

Khurashid -ul - Hassan

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Resident Engineer, Prime Engineer Consultancy, KallurKot Bridge Project

Client Reference: PE-BA-JV/KK-DIK/2019/020

Dated: 06-05-2019

SOM Lab Ref: CED/SOM/763(Page-1/1)

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Sample Type: Deformed Bar(Nomee Steel)

Gauge Length:

200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.920	25	25.21	491	499	219.00	347.20	446	439	707	696	35.0	200	17.5	
2	0.876	12	11.92	113	112	49.50	73.00	438	444	645	655	32.5	200	16.3	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four Samples Received and Tested
12mm	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Liberty
Forum
91-C/III, Noor Jahan Road, Gulberg -III, Lahore

Test Performed By:

Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: nil
SOM Lab Ref: CED/SOM/769(Page-1/1)

Dated: 06-05-2019
Dated: 06-05-20198

Test: Tension Test & Bend Test
Sample Type: Deformed Bar

Test Specification: ASTM-A 615
Gauge Length: 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.987	25	25.43	491	508	292.20	361.50	595	576	736	712	32.5	200	16.3	
2	3.844	25	24.97	491	490	267.20	336.50	544	546	686	688	30.0	200	15.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Prof . Dr. Aman Ullah Khan

Acting Project Director, Air University, Multan Campus, 4-5th Floor, Khan Centre, Abdali Road, Multan

Test Performed By:

Dr. /Engr.

S. Asad Ali Gillani

Client Reference: MUX/AUMC/AB1/2018/77

Dated: 06-05-2019

SOM Lab

Ref: 760(P-1/1)

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Itteaq Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.628	8	0.991	0.79	0.772	26.12	33.46	72910	74610	93400	95580	1.50	8.0	18.8	
2	2.677	8	1.001	0.79	0.787	28.00	36.36	78180	78470	101510	101900	1.20	8.0	15.0	
3	1.524	6	0.755	0.44	0.448	17.56	21.05	88040	86470	105510	103630	1.00	8.0	12.5	
4	1.526	6	0.755	0.44	0.448	17.23	20.54	86350	84810	102960	101120	1.00	8.0	12.5	
5	1.074	5	0.634	0.31	0.316	13.63	16.00	96960	95120	113860	111700	0.80	8.0	10.0	
6	1.041	5	0.624	0.31	0.306	12.61	14.78	89710	90880	105160	106530	0.90	8.0	11.3	
7	0.649	4	0.493	0.20	0.191	4.76	6.78	52500	54970	74750	78280	1.50	8.0	18.8	
8	0.647	4	0.492	0.20	0.190	4.79	6.88	52840	55620	75880	79870	1.70	8.0	21.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Khurashid -ul-Hassan

Test Performed By: Dr. /Engr.

Nauman
Khurram

Resident Engineer, Prime Engineering Consultancy, Kallurkot Bidge Project

Client Reference: PE-BA-JV/KK-DIK/2019/019

SOM Lab

Ref: 762 (Page-1/1)

Dated: 04-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.497	5	0.748	0.31	0.440	12.44	18.83	88480	62340	133950	94370	1.70	8.0	21.3	
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BEND TEST:

--	No Bend test performed	Note:- Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Zafar Iqbal
Project Manager, Liberty Condominiums, Lahore

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: LC/T/2/16

SOM Lab

Ref: 766(Page-1/3)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.645	4	0.492	0.20	0.190	5.89	8.28	64970	68390	91280	96080	1.30	8.0	16.3	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Zafar Iqbal
Project Manager, Liberty Condominiums, Lahore

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: LC/T/2/15

SOM Lab

Ref: 766(Page-2/3)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.480	6	0.744	0.44	0.435	12.13	17.48	60810	61500	87630	88640	1.70	8.0	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Zafar Iqbal
Project Manager, Liberty Condominiums, Lahore

Test Performed By: Dr. /Engr. S Asad Ali Gillani

Client Reference: LC/T/2/14

SOM Lab

Ref: 766(Page-3/3)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.629	8	0.992	0.79	0.773	25.18	36.29	70290	71840	101310	103540	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Faisal Mubarik Shabbir
Khan(Retd.)

Test Performed By: Dr. /Engr. Nauman Khurram

TBt, TI (M), Lieutenant Colonel, Additional Director Development, DHA Phaes-XI (Rehbar) Lahore

Client Reference: 700/3/Girls School/Ph-XI/Projs/1544

SOM Lab

Ref: 767(Page-1/1)

Dated: 03-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Moiz Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.636	8	0.993	0.79	0.775	24.77	34.05	69160	70490	95050	96890	1.50	8.0	18.8	
2	2.602	8	0.987	0.79	0.765	22.80	32.79	63660	65740	91550	94540	1.30	8.0	16.3	
3	1.506	6	0.751	0.44	0.443	13.32	19.57	66780	66330	98100	97440	1.40	8.0	17.5	
4	1.488	6	0.746	0.44	0.437	12.97	19.08	65000	65440	95650	96310	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

By Dir MTL, Extnt Elec Works U/G of IVY Green Sector-Z, - DHA , Ph-VIII - (M/S NLC)

Client Reference: 408/241/E/Lab/557/110

SOM Lab

Ref: 768(Page-1/1)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (FF
Steel)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.489	6	0.747	0.44	0.438	15.14	20.08	75880	76220	100660	101120	1.10	8.0	13.8	
2	1.493	6	0.748	0.44	0.439	15.21	20.03	76240	76410	100400	100630	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Shahzad Munir
Resident Engineer, G 3 Engineering Consultants (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr.

S Asad Ali
Gillani

Client Reference: G3/224/RE-10

SOM Lab

Ref: 772-(Page-1/1)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.643	8	0.995	0.79	0.777	26.86	36.26	74990	76240	101230	102920	1.40	8.0	17.5	
2	2.619	8	0.990	0.79	0.770	24.16	35.52	67450	69200	99180	101750	1.20	8.0	15.0	
3	2.611	8	0.988	0.79	0.767	23.60	35.98	65880	67860	100460	103470	1.20	8.0	15.0	
4	2.643	8	0.995	0.79	0.777	23.85	35.98	66590	67710	100460	102140	1.30	8.0	16.3	
5	2.635	8	0.993	0.79	0.774	23.85	34.98	66590	67970	97670	99690	1.20	8.0	15.0	
6	2.612	8	0.989	0.79	0.768	23.57	35.70	65800	67680	99660	102520	1.40	8.0	17.5	
7	2.570	8	0.980	0.79	0.755	23.13	35.44	64570	67570	98950	103540	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Eight Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

S. Asad Ali Gillani

Dy Dir MTL, Const of Commercial Plaza, DRGCC DHA Ph-VI, (M/S Construct)

Client Reference: 408/241/E/Lab/548/2211

SOM Lab

Ref: 773(Page-1/2)

Dated: 30-04-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Kamran Steel)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.460	6	0.739	0.44	0.429	12.61	18.93	63210	64830	94880	97320	1.40	8.0	17.5	
2	1.452	6	0.737	0.44	0.427	12.49	18.83	62590	64500	94370	97250	1.40	8.0	17.5	
3	0.649	4	0.493	0.20	0.191	6.09	8.15	67110	70270	89930	94170	1.20	8.0	15.0	
4	0.651	4	0.493	0.20	0.191	6.12	8.10	67450	70630	89370	93580	1.10	8.0	13.8	
5	0.651	4	0.493	0.20	0.191	6.14	8.38	67670	70860	92400	96760	1.40	8.0	17.5	
6	0.649	4	0.493	0.20	0.191	5.88	8.25	64860	67920	90940	95230	1.50	8.0	18.8	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Maj Adnan khalid®

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Dy Dir MTL, Const of Commercial Plaza, DRGCC DHA Ph-VI, (M/S Construct)

SOM Lab

Client Reference: 408/241/E/Lab/556/7321

Ref: 773(Page-2/2)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Kamran Steel)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.448	6	0.736	0.44	0.426	12.49	18.52	62590	64650	92840	95890	1.30	8.0	16.3	
2	1.496	6	0.748	0.44	0.440	13.32	19.52	66780	66780	97850	97850	1.50	8.0	18.8	
3	0.660	4	0.497	0.20	0.194	7.39	8.94	81500	84020	98580	101630	1.00	8.0	12.5	
4	0.661	4	0.497	0.20	0.194	7.24	8.92	79810	82280	98360	101400	1.00	8.0	12.5	
5	0.661	4	0.497	0.20	0.194	7.31	8.97	80600	83090	98920	101980	1.20	8.0	15.0	
6	0.654	4	0.494	0.20	0.192	7.29	8.92	80370	83720	98360	102460	1.10	8.0	13.8	
7	0.667	4	0.500	0.20	0.196	7.24	8.79	79810	81440	96900	98880	1.00	8.0	12.5	
8	0.662	4	0.498	0.20	0.195	7.26	8.79	80040	82090	96900	99380	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Abdullah Khadim
Resident Engineer, DAR Engineering

Test Performed By: Dr. /Engr. S. Asad Ali Gillani

Client Reference: DB-78/DAR/RE/ME/2019/0193

SOM Lab

Ref: 774(Page-1/1)

Dated: 06-05-2019

Dated: 06-05-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar(Kamran Steel)

Gauge Length: 8 inch

Sample Type:

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.467	6	0.741	0.44	0.431	13.51	19.64	67700	69120	98460	100520	1.30	8.0	16.3	A-49
2	1.480	6	0.744	0.44	0.435	12.86	18.95	64480	65230	94990	96080	1.30	8.0	16.3	A-49
3	1.494	6	0.748	0.44	0.439	13.35	18.86	66940	67090	94530	94740	1.40	8.0	17.5	P-773
4	1.493	6	0.748	0.44	0.439	13.25	19.08	66430	66580	95650	95870	1.30	8.0	16.3	P-773
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Six Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Test Performed By: Dr M. Irfan UI Hassan

Major (Retd) Syed Shahid Anwar
Resident Engineer
Package-8,
SMEC
Dera Ismail Khan

Client Reference: 5065060/RE/N-50/P-8/Material/2019/312 Dated 02-05-2019

SOM Laboratory Reference: CED/SOM/771(Page-1/1) Dated 06-05-2019

Test: Pull out Test ,

Sample Type: Expangrout Fix along with Literature for the test

Pull Out Test

S. No	Tension Pull Out Load Grout (kN)	Remarks
1	62.5	Grout Fails in Adhesion Between Concrete And Grout

