



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Deputy Director (QCD)
 WASA (LDA), Lahore
 (R.C.C. Manhole Covers Maintenance of Drainage System and C.I. Rings (M/s Eagle RCC Pipe Industry))

Reference # CED/TFL **32280** (Dr. Ali Ahmed)
 Reference of the request letter # QCD/2033-34

Dated: 24-12-2018
 Dated: 20-12-2018

Tension Test Report (Page – 1/2)

Date of Test 01-01-2019
 Gauge length 2 inches
 Description Angle Iron Strip Tensile and Bend Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)		(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Angle Iron	2x2x1/4	24.60x7.10	174.66	6100	10000	342.61	561.66	0.60	30.00	
2	Angle Iron	2x2x1/4	24.60x7.10	174.66	6400	10300	359.46	578.51	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile and One Sample for Bend Test											
Bend Test											
Strip Taken from Angle Iron (2"x2"x1/4") Bend Test Through 180° is Satisfactory											

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
Deputy Director (QCD)
WASA (LDA), Lahore
(R.C.C. Manhole Covers Maintenance of Drainage System and C.I. Rings (M/s Eagle RCC Pipe Industry))

Reference # CED/TFL **32280** (Dr. Ali Ahmed)
Reference of the request letter # QCD/2033-34

Dated: 24-12-2018
Dated: 20-12-2018

Weight & Size Test Report (Page – 2/2)

Date of Test 01-01-2019
Gauge length -----
Description Angle Iron Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	2x2x1/4	3175	60.10	5.28	51.60	51.40	7.00	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only One Sample for Test								

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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To,
 Resident Engineer
 EA Consulting (Pvt) Ltd
 Sukkur – Multan Motorway Project Section-III (CSCEC)

Reference # CED/TFL **32291** (Dr. Ali Ahmed)
 Reference of the request letter # RE/EA/M.P-III/279-2018

Dated: 26-12-2018
 Dated: 24-12-2018

Tension Test Report (Page – 1/3)

Date of Test 01-01-2019
 Gauge length 2 inches
 Description Pipe & Angle Strip Tensile and Bend Test as per ASTM A53

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)										
1	Hot Galvanized Pipe DN 80mm	4	21.20x3.80	80.56	2400	4050	292.25	493.18	0.50	25.00	
2			21.20x3.80	80.56	2300	4000	280.08	487.09	0.50	25.00	
3	GI Pipe DN 50mm	3	21.30x3.00	63.90	2400	3500	368.45	537.32	0.20	10.00	
4			21.30x3.00	63.90	2400	3500	368.45	537.32	0.20	10.00	
5	Hot Galvanized Pipe DN 100mm	4.50	21.40x4.80	102.72	3600	4700	343.81	448.86	0.50	25.00	
6			21.40x4.80	102.72	3700	4800	353.36	458.41	0.50	25.00	
Only Ten Samples for Tensile and Five Samples for Bend Test											
Bend Test											

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project Section-III (CSCEC)

Reference # CED/TFL **32291** (Dr. Ali Ahmed)
Reference of the request letter # RE/EA/M.P-III/279-2018

Dated: 26-12-2018
Dated: 24-12-2018

Weight & Size Test Report (Page – 3/3)

Date of Test 01-01-2019
Gauge length -----
Description Angle Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(mm)	(mm)							
1	GI Angle Iron	50x50x5	950	31.30	3.04	48.60	47.90	4.40	
2	Steel Angle	40x4	726	31.10	2.33	37.50	38.4	4.30	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only Two Samples for Test									

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project Section-III (CSCEC)

Reference # CED/TFL **32291** (Dr. Ali Ahmed)
Reference of the request letter # RE/EA/M.P-III/279-2018

Dated: 26-12-2018
Dated: 24-12-2018

Weight & Size Test Report (Page – 3/3)

Date of Test 01-01-2019
Gauge length -----
Description Angle Weight and Size Test

Sr. No.	Designation		Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(mm)	(mm)							
1	GI Angle Iron	50x50x5	950	31.30	3.04	48.60	47.90	4.40	
2	Steel Angle	40x4	726	31.10	2.33	37.50	38.4	4.30	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only Two Samples for Test									

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To,
Resident Engineer
EA Consulting (Pvt) Ltd
Sukkur – Multan Motorway Project Section-III (CSCEC)

Reference # CED/TFL **32303** (Dr. Ali Ahmed)
Reference of the request letter # CRE/EA/M.P-III/281-2018

Dated: 27-12-2018
Dated: 26-12-2018

Tension Test Report (Page – 1/1)

Date of Test 01-01-2019
Gauge length 2 inches
Description Steel Plate Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(Kg)	(Kg)	(MPa)	(MPa)	(in)		
1	16	24.80x10.00	248.00	10200	14300	403.48	565.66	0.70	35.00	
2	10	24.70x12.00	296.40	12600	17700	417.02	585.82	0.70	35.00	
3	12	24.90x14.00	348.60	13200	19100	371.46	537.50	0.80	40.00	
4	14	27.40x16.00	438.40	16800	20900	375.93	467.68	0.90	45.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Four Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Manager Quality
Banu Mukhtar Steel (Pvt) Ltd
Lahore

Reference # CED/TFL **32307** (Dr. Ali Ahmed)
Reference of the request letter # BMS-QA/QC- 042/18

Dated: 27-12-2018
Dated: 12-12-2018

Tension Test Report (Page – 1/5)

Date of Test 01-01-2019
Gauge length 2 inches
Description CS Plates Steel Strip Tensile Test as per ASTM A-572 Gr. 50

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	04	28.00x4.00	112.00	3800	5800	332.84	508.02	0.70	35.00	TT01
2	04	28.00x4.00	112.00	3800	5800	332.84	508.02	0.70	35.00	TT02
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Department of Civil Engineering
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To,
Manager Quality
Banu Mukhtar Steel (Pvt) Ltd
Lahore

Reference # CED/TFL **32307** (Dr. Ali Ahmed)
Reference of the request letter # BMS-QA/QC- 043/18

Dated: 27-12-2018
Dated: 12-12-2018

Tension Test Report (Page – 2/5)

Date of Test 07-12-2018
Gauge length 2 inches
Description CS Plates Steel Strip Tensile Test as per ASTM A-572 Gr. 50

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	05	27.70x5.00	138.50	4600	7000	325.82	495.81	0.80	40.00	TT-01
2	05	27.70x5.00	138.50	4600	7000	325.82	495.81	0.80	40.00	TT-02
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
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Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Manager Quality
Banu Mukhtar Steel (Pvt) Ltd
Lahore

Reference # CED/TFL **32307** (Dr. Ali Ahmed)
Reference of the request letter # BMS-QA/QC- 044/18

Dated: 27-12-2018
Dated: 12-12-2018

Tension Test Report (Page – 3/5)

Date of Test 07-12-2018
Gauge length 2 inches
Description CS Plates Steel Strip Tensile Test as per ASTM A-572 Gr. 50

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	06	28.00x6.00	168.00	5700	8800	332.84	513.86	0.75	37.50	TT-01
2	06	28.00x6.00	168.00	5500	8800	321.16	513.86	0.70	35.00	TT-02
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Manager Quality
Banu Mukhtar Steel (Pvt) Ltd
Lahore

Reference # CED/TFL **32307** (Dr. Ali Ahmed)
Reference of the request letter # BMS-QA/QC- 045/18

Dated: 27-12-2018
Dated: 12-12-2018

Tension Test Report (Page – 4/5)

Date of Test 07-12-2018
Gauge length 2 inches
Description CS Plates Steel Strip Tensile Test as per ASTM A-572 Gr. 50

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	8	27.80x7.70	214.06	5800	9200	265.80	421.62	0.90	45.00	TT-01
2	8	28.00x7.75	217.00	5900	9200	266.72	415.91	0.80	40.00	TT-02
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Test Floor Laboratory
Department of Civil Engineering
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To,
Manager Quality
Banu Mukhtar Steel (Pvt) Ltd
Lahore

Reference # CED/TFL **32307** (Dr. Ali Ahmed)
Reference of the request letter # BMS-QA/QC- 046/18

Dated: 27-12-2018
Dated: 12-12-2018

Tension Test Report (Page – 5/5)

Date of Test 07-12-2018
Gauge length 2 inches
Description CS Plates Steel Strip Tensile Test as per ASTM A-572 Gr. 50

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	10	28.00x9.90	277.20	10200	14300	360.97	506.07	0.90	45.00	TT-01
2	10	28.10x9.80	275.38	10300	14300	366.92	509.42	0.80	40.00	TT-02
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test										
Bend Test										

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
 Sub Divisional Officer
 Highway Sub Division, Wazirabad
 (Construction of Pile Foundation Bridge over Nallah Ralkhu I/C Approach Road at Village
 Wadala Cheema (Length = 2.10 kms) in Tehsil Wazirabad District Gujranwala

Reference # CED/TFL **32317** (Dr. Ali Ahmed)
 Reference of the request letter # 68/W

Dated: 28-12-2018
 Dated: 22-05-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.373	3	0.374	0.11	0.110	3200	4800	64200	64280	96200	96500	1.30	16.3	
2	0.373	3	0.374	0.11	0.110	3100	4800	62200	62330	96200	96600	1.40	17.5	
3	4.208	10	1.255	1.27	1.237	34800	51000	60400	62010	88600	90900	1.70	21.3	
4	4.154	10	1.247	1.27	1.221	40400	55400	70200	72930	96200	100100	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
 Sub Divisional Officer
 Tube Well Sub Division
 Daudkhel
 Channelization of Rakka and Darsola Nullahs in tehsil Isa Khel District Mianwali

Reference # CED/TFL **32319** (Dr. Ali Ahmed)
 Reference of the request letter # 293/4-W

Dated: 28-12-2018
 Dated: 10-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.370	0.11	0.108	3700	5000	74200	75650	100200	102300	0.80	10.0	
2	0.366	3	0.370	0.11	0.108	3700	5000	74200	75830	100200	102500	1.00	12.5	
3	4.130	10	1.243	1.27	1.214	40000	57200	69500	72630	99300	103900	1.40	17.5	
4	4.125	10	1.242	1.27	1.212	41000	57600	71200	74540	100000	104800	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 NESPAK
 Construction Supervision of Sewerage & W/S Scheme WASA, Multan

Reference # CED/TFL **32320** (Dr. Ali Ahmed)
 Reference of the request letter # 3907/11/HAM/01/36

Dated: 28-12-2018
 Dated: 20-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.370	9	9.45	0.11	0.109	4000	5100	80200	81160	102200	103500	1.10	13.8	
2	0.367	9	9.42	0.11	0.108	4100	5100	82200	83690	102200	104100	0.75	9.4	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
9mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Civil Supervisor
 Ambition Apparel
 20-km Ferozpur Road Glaxo Town, Lahore

Reference # CED/TFL **32325** (Dr. Ali Ahmed)
 Reference of the request letter # Nil

Dated: 28-12-2018
 Dated: 28-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3	0.375	0.11	0.110	3200	4900	64200	64010	98200	98100	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 XEN
 GE (air) Lahore
 (Construction of Infrastructure for 109 AED at PAF Base Lahore CA No. ENC-PAF-03/2019)

Reference # CED/TFL **32326** (Dr. Ali Ahmed)
 Reference of the request letter # 6823/53/E-6

Dated: 28-12-2018
 Dated: 14-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Grade
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.381	3/8	0.378	0.11	0.112	3000	4500	60200	59040	90200	88600	1.50	18.8	40
2	0.385	3/8	0.379	0.11	0.113	3000	4500	60200	58480	90200	87800	1.50	18.8	
3	0.370	3/8	0.372	0.11	0.109	3200	5000	64200	64810	100200	101300	1.00	12.5	60
4	0.367	3/8	0.370	0.11	0.108	3100	4900	62200	63410	98200	100300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Project Manager
 Master Tiles, Kamoke
 Gujranwala
 (Master Tiles Ware House-2)

Reference # CED/TFL **32327** (Dr. Ali Ahmed)
 Reference of the request letter # Nil

Dated: 31-12-2018
 Dated: 13-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.365	3	0.370	0.11	0.107	3400	5000	68200	69850	100200	102800	1.00	12.5	
2	0.369	3	0.372	0.11	0.108	3700	5100	74200	75230	102200	103700	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 SQN LDR
 GE (Air) Rafiqui
 Rehabilitation of Guard Room at PAF Base Rafiqui CA No. CMES-SGD-13/2019
 (M/s Javed Abdullah Construction Co)

Reference # CED/TFL **32329** (Dr. Ali Ahmed)
 Reference of the request letter # 6163/20/E-6

Dated: 31-12-2019
 Dated: 28-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Grade
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.355	3	0.365	0.11	0.104	2600	4100	52100	54890	82200	86600	1.10	13.8	40
3	0.361	3	0.367	0.11	0.106	2600	4200	52100	54070	84200	87400	1.30	16.3	60
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: only two samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 SQN LDR
 GE (Air) Rafiqui
 Construction of Church (Phase-II) at PAF Base Rafiqui CA No. CEAf-CZ-21/2019
 (M/s Naji Traders & Builders)

Reference # CED/TFL **32330** (Dr. Ali Ahmed)
 Reference of the request letter # 6182/08/E-6

Dated: 31-12-2019
 Dated: 28-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2018
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Grade
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.385	3	0.380	0.11	0.113	3100	5000	62200	60390	100200	97400	0.90	11.3	60
3	0.337	3	0.355	0.11	0.099	2200	3000	44100	48950	60200	66800	1.50	18.8	40
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: only two samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 Al-Imam Enterprises (Pvt) Ltd
 Construction of Penta Square, Phase-V, D.H.A, Lahore
 'FF Steel'

Reference # CED/TFL 32331 (Dr. Ali Ahmed)

Dated: 31-12-2018

Reference of the request letter # Al-Imam/746/PS-1/DHA/LHE/732

Dated: 28-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2019

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.383	10	9.61	0.11	0.112	3700	5200	74200	72520	104200	102000	1.00	12.5	
2	0.384	10	9.63	0.11	0.113	3600	5100	72200	70330	102200	99700	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
M/S Defence Housing Authority.
Lahore Cantt
(Infra Development Works Sector-E, DHA Phase-IX)(M/s Inland)

Reference # CED/TFL **32332** (Dr. Ali Ahmed)
Reference of the request letter # 408/241/E/Lab/384/11

Dated: 31-12-2018
Dated: 31-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.373	3	0.373	0.11	0.110	3000	4800	60200	60380	96200	96600	1.20	15.0	City Steel
2	0.381	3	0.378	0.11	0.112	3000	4900	60200	59060	98200	96500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 SQN LDR
 GE (Air) Rafiqui
 Rehabilitation of Parallel Taxi Track at PAF Base Rafiqui CA No. ENC-PAF-89/2018

Reference # CED/TFL **32334** (Dr. Safer Abbas)
 Reference of the request letter # 6000-432/75/E-6

Dated: 01-01-2019
 Dated: 28-12-2018

Tension Test Report (Page -1/1)

Date of Test 01-01-2019
 Gauge length 2 inches
 Description Plain Steel Bar Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	8.979	1 ¹ / ₂	38.16	-----	1143.8	49600	87400	425	750	0.5	25.0	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test												
Bend Test												

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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