

Sub- Divisional Officer  
( Civil ) GC University, Faisalabad

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: GCUF/EC/1157

SOM Lab

Ref: 1184 (Page-1/1)

Dated: 25-07-2019

Dated: 26-07-2019

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	2.676	8	1.000	0.79	0.786	26.07	34.48	72770	73140	96250	96740	1.20	8.0	15.0	
2	2.672	8	1.000	0.79	0.785	29.73	36.21	83010	83540	101080	101730	1.20	8.0	15.0	
3	1.461	6	0.739	0.44	0.429	16.48	20.74	82620	84740	103980	106650	1.00	8.0	12.5	
4	1.464	6	0.740	0.44	0.430	16.56	20.90	83030	84960	104750	107180	1.00	8.0	12.5	
5	1.017	5	0.617	0.31	0.299	11.06	13.81	78690	81580	98270	101880	1.10	8.0	13.8	
6	1.031	5	0.621	0.31	0.303	11.23	14.02	79920	81770	99720	102020	1.00	8.0	12.5	
7	0.677	4	0.503	0.20	0.199	6.93	8.36	76440	76820	92180	92640	1.00	8.0	12.5	
8	0.669	4	0.501	0.20	0.197	6.95	8.38	76660	77830	92400	93810	0.80	8.0	10.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:- Only Twelve Samples Received and Tested</b>
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	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)

Furqan Ali Malik  
 Chief Resident Engineer, Package -I, NESPAK, (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 4042/13/FAM/Steel-074

SOM Lab  
 Ref: 1187(Page-1/1)

Dated: 22-07-2019

Dated: 26-07-2019

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (FF 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	2.750	8	1.014	0.79	0.808	28.80	36.41	80400	78600	101650	99390	1.60	8.0	20.0	
2	2.687	8	1.003	0.79	0.790	27.32	35.34	76270	76270	98660	98660	1.50	8.0	18.8	
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**BEND TEST:**

# 8	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)

Furqan Ali Malik  
 Chief Resident Engineer, Package -I, NESPAK, (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 4042/13/FAM/Steel-073

SOM Lab  
 Ref: 1187(Page-2/3)

Dated: 22-07-2019

Dated: 26-07-2019

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	1.484	6	0.745	0.44	0.436	14.98	19.29	75110	75800	96670	97560	1.20	8.0	15.0	
2	1.488	6	0.746	0.44	0.437	15.14	19.39	75880	76400	97180	97850	1.30	8.0	16.3	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  <b>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)

Furqan Ali Malik  
 Chief Resident Engineer, Package -I, NESPAK, (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 4042/13/FAM/Steel-072

SOM Lab  
 Ref: 1187(Page-3/3)

Dated: 22-07-2019

Dated: 26-07-2019

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	0.660	4	0.497	0.20	0.194	6.63	8.21	73070	75330	90490	93290	1.20	8.0	15.0	
2	0.662	4	0.498	0.20	0.195	7.00	8.58	77230	79210	94650	97080	1.10	8.0	13.8	
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**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)

Executive Engineer,  
Highways Division, Narowal

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 1134/CB

SOM Lab

Ref: 1188 (Page-1/1)

Dated: 19-07-2019

Dated: 26-07-2019

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	1.551	6	0.762	0.44	0.456	11.28	17.15	56560	54580	85940	82930	1.80	8.0	22.5	
2	1.527	6	0.756	0.44	0.449	11.08	16.79	55540	54430	84160	82470	1.70	8.0	21.3	
3	0.681	4	0.505	0.20	0.200	5.05	7.21	55650	55650	79470	79470	1.80	8.0	22.5	
4	0.669	4	0.501	0.20	0.197	4.96	7.08	54750	55580	78130	79320	1.40	8.0	17.5	
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**BEND TEST:**

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