

Arfan Nazir  
Manager Civil, Nishat Mill Ltd, Lahore

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

Client Reference: NDF/ST/005

Dated: 01-09-2021

SOM Lab Ref: CED/SOM/4906(Page-1/1)

Dated: 02-09-2021

Test: Tension and Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar( AFCCO 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.872	25	25.05	491	493	284.00	374.00	579	577	762	759	37.5	200	18.8	
2	3.861	25	25.03	491	492	278.00	371.70	566	566	757	756	35.0	200	17.5	
3	2.441	20	19.90	314	311	146.00	191.70	465	470	610	617	32.5	200	16.3	
4	2.432	20	19.86	314	310	146.00	190.20	465	472	605	615	30.0	200	15.0	
5	1.592	16	16.07	201	203	84.20	117.70	419	416	585	581	40.0	200	20.0	
6	1.575	16	15.99	201	201	83.20	116.50	414	415	579	581	40.0	200	20.0	
7	1.003	12	12.76	113	128	65.70	80.00	581	515	707	626	20.0	200	10.0	
8	1.007	12	12.78	113	128	70.20	84.70	621	548	749	661	25.0	200	12.5	
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
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](http://www.uet-civil.edu.pk)

Muhammad Reza Awan  
 Manager (Admin & HR) Gharibwal Cement Ltd. Lahore

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

**Client Reference:** GCL/Admin/UET/Tests/23

**Dated:** 02-09-2021

**SOM Lab Ref:** CED/SOM/4916 (Page-1/3)

**Dated:** 02-09-2021

**Test:** Tension Test Bend Test

**Test Specification:** ASTM-A-615

**Sample Type:** Deformed Bar

**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.900	24	25.16	380	497	227.00	329.50	597	457	867	663	35.0	200	17.5	
2	0.881	12	11.96	113	112	53.70	75.00	475	479	663	669	30.0	200	15.0	
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**BEND TEST:**

24mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Muhammad Reza Awan  
 Manager (Admin & HR) Gharibwal Cement Ltd. Lahore

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

**Client Reference:** GCL/Admin/UET/Tests/23

**Dated:** 02-09-2021

**SOM Lab Ref:** CED/SOM/4916 (Page-2/3)

**Dated:** 02-09-2021

**Test:** Tension Test Bend Test

**Test Specification:** ASTM-A-615

**Sample Type:** Deformed Bar

**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.843	24	24.98	380	490	235.70	322.50	620	482	848	659	40.0	200	20.0	B-001
2	2.377	20	19.63	314	303	144.20	200.70	459	477	639	663	32.5	200	16.3	B-001
3	0.866	12	11.85	113	110	54.20	69.50	479	492	615	631	25.0	200	12.5	B-001
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**BEND TEST:**

24mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
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](http://www.uet-civil.edu.pk)

Muhammad Reza Awan  
 Manager (Admin & HR) Gharibwal Cement Ltd. Lahore

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

**Client Reference:** GCL/Admin/UET/Tests/23

**Dated:** 02-09-2021

**SOM Lab Ref:** CED/SOM/4916 (Page-3/3)

**Dated:** 02-09-2021

**Test:** Tension Test Bend Test

**Test Specification:** ASTM-A-615

**Sample Type:** Deformed Bar

**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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.866	24	25.03	380	492	236.70	329.50	623	482	867	670	37.5	200	18.8	C-001
2	3.837	24	24.95	380	489	227.50	322.00	598	466	847	659	35.0	200	17.5	C-001
3	2.167	20	18.75	314	276	137.00	190.00	436	497	605	689	32.5	200	16.3	C-001
4	2.209	20	18.93	314	281	136.50	189.70	434	486	604	675	32.5	200	16.3	C-001
5	1.575	16	15.98	201	201	110.00	139.50	547	549	694	696	30.0	200	15.0	C-001
6	1.575	16	15.98	201	201	107.80	138.70	536	538	690	692	30.0	200	15.0	C-001
7	1.000	12	12.74	113	127	65.20	88.00	576	512	778	691	25.0	200	12.5	C-001
8	1.002	12	12.75	113	128	65.00	88.50	575	510	783	694	27.5	200	13.8	C-001
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**BEND TEST:**

24mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
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](http://www.uet-civil.edu.pk)

Sarfraz Rasheed  
GM Projects, Ittefaq Building Solution (Pvt) Ltd. Lahore

**Test Performed By:** Dr. /Engr. S. Asas Ali Gillani

**Client Reference:** IBS/CED/FFF-2

**SOM Lab Ref:** 4902(Page-1/1)

**Dated:** 01-09-2021

**Dated:** 002-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.698	8	1.005	0.79	0.793	24.33	33.94	67930	67670	94770	94410	1.10	8.0	13.8	
2	1.498	6	0.748	0.44	0.440	13.53	19.80	67810	67810	99230	99230	1.20	8.0	15.0	
3	0.651	4	0.493	0.20	0.191	7.03	8.66	77560	81220	95550	100050	1.20	8.0	15.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 6	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](http://www.uet-civil.edu.pk)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

**Test Performed By:** Dr. /Engr. Nauman Khurram

**Client Reference:** IHPL/Steel/0117

**SOM Lab Ref:** 4903(Page-1/1)

**Dated:** 01-09-2021

**Dated:** 01-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.503	6	0.750	0.44	0.442	14.14	20.46	70870	70550	102550	102080	1.30	8.0	16.3	
2	1.462	6	0.740	0.44	0.430	14.58	20.82	73070	74770	104340	106760	1.10	8.0	13.8	
3	1.460	6	0.739	0.44	0.429	14.17	20.49	71020	72850	102700	105340	1.20	8.0	15.0	
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**Witnessed By:** Rafi Ullah(IHPL) & Ali Hasnain Khan, Jr. Planing Engineer, Kingcrete Builders.

**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Five 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](http://www.uet-civil.edu.pk)

Engr. Javed Asad  
Chief Resident Engineer JIP Consultants,

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

**Client Reference:** JIPIC/TECH/P-3//CRE/02

**SOM Lab Ref:** 4904(Page-1/1)

**Dated:** 01-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed Bar( Mughal 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.603	8	0.987	0.79	0.765	26.73	34.10	74620	77060	95190	98300	1.30	8.0	16.3	
2	2.605	8	0.988	0.79	0.766	27.88	35.12	77830	80270	98040	101110	1.10	8.0	13.8	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Javed Asad

**Test Performed By:**

Dr. /Engr. S. Asad Ali Gillani

Chief Resident Engineer JIP Consultants, Jalalpur Irrigation Project (JIT)

**Client Reference:** JIPIC/TECH/P-3//CRE/03

**SOM Lab Ref:** 4905(Page-1/1)

**Dated:** 01-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed Bar( Ittefaq Iron Industries

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.577	6	0.768	0.44	0.463	17.53	21.73	87880	83520	108940	103520	1.00	8.0	12.5	
2	1.559	6	0.764	0.44	0.458	17.58	21.81	88140	84680	109340	105050	1.10	8.0	13.8	
3	0.666	4	0.500	0.20	0.196	5.86	8.87	64640	65960	97800	99790	1.30	8.0	16.3	
4	0.673	4	0.502	0.20	0.198	5.66	8.38	62390	63020	92400	93330	1.10	8.0	13.8	
5	0.667	4	0.500	0.20	0.196	7.21	8.87	79470	81100	97800	99790	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	6.78	8.46	74750	75890	93300	94720	1.00	8.0	12.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)



Abid Mann  
Construction Manager, One Liberty, Lahore

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

Client Reference: OL/2021/08/01

SOM Lab Ref: 4795(Page-1/1)

Dated: 12-08-2021

Dated: 12-08-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.712	8	1.007	0.79	0.797	22.91	39.65	63950	63390	110700	109730	1.40	8.0	17.5	
2	2.715	8	1.008	0.79	0.798	22.73	39.64	63460	62830	110670	109560	1.40	8.0	17.5	
3	1.490	6	0.747	0.44	0.438	11.85	20.82	59380	59650	104340	104810	1.20	8.0	15.0	
4	1.495	6	0.748	0.44	0.439	11.82	20.80	59270	59410	104230	104470	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Zou Jiawei

**Test Performed By:**

**Dr. /Engr. S. Asad Ali Gillani**

Project Manager, China Energy Engineering Group Northeast No. 2, Electric Power Construction Co.

**Client Reference:** DD-401 A-FA-538

**SOM Lab Ref:** 4908(Page-1/1)

**Dated:** 02-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.710	8	1.007	0.79	0.796	28.64	35.32	79970	79370	98610	97860	1.20	8.0	15.0	
2	2.684	8	1.002	0.79	0.789	28.54	35.27	79680	79790	98470	98590	1.40	8.0	17.5	
3	1.479	6	0.744	0.44	0.435	16.59	21.12	83130	84090	105870	107090	1.50	8.0	18.8	
4	1.496	6	0.748	0.44	0.440	15.67	20.08	78530	78530	100660	100660	1.50	8.0	18.8	
5	1.481	6	0.744	0.44	0.435	15.16	19.72	75980	76850	98870	100010	1.30	8.0	16.3	
6	1.558	6	0.764	0.44	0.458	15.31	19.85	76750	73730	99480	95570	1.40	8.0	17.5	
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**Witnessed By:** Sohaib Ali, Sub Engineer (NESPAK)

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 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](http://www.uet-civil.edu.pk)

Safdar Hussain  
Resident Engineer, ACE, Danish School Mankera Residency

**Test Performed By:** Dr. /Engr. S. Asad Ali Gillali

**Client Reference:** ACE/RE-PDS/MNK/BHK/21/438

**SOM Lab Ref:** 4909(Page-1/1)

**Dated:** 30-08-2021

**Dated:** 02-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.510	6	0.752	0.44	0.444	15.16	19.78	75980	75300	99130	98230	1.60	8.0	20.0	
2	1.502	6	0.749	0.44	0.441	14.95	19.62	74960	74790	98360	98140	1.50	8.0	18.8	
3	1.045	5	0.625	0.31	0.307	10.96	13.76	77960	78720	97910	98860	1.30	8.0	16.3	
4	1.043	5	0.625	0.31	0.307	10.70	13.68	76150	76890	97330	98280	1.10	8.0	13.8	
5	0.669	4	0.501	0.20	0.197	6.60	9.04	72730	73840	99710	101230	1.00	8.0	12.5	
6	0.674	4	0.502	0.20	0.198	6.65	9.14	73290	74030	100830	101850	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 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](http://www.uet-civil.edu.pk)

Sub Divisional Officer  
Highway Sub Division, Okara

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

Client Reference: 171/OK

SOM Lab Ref: 4910(Page-1/1)

Dated: 04-08-2021

Dated: 02-09-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.595	4	0.472	0.20	0.175	6.54	8.21	72170	82480	90490	103420	1.10	8.0	13.8	
2	0.593	4	0.471	0.20	0.174	6.57	8.18	72510	83340	90150	103620	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Yasir Ahmad  
GM - Works, FF Steel Lahore

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

Client Reference: Nil

SOM Lab Ref: 4911(Page-1/1)

Dated: 02-09-2021

Dated: 02-09-2021

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(FF 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.013	5	0.616	0.31	0.298	10.16	13.73	72310	75220	97690	101620	1.00	8.0	12.5	
2	1.011	5	0.615	0.31	0.297	10.09	13.88	71800	74940	98780	103100	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Yasir Ahmad  
GM - Works, FF Steel Lahore

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

Client Reference: Nil

SOM Lab Ref: 4912(Page-1/1)

Dated: 02-09-2021

Dated: 02-09-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(FF 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.619	8	0.990	0.79	0.770	28.44	39.27	79400	81460	109620	112470	1.10	8.0	13.8	
2	2.607	8	0.988	0.79	0.766	28.44	39.37	79400	81890	109910	113350	1.10	8.0	13.8	
3	1.495	6	0.748	0.44	0.439	16.99	22.12	85180	85370	110880	111130	1.10	8.0	13.8	
4	1.493	6	0.748	0.44	0.439	17.13	22.17	85840	86040	111130	111390	1.10	8.0	13.8	
5	0.679	4	0.505	0.20	0.200	7.44	9.14	82060	82060	100830	100830	1.10	8.0	13.8	
6	0.680	4	0.505	0.20	0.200	7.08	8.79	78130	78130	96900	96900	1.00	8.0	12.5	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 6	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](http://www.uet-civil.edu.pk)

Bilal Mehmood

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

Resident Engineer, Development Consultancy Services (Pvt) Ltd.

Client Reference: DCS/RE/GCUF/2021/04

SOM Lab Ref: 4913(Page-1/1)

Dated: 31-08-2021

Dated: 02-09-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.484	6	0.745	0.44	0.436	13.48	18.17	67550	68170	91050	91890	1.50	8.0	18.8	
2	1.494	6	0.748	0.44	0.439	13.48	18.17	67550	67700	91050	91260	1.50	8.0	18.8	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Witnessed By: M. Jamil Alam, Muhammad Aslam & M. Hassan Ali

**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Naeem Fazal

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

Site Engineer, Project Managers (Project : Allied Bank Ltd. Plot No 14, Block A3, Gulberg-III Lahore)

Client Reference: nil

SOM Lab Ref: 4914(Page-1/1)

Dated: 02-09-2021

Dated: 02-9-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.477	6	0.743	0.44	0.434	16.21	21.58	81240	82370	108170	109660	1.00	8.0	12.5	
2	1.484	6	0.745	0.44	0.436	15.26	20.95	76490	77190	105000	105960	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	0.377	3	0.376	0.11	0.111	11.77	17.19	236050	233930	344580	341470	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)



M. Saleem Construction Comp:  
Engineers & Contractors, Lahore Road Sheikhpura

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

**Client Reference:** Steel Test (N.T.N. 2872696 - 7)

**SOM Lab Ref:** 4915(Page-1/1)

**Dated:** 02-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.688	4	0.507	0.20	0.202	6.37	8.63	70260	69560	95210	94270	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Reza Awan  
 Manager (Admin & HR) Gharibwal Cement Ltd. Lahore

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

**Client Reference:** GCL/Admin/UET/Tests/23

**SOM Lab Ref:** 4916(Page-1/3)

**Dated:** 02-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & bend Test

**Test Specification:** ASTM-A-615

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.688	4	0.507	0.20	0.202	6.37	8.63	70260	69560	95210	94270	1.00	8.0	12.5	
2	1.455	6	0.738	0.44	0.428	13.46	18.55	67450	69340	92990	95600	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Four Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Waseem Bari  
Pr. Engineer (Civil), SWP, Pakistan Atomic Energy Commission D. G. Khan

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

**Client Reference:** SWP/W(2414)/2020

**SOM Lab Ref:** 4917(Page-1/1)

**Dated:** 01-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & Bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.670	4	0.501	0.20	0.197	6.12	8.31	67450	68470	91610	93010	0.90	8.0	11.3	
2	0.671	4	0.501	0.20	0.197	6.24	8.41	68800	69840	92740	94150	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Sami Ullah warraich

**Test Performed By:**

Dr. /Engr. S. Asad Ali Gillani

Project Manager TCPL, Tameer Construction (Pvt) Ltd. Lahore

**Client Reference:** TCPL/CONST-ALHAMD/21/0806

**SOM Lab Ref:** 4918(Page-1/2)

**Dated:** 02-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & bend Test

**Test Specification:**

ASTM-A-615

**Guage Length:** 2.5 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.544	8	0.976	0.79	0.748	21.87	32.52	61040	64470	90780	95880	1.50	8.0	18.8	
2	2.648	8	0.995	0.79	0.778	28.39	35.07	79260	80480	97900	99410	1.40	8.0	17.5	
3	1.499	6	0.749	0.44	0.441	15.87	20.97	79560	79380	105100	104860	1.60	8.0	20.0	
4	1.487	6	0.746	0.44	0.437	12.69	18.37	63620	64050	92070	92710	1.50	8.0	18.8	
5	0.673	4	0.502	0.20	0.198	6.93	8.53	76440	77210	94090	95040	1.40	8.0	17.5	
6	0.673	4	0.502	0.20	0.198	5.68	8.07	62610	63250	89030	89930	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
# 6	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](http://www.uet-civil.edu.pk)

Sami Ullah warraich

**Test Performed By:**

Dr. /Engr. S. Asad Al Giilani

Project Manager TCPL, Tameer Construction (Pvt) Ltd. Lahore

**Client Reference:** TCPL/CONST-WAVES/21/080

**SOM Lab Ref:** 4918(Page-2/2)

**Dated:** 02-09-2021

**Dated:** 02-09-2021

**Test:** Tension Test & bend Test

**Test Specification:**

ASTM-A-615

**Gauge Length:** 2.5 inch

**Sample Type:**

Deformed 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.525	6	0.755	0.44	0.448	14.90	19.49	74700	73370	97690	95950	1.50	8.0	18.8	
2	1.549	6	0.761	0.44	0.455	15.11	19.69	75720	73230	98720	95460	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)