

Irfan Siddique

Test Performed By:

Dr. /Engr.

Dr Rashid Hameed

Building Standards Material Testing, Quality Control & Geotechnical Services, Lahore

Client Reference: GT/LTR/210517-049

Dated: 17-05-2021

SOM Lab Ref: CED/SOM/4321 (Page-1/1)

Dated: 18-05-2021

Test: Tension 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	2.258	20	19.15	314	288	139.00	193.50	442	483	616	672	35.0	200	17.5	
2	2.227	20	19.01	314	284	144.00	189.20	458	508	602	667	32.5	200	16.3	
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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)

Muhammad Shabbir  
Construction Manager, Opal, Deevar Developers Pvt. Ltd. Lahore

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

**Client Reference:** ZD/ZO/L/026

**SOM Lab**

**Ref:** 4322(Page-1/1)

**Dated:** 18-05-2021

**Dated:** 18-05-2021

**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	2.643	8	0.995	0.79	0.777	26.04	34.20	72710	73930	95480	97080	1.30	8.0	16.3	
2	2.653	8	0.997	0.79	0.780	25.76	34.22	71920	72840	95530	96760	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 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)

Sajjad Ali Memon  
Resident Engineer, Pillar & Sons, DHA Multan

Test Performed By: Dr. /Engr. Rashid Hameed

Client Reference: P&S/OTH/GEN/00024  
Dated: 06-05-2021  
Test: Tension Test & Bend Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 4323(Page-1/1)  
Dated: 18-05-2021  
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	2.574	8	0.981	0.79	0.756	22.22	29.94	62040	64830	83580	87340	1.40	8.0	17.5	
2	2.568	8	0.980	0.79	0.755	21.89	29.43	61100	63930	82160	85970	1.20	8.0	15.0	
3	1.413	6	0.727	0.44	0.415	11.42	18.50	57230	60680	92740	98330	1.50	8.0	18.8	
4	1.443	6	0.735	0.44	0.424	12.03	18.76	60290	62570	94020	97560	1.40	8.0	17.5	
5	0.659	4	0.497	0.20	0.194	5.61	8.92	61830	63740	98360	101400	1.10	8.0	13.8	
6	0.644	4	0.491	0.20	0.189	5.71	9.19	62950	66620	101390	107290	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)

**Test Performed by:** Dr.S. Asad ali Gillani

Engr. Muhammad Afzal Mughal

Addl. Chief Engineer (D. E)

National Transmission And Despatch Company Ltd., Lahore

**Client Reference No.:** CE/S&S/NTDC/LHR/95/1696-97

Dated: 05-05-2021

**SOM Lab Ref:** CED/SOM/4324(Page 1/1)

Dated: 18-05-2021

**Test Type:** Hardness Test

**Sample Type:** Aluminium

**Hardness Test Details:**

**Machine used: Avery Rockwell Hardness Testing Machine**

(Minor Load: 10 Kgf      Major Load: 60.0 kgf    Scale: A)

**Hardness Test Results**

Sample No.	Sample Type	Sample Designation	Hardness
1	LT SERVICE BOX	3783	HR – 49.33– A
2	LT SERVICE BOX	1904	HR – 17.33– A
3	LT SERVICE BOX	1952	HR – 46.83– A

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

