

Muteen Zafar Malik

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

Project Engineer, MA Engineering Services, Lahore (Project: Engro Enfrashare B25 Towers)

**Client Reference:** MA/UET/LHR/008

**Dated:** 02-07-2021

**SOM Lab Ref:** CED/SOM/4621(Page-1/1)

**Dated:** 07-07-2021

**Test:** Tension and Bend 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	3.984	25	25.41	491	507	255.00	352.00	519	503	717	695	27.5	200	13.8	
2	2.227	20	19.00	314	284	127.70	177.50	406	451	565	626	32.5	200	16.3	
3	1.583	16	16.02	201	202	106.20	142.50	528	527	709	707	27.5	200	13.8	
4	0.976	12	12.58	113	124	55.70	80.50	492	448	712	648	35.0	200	17.5	
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**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Eight Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
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)

Abid Mann  
Construction Manager, One Liberty, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: OL/2021/07/07

Dated: 07-07-2021

SOM Lab

Ref: 4620(Page-1/1)

Dated: 07-07-2021

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	2.647	8	0.995	0.79	0.778	16.84	29.84	47020	47740	83300	84580	1.60	8.0	20.0	
2	2.661	8	0.998	0.79	0.782	17.13	30.12	47810	48300	84090	84960	1.60	8.0	20.0	
3	1.544	6	0.760	0.44	0.454	10.91	18.65	54670	52990	93510	90620	1.50	8.0	18.8	
4	1.542	6	0.759	0.44	0.453	10.81	18.71	54160	52610	93760	91070	1.70	8.0	21.3	
5	0.649	4	0.493	0.20	0.191	5.30	8.51	58460	61210	93860	98290	1.30	8.0	16.3	
6	0.654	4	0.494	0.20	0.192	5.35	8.51	59020	61480	93860	97770	1.20	8.0	15.0	
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Witnessed By: Abid Mann, Client Purchaser

**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)

Sub Divisional Officer  
Sub Division No. 17, (M & R) GOR-I, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: 658-

Dated: 23-06-2021

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 4622(Page-1/1)

Dated: 07-07-2021

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	1.498	6	0.748	0.44	0.440	13.53	19.42	67810	67810	97340	97340	1.00	8.0	12.5	
2	0.663	4	0.498	0.20	0.195	5.59	8.38	61600	63180	92400	94770	1.40	8.0	17.5	
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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)

Obaid Ullah

Test Performed By:

Dr. /Engr. M Burhan Sharif

CE/Engineer's Representative, NESPAK (Proj. Infra Devel. Of Federal Govt. Employees Housing Scheme,)

Client Reference: 3690/321/104/OU/11(a)/56

SOM Lab Ref: 4623(Page-1/1)

Dated: 05-07\2021

Dated: 07-07-2021

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	0.995	5	0.610	0.31	0.292	9.60	12.81	68320	72530	91160	96780	1.00	8.0	12.5	
2	0.665	4	0.498	0.20	0.195	5.17	7.72	56990	58460	85100	87280	1.50	8.0	18.8	
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**BEND TEST:**

# 5	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)

Kamal Fibrics  
Faisalabad

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: nil

Dated: 07-07-2021

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 4624(Page-1/1)

Dated: 07-07-2021

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	2.687	8	1.003	0.79	0.790	28.80	36.41	80400	80400	101650	101650	1.00	8.0	12.5	
2	1.556	6	0.763	0.44	0.457	16.38	20.10	82110	79060	100760	97010	1.10	8.0	13.8	
3	0.661	4	0.497	0.20	0.194	5.63	8.53	62050	63970	94090	97000	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	
# 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)