

Engr. Hassan Hahmood  
RE, G3 Engineering Consultants (Pvt) Ltd

Test Performed By:

Dr. /Engr.

Dr. M Rizwan  
Riaz

Client Reference: G3/DHA-NLD/RE/086

SOM Lab Ref:

CED/SOM/710

Dated: 26-07-2022

Dated:

03-08-2022

Test: Tension & Bend Test

Test Specification:

ASTM-A-615 (Union Steel)

Guage Length: 8 inch

Sample Type:

M S Deformed 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	2.651	8	0.996	0.79	0.779	22.75	31.93	63520	64420	89130	90390	1.30	8.0	16.3	
2	2.591	8	0.984	0.79	0.761	26.32	34.93	73480	76280	97530	101240	1.30	8.0	16.3	
3	2.657	8	0.997	0.79	0.781	24.57	32.28	68590	69380	90130	91170	1.30	8.0	16.3	
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**BEND TEST:**

Sr. # 1	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)

Babar Ali

**Test Performed By:**

Dr. /Engr.

Nauman Khurram

Const Manager, Guarantee Engrs.(Pvt)Ltd (Beaconhouse School System TNS 2.0 Gulberg-III Lahore)

**Client Reference:** TNS/GE/ST/016

**Dated:** 03-08-2022

**SOM Lab Ref:** CED/SOM/713(Page-1/1)

**Dated:** 03-08-2022

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S 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	3.820	25	24.90	491	487	200.50	285.50	408	412	582	587	40.0	200	20.0	
2	3.810	25	24.86	491	485	235.70	319.00	480	486	650	658	35.0	200	17.5	
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**Witnessed By:** Muhammad Ali Khan (A.M.C)

**BEND TEST:**

25mm	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)

Munir Ansari

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Admin. Manager The Signatures.(MCB-Allhabad Branch,Gujranwala)

Client Reference: Nil

SOM Lab

Ref:

711 (Page-1/1)

Dated: 02-08-2022

Dated:

03-08-2022

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	1.659	6	0.788	0.44	0.488	17.66	21.61	88500	79790	108320	97670	1.10	8.0	13.8	
2	0.673	4	0.502	0.20	0.198	6.70	8.46	73850	74600	93300	94240	0.90	8.0	11.3	
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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)

Engr. Naveed Sadiq  
RE Orbit Housing.Lahore.(The Springs Apartment Homes)

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** Nil

**SOM Lab**

**Ref:** 712 (Page-1/1)

**Dated:** 02-08-2022

**Dated:** 03-08-2022

**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	2.616	8	0.990	0.79	0.769	23.01	34.98	64230	65990	97670	100340	1.40	8.0	17.5	
2	2.585	8	0.984	0.79	0.760	23.06	35.19	64370	66920	98240	102120	1.20	8.0	15.0	
3	1.510	6	0.752	0.44	0.444	13.48	20.18	67550	66940	101170	100260	1.00	8.0	12.5	
4	1.534	6	0.758	0.44	0.451	13.68	20.34	68570	66900	101940	99450	1.10	8.0	13.8	
5	0.668	4	0.500	0.20	0.196	6.44	8.46	71040	72490	93300	95200	1.00	8.0	12.5	
6	0.668	4	0.500	0.20	0.196	6.60	8.61	72730	74210	94990	96930	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)