Bangladesh

Test performed by:
Dr. Md. Shafiul Bari
Professor, Dept. of Civil Engg., BUET

Department of Civil Eng... BUET, Dhaka-1000, Bangl...

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 fradulent fabrication of test results, this report has been printed on a security pape It is also recommended that the test results be collected by a duly authorized person.*