

Major Tanveer Ahmad (R)  
Resident Engineer-2, ACES, Sector-H DHA Multan (M/s NLC)

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

**Client Reference:** ACES-DHAM-NLC-019

**Dated:** 04-11-2021

**SOM Lab Ref:** CED/SOM/5251(Page-1/1)

**Dated:** 04-11-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar (SJ 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	0.957	12	12.46	113	122	60.20	86.50	532	494	765	710	32.5	200	16.3	
2	0.960	12	12.48	113	122	60.50	86.70	535	495	767	709	32.5	200	16.3	
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**BEND TEST:**

12mm	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)

Irshad Ahmad  
Dy. Director (Maint) M-4, NHA Khanewal

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

**Client Reference:** DD(Maint)/M-4/NHA/2021/735

**Dated:** 26-10-2021

**SOM Lab Ref:** CED/SOM/5253(Page-1/1)

**Dated:** 04-11-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar (Karachi 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	0.972	12	12.57	113	124	68.00	85.20	601	549	753	688	25.0	200	12.5	
2	0.974	12	12.57	113	124	69.00	86.50	610	556	765	697	30.0	200	15.0	
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**BEND TEST:**

12mm	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)

Material Engineer  
Soil & Foundation Engineering Services, Lahore

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

Client Reference: SS/Letter/2325/21  
SOM Lab Ref: CED/SOM/5256(Page-1/1)  
Test: Tension Test & Bend Test  
Sample Type: Deformed Bar

Dated: 04-11-2021  
Dated: 04-11-2021  
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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.900	25	25.16	491	497	233.00	299.50	475	469	610	603	32.5	200	16.3	Faizan
2	2.454	20	19.95	314	313	164.50	204.50	524	527	651	655	25.0	200	12.5	Faizan
3	1.611	16	16.17	201	205	107.50	134.00	535	524	666	653	27.5	200	13.8	Faizan
4	0.907	12	12.13	113	116	71.50	86.50	632	619	765	749	25.0	200	12.5	Faizan
5	2.420	20	19.81	314	308	157.20	205.70	500	510	655	668	25.0	200	12.5	FF
6	1.512	16	15.66	201	193	103.00	130.50	512	535	649	678	20.0	200	10.0	SAJ
7	0.878	12	11.93	113	112	49.70	68.50	439	445	606	613	30.0	200	15.0	SAJ
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Fourteen Samples Received and Tested
(Sr # 2 & 5)	Sample bend through 180 degrees Satisfactorily without any crack	
(Sr # 3 & 6)	Sample bend through 180 degrees Satisfactorily without any crack	
(Sr # 4 & 7)	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 Hassan  
Project Engineer, Great City, Sheikhpura

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

Client Reference: MLD/GC/004/2021

SOM Lab

Ref: 5252(Page-1/1)

Dated: 02-11-2021

Dated: 04-11-2021

Test: Tension 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	1.515	6	0.753	0.44	0.445	13.61	19.47	68210	67450	97590	96500	1.40	8.0	17.5	Moiz
2	0.661	4	0.497	0.20	0.194	6.19	8.02	68230	70340	88470	91200	1.20	8.0	15.0	FF
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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)

Tahir Mehmood  
Chief Engineer, New Lahore City

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

Client Reference: NLC/CE/Const/03

SOM Lab 5254-5255(Page-

Ref: 1/1)

Dated: 03-11-2021

Dated: 04-11-2021

Test: Tension Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Kamran 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	2.554	8	0.978	0.79	0.751	22.48	31.62	62750	66010	88280	92860	1.40	8.0	17.5	
2	2.570	8	0.980	0.79	0.755	24.72	33.35	69010	72210	93120	97430	1.50	8.0	18.8	
3	1.473	6	0.743	0.44	0.433	13.15	18.40	65910	66980	92230	93720	1.40	8.0	17.5	
4	1.423	6	0.730	0.44	0.418	11.39	16.92	57080	60080	84820	89280	1.40	8.0	17.5	
5	0.673	4	0.502	0.20	0.198	6.32	8.53	69700	70400	94090	95040	1.40	8.0	17.5	
6	0.676	4	0.503	0.20	0.199	6.37	8.51	70260	70610	93860	94330	1.40	8.0	17.5	
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Witnessed By: Faizan Siddiqui (Zaitoon)

**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	

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