

Engr. Jaffar Rashid

**Test Performed By:**

Dr. /Engr.

S. Asad Ali Gillani

Sr. Project Manager IZHAR GROUP OF COMPANIES, Lahore

**Client Reference:** ICPL/NHO/Lab/02

**Dated:** 04-06-2021

**SOM Lab Ref:** CED/SOM/4396(Page-1/1)

**Dated:** 04-06-2021

**Test:** Tension Test & bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** Deformed Bar(Mughal 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	3.056	22	22.26	380	389	220.20	275.50	579	567	725	709	37.5	200	18.8	
2	3.062	22	22.29	380	390	221.00	277.20	581	567	729	711	35.0	200	17.5	
3	1.526	16	15.74	201	194	110.00	135.50	547	566	674	697	27.5	200	13.8	
4	1.527	16	15.74	201	195	110.50	136.20	550	568	677	700	27.5	200	13.8	
5	0.899	12	12.08	113	115	60.70	73.50	537	530	650	642	25.0	200	12.5	
6	0.898	12	12.07	113	114	61.50	78.00	544	538	690	683	25.0	200	12.5	
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**BEND TEST:**

22mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
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)

Resident Engineer,  
 PICIIP Sahiwal, NESPAK (Pvt) Ltd., 73-A W, Block Farid Town Sahiwal.

**Test Performed By:**

Dr. /Engr.

S. Asad Ali  
Gillani

**Client Reference:** 3976/11/MT/Lot-1/88

**Dated:** 28-05-2021

**SOM Lab**

**Ref:** 4395(Page-1/1)

**Dated:** 04-06-2021

**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	2.675	8	1.000	0.79	0.786	24.84	33.89	69350	69710	94620	95110	1.60	8.0	20.0	
2	2.676	8	1.000	0.79	0.786	24.67	33.91	68870	69220	94680	95160	1.30	8.0	16.3	
3	1.500	6	0.749	0.44	0.441	12.81	18.03	64230	64080	90390	90180	1.20	8.0	15.0	
4	1.496	6	0.748	0.44	0.440	12.64	17.99	63360	63360	90180	90180	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)

Asif Pervaiz Butt  
Project Manager, AYQ Developers Pvt. Ltd. Lahore

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

Client Reference: Nil

SOM Lab

Ref: 4397(Page-1/1)

Dated: 04-06-2021

Dated: 04-06-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Ittefaq 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	29.36	37.28	81960	82910	104070	105270	1.10	8.0	13.8	
2	2.613	8	0.989	0.79	0.768	29.56	37.49	82530	84890	104670	107670	1.00	8.0	12.5	
3	2.621	8	0.990	0.79	0.770	29.15	36.77	81390	83510	102650	105310	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 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)

**Test Performed by:** Dr. M. Irfan UI Hassan

Syed Umar Bin Arif  
Business Strategist  
CONCEPTELLERS,

**Client Reference No.:** Nil

Dated: Nil

**SOM Lab Ref:** CED/SOM/4394(Page-1/1)

Dated: 04-06-2020

**Test:** Compressive Load Test

**Sample Type:** Lab Tests on Polyurethane Sandwich Panel

**- COMPRESSIVE STRENGTH**

S. No.	Sample Area (cm <sup>2</sup> )	Compressive Load (Kg)	Compressive Strength (KPa)
1	75	68.0	89
2	75	72.4	94

**- COMPRESSIVE STRENGTH AT CORRUGATION TEST**

S. No.	Sample Area (cm <sup>2</sup> )	Compressive Load (Kg)	Compressive Strength (KPa)
1	600	297.65	49

**WATER ABSORPTION TEST**

S. No	Remarks
1	12.5 %
2	13.6 %

**DENSITY TEST**

S. No	Density
1	41.8 Kg/m <sup>3</sup>
2	41.2 Kg/m <sup>3</sup>

