

Engr. Fizan Hussain  
Assistant Engineer, B & W Department, U. E. T. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: B & W/AEN/1119

SOM Lab

Ref: 1456 (Page-1/1)

Dated: 24-09-2019

Dated: 24-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	0.630	4	0.485	0.20	0.185	7.05	8.48	77790	84100	93530	101110	1.00	8.0	12.5	
2	0.625	4	0.484	0.20	0.184	6.14	7.87	67670	73560	86780	94330	0.90	8.0	11.3	
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Witnessed By: Faizan Hussain

**BEND TEST:**

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

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

Assistant Engineer,  
Innovation Center & Innovation Park, U.E.T. Lahore (Narowal Campus)

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: Univ/NRL/CIP/PD/491

SOM Lab

Ref: 1419(Page-1/1)

Dated: 17-09-2019

Dated: 18-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	2.703	8	1.005	0.79	0.794	24.16	32.11	67450	67110	89640	89190	1.30	8.0	16.3	
2	2.710	8	1.007	0.79	0.796	24.26	32.42	67730	67220	90500	89820	1.50	8.0	18.8	
3	1.563	6	0.764	0.44	0.459	14.27	21.20	71540	68570	106280	101880	1.00	8.0	12.5	
4	1.566	6	0.765	0.44	0.460	14.48	21.20	72560	69400	106280	101660	1.10	8.0	13.8	
5	0.677	4	0.503	0.20	0.199	7.72	9.58	85100	85520	105670	106200	1.00	8.0	12.5	
6	0.681	4	0.505	0.20	0.200	7.75	9.79	85430	85430	107910	107910	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>  <b>Only Nine Samples Received and Tested</b>
# 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)

Maj Adnan khalid®

Test Performed By: Dr. /Engr. Nauman Khurram

By Dir MTL, External Elec Works (U/G) IVY Green Sector-Z, - DHA , Ph-VIII - (M/S NLC)

Client Reference: 408/241/E/Lab/712/1660

SOM Lab

Ref: 1458(Page-1/1)

Dated: 23-09-2019

Dated: 24-09-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar ( FF Steel)

Gauge Length: 8 inch

Sample Type:

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	1.470	6	0.742	0.44	0.432	16.26	21.33	81500	83010	106890	108870	1.00	8.0	12.5	
2	1.467	6	0.741	0.44	0.431	16.94	21.89	84920	86690	109700	111990	1.10	8.0	13.8	
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**BEND TEST:**

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

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

Nadeem Hussain  
Project Manager, Master Tiles. Kamoke, Gujranwala

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: SMI/OB/NH/01u4/2018

SOM Lab  
Ref: 1459(Page-1/1)

Dated: 23-09-2019

Dated: 23-09-2019

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	2.669	8	0.999	0.79	0.784	19.39	29.84	54130	54540	83300	83940	1.40	8.0	17.5	
2	2.641	8	0.994	0.79	0.776	19.64	30.48	54840	55830	85090	86630	1.90	8.0	23.8	
3	1.502	6	0.749	0.44	0.441	11.49	17.74	57590	57460	88910	88710	1.50	8.0	18.8	
4	1.520	6	0.754	0.44	0.447	11.42	18.04	57230	56330	90440	89020	1.20	8.0	15.0	
5	0.566	4	0.460	0.20	0.166	4.59	7.19	50590	60950	79250	95480	1.00	8.0	12.5	
6	0.577	4	0.465	0.20	0.170	5.40	8.12	59580	70090	89590	105400	1.00	8.0	12.5	
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**BEND TEST:**

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