

Major Muhammad Azeem (Retd)

**Test Performed By:**

Dr. /Engr.

S. Asad Ali Gillani

Resident Engineer, ACES (Pvt) Ltd. Site Office - DHA, Mattital Road, Multan

**Client Reference:** RE/Sec-R/Material/06

**Dated:** 02-11-2020

**SOM Lab Ref:** CED/SOM/3277(Page-1/1)

**Dated:** 17-11-2020

**Test:** Tension & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar(FF 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	2.176	6	18.78	#N/A	277	143.20	201.50	#N/A	517	#N/A	728	30.0	200	15.0	
2	2.191	6	18.85	#N/A	279	140.20	198.30	#N/A	503	#N/A	711	27.5	200	13.8	
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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)

Assistant Executive Engineer  
KBCMA, CVAS, Narowal

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: AEE/NC/26

Dated: 06-11-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3272 (Page-1/1)

Dated: 17-11-2020

ASTM-A-615

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	1.022	5	0.618	0.31	0.300	10.47	14.53	74480	76960	103340	106790	0.90	8.0	11.3	
2	0.996	5	0.611	0.31	0.293	10.32	14.44	73390	77650	102760	108730	1.00	8.0	12.5	
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**BEND TEST:**

# 5	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 Anees

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Sire Engineer, Steelman International Engineer, DHA Phase-6, Lahore

Client Reference: Nil

SOM Lab

Ref: 3273(Page-1/1)

Dated: 17-11-2020

Dated: 17-11-2020

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	1.489	6	0.747	0.44	0.438	16.99	21.10	85180	85570	105770	106250	1.10	8.0	13.8	
2	0.643	4	0.491	0.20	0.189	6.39	8.74	70480	74580	96340	101940	1.10	8.0	13.8	
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**BEND TEST:**

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

Tariq Siddique Khokhar  
PM/CRE(CRIP), MM Pakistan, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: DCRIP/PM/HWL/1767

Dated: 14-11-2020

SOM Lab

Ref: 3276(Page-1/2)

Dated: 17-11-2020

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	2.629	8	0.992	0.79	0.773	25.94	35.95	72430	74020	100370	102580	0.90	8.0	11.3	
2	2.639	8	0.994	0.79	0.776	25.86	36.14	72200	73500	100880	102700	1.00	8.0	12.5	
3	1.497	6	0.748	0.44	0.440	13.32	18.88	66780	66780	94630	94630	1.40	8.0	17.5	
4	1.483	6	0.745	0.44	0.436	13.37	19.39	67040	67650	97180	98080	1.30	8.0	16.3	
5	0.670	4	0.501	0.20	0.197	6.03	9.07	66550	67560	100050	101570	1.20	8.0	15.0	
6	0.674	4	0.502	0.20	0.198	5.96	9.04	65760	66430	99710	100710	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 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)

Tariq Siddique Khokhar  
PM/CRE(CRIP), MM Pakistan, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: DCRIP/PM/HWL/1767

Dated: 14-11-2020

SOM Lab

Ref: 3276(Page-2/2)

Dated: 17-11-2020

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	0.685	4	0.506	0.20	0.201	4.91	7.21	54180	53910	79470	79080	1.50	8.0	18.8	
2	0.685	4	0.506	0.20	0.201	4.89	7.29	53960	53690	80370	79970	1.50	8.0	18.8	
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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)

Major Muhammad Azeem (Retd)  
Resident Engineer, ACES (Pvt) Ltd. Site Office - DHA, Mattital Road, Multan

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: RE/Sec-R/Material/06

SOM Lab

Ref: 3277(Page-1/1)

Dated: 02-11-2020

Dated: 17-11-2020

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	1.462	6	0.740	0.44	0.430	14.60	20.54	73170	74870	102960	105350	1.20	8.0	15.0	
2	1.472	6	0.743	0.44	0.433	14.29	20.00	71640	72800	100250	101870	1.10	8.0	13.8	
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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)

Executive Engineer (UVET)  
University of Sargodha

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: SU/PMU/PC/637

Dated: 16-11-2020

SOM Lab

Ref: 3278(Page-1/1)

Dated: 17-11-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

ASTM-A-615

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	1.523	6	0.755	0.44	0.448	13.07	19.49	65510	64340	97690	95950	1.30	8.0	16.3	
2	1.524	6	0.755	0.44	0.448	13.20	19.69	66170	64990	98720	96950	1.40	8.0	17.5	
3	0.666	4	0.500	0.20	0.196	5.86	8.99	64640	65960	99150	101170	1.00	8.0	12.5	
4	0.660	4	0.497	0.20	0.194	5.76	8.92	63510	65480	98360	101400	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 Six Samples Received and Tested
# 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)

Mr Muhammad Irshad  
Team Leader, NESPAK (Pvt) Ltd. D I Khan

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: DR-01/GZD/DSC/TL/1422

Dated: 11-11-2020

SOM Lab

Ref: 3279(Page-1/1)

Dated: 17-11-2020

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	1.480	6	0.744	0.44	0.435	14.22	18.47	71280	72100	92590	93650	1.10	8.0	13.8	
2	1.513	6	0.753	0.44	0.445	17.15	21.07	85940	84980	105610	104430	1.20	8.0	15.0	
3	1.032	5	0.621	0.31	0.303	10.72	13.00	76300	78060	92470	94600	1.00	8.0	12.5	
4	1.034	5	0.622	0.31	0.304	10.91	13.12	77600	79130	93340	95180	1.30	8.0	16.3	
5	0.587	4	0.469	0.20	0.173	5.91	7.46	65200	75370	82290	95130	1.20	8.0	15.0	
6	0.587	4	0.469	0.20	0.173	5.86	7.39	64640	74720	81500	94220	1.30	8.0	16.3	
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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
# 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)



Engr. Khizar Rehman

Resident Engineer, Grand City Kharian (Asian Consulting Engineers (Pvt) Ltd. )

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** ABD-301B/2018/140

**Dated:** 17-11-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3280(Page-1/1)

**Dated:** 18-11-2020

ASTM-A-615

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	2.699	8	1.005	0.79	0.793	20.59	32.28	57490	57270	90130	89790	1.40	8.0	17.5	
2	2.691	8	1.004	0.79	0.791	20.61	32.31	57540	57470	90210	90100	1.40	8.0	17.5	
3	1.438	6	0.734	0.44	0.423	11.44	17.71	57330	59640	88750	92320	1.40	8.0	17.5	
4	1.451	6	0.736	0.44	0.426	11.44	17.81	57330	59220	89260	92200	1.50	8.0	18.8	
5	1.454	6	0.737	0.44	0.427	11.62	17.84	58250	60020	89420	92140	1.60	8.0	20.0	
6	1.445	6	0.736	0.44	0.425	11.54	17.79	57840	59880	89160	92310	1.50	8.0	18.8	
7	0.648	4	0.492	0.20	0.190	5.40	8.15	59580	62710	89930	94660	1.30	8.0	16.3	
8	0.661	4	0.497	0.20	0.194	5.63	8.18	62050	63970	90150	92940	1.40	8.0	17.5	
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**Witnessed By:** Amjad Tufail, S.E NESPAK,

**BEND TEST:**

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

Project Manager, ICPL-OMPL 0629, IZHAR Construction (Pvt) Ltd. Lahore

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** ICPL/CONST-OMPL/20/058

**Dated:** 12-11-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3281(Page-1/1)

**Dated:** 18-11-2020

ASTM-A-615

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	1.211	6	0.673	0.44	0.356	13.27	19.57	66530	82220	98100	121250	1.10	8.0	13.8	
2	1.209	6	0.672	0.44	0.355	13.12	19.39	65760	81510	97180	120450	1.10	8.0	13.8	
3	0.555	4	0.456	0.20	0.163	6.29	8.53	69360	85100	94090	115440	1.30	8.0	16.3	
4	0.552	4	0.454	0.20	0.162	6.34	8.66	69920	86320	95550	117960	1.30	8.0	16.3	
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**BEND TEST:**

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

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Project Director( North-3) WASA (PAEC) Pakistan Atomic Energy Commission, Chashma

Client Reference: Dir(CH)WASO/Sec/2020/2545

SOM Lab

Ref: 3282(Page-1/1)

Dated: 16-11-2020

Dated: 18-11-2020

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	1.240	6	0.681	0.44	0.364	13.66	19.93	68470	82760	99890	120750	1.50	8.0	18.8	
2	1.239	6	0.681	0.44	0.364	13.71	19.98	68730	83070	100150	121060	1.40	8.0	17.5	
3	0.658	4	0.496	0.20	0.193	6.19	8.84	68230	70710	97460	100990	1.30	8.0	16.3	
4	0.656	4	0.496	0.20	0.193	6.14	8.79	67670	70130	96900	100410	1.30	8.0	16.3	
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**BEND TEST:**

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

Khalid Ahmad  
Project Manager, S.A Garden (Pvt) Ltd.

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: SA/PM/Amphitector/203

Dated: 17-11-2020

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3293 (Page-1/1)

Dated: 18-11-2020

ASTM-A-615

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	1.438	6	0.734	0.44	0.423	14.24	19.78	71380	74250	99130	103110	1.20	8.0	15.0	
2	1.438	6	0.734	0.44	0.423	14.60	19.54	73170	76110	97950	101890	1.20	8.0	15.0	
3	0.648	4	0.492	0.20	0.190	6.49	8.58	71610	75380	94650	99630	1.20	8.0	15.0	
4	0.659	4	0.497	0.20	0.194	6.57	8.72	72510	74750	96110	99080	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 Six Samples Received and Tested
# 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)

M. Sohail Anjum

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Project Manager, MEK Multistory Offices, P-156, Gulberg-II, Lahore

Client Reference: P-156-170

SOM Lab

Ref: 3284(Page-1/1)

Dated: 18-11-2020

Dated: 18-11-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(AFCO 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	2.657	8	0.997	0.79	0.781	34.86	42.48	97330	98450	118580	119950	1.10	8.0	13.8	
2	2.645	8	0.995	0.79	0.777	34.25	41.39	95620	97220	115540	117470	1.00	8.0	12.5	
3	0.630	4	0.485	0.20	0.185	6.63	8.89	73070	78990	98020	105970	0.90	8.0	11.3	
4	0.639	4	0.489	0.20	0.188	5.71	8.84	62950	66970	97460	103680	0.90	8.0	11.3	
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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
# 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)

Engr. Khizar Rehman

Resident Engineer, Grand City Kharian (Asian Consulting Engineers (Pvt) Ltd. )

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** AsCE/GCK/RE/14

**Dated:** 16-11-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3285(Page-1/1)

**Dated:** 18-11-2020

ASTM-A-615

Deformed Bar(AF 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	2.588	8	0.984	0.79	0.761	24.64	33.08	68790	71410	92350	95870	1.30	8.0	16.3	
2	1.499	6	0.749	0.44	0.441	13.43	19.01	67290	67140	95290	95080	1.00	8.0	12.5	
3	0.659	4	0.497	0.20	0.194	6.24	8.46	68800	70920	93300	96190	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 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)

RJA Engineering & Service,  
MZ-82 Defense Shopping Mall, Main Boulevard, DHA Lahore

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** Nil

**Dated:** 18-11-2020

**Test:** Tension Test & Bend Test

**Gauge Length:** 8 inch

**Test Specification:**

**Sample Type:**

**SOM Lab**

**Ref:** 3286(Page-1/1)

**Dated:** 18-11-2020

ASTM-A-615

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	1.457	6	0.738	0.44	0.428	15.70	19.37	78690	80890	97080	99800	1.10	8.0	13.8	
2	1.497	6	0.748	0.44	0.440	17.40	21.12	87220	87220	105870	105870	1.20	8.0	15.0	
3	0.653	4	0.494	0.20	0.192	5.98	8.97	65990	68740	98920	103040	1.30	8.0	16.3	
4	0.654	4	0.494	0.20	0.192	5.93	8.94	65420	68150	98580	102690	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 Six Samples Received and Tested
# 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)