

Resident Engineer,  
NESPAK (Pvt) Ltd. Lahore

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

**Client Reference:** 3772/GD/103/RE/05/43

**Dated:** 16-08-2021

**SOM Lab Ref:** CED/SOM/4870 (Page-1/2)

**Dated:** 26-08-2021

**Test:** Tension Test

**Test Specification:** ASTM-A-307

**Sample Type:** J Bolt

**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	3.778	25	24.75	491	481	202.50	329.00	413	421	670	684	17.5	50	35.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only One Sample 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)

Engr Zaheer ud Din Babar

Test Performed By:

Dr. /Engr.

M. Irfan UI Hassan

Deputy Genral Manager (Projects) Habib Rafiq Engineering (Pvt) Ltd. Lahore

Client Reference: HRLE/SKG/2021/017

Dated: 26-08-2021

SOM Lab Ref: CED/SOM/4873 (Page-1/1)

Dated: 26-08-2021

Test: TensileTest & Bend Test

Test Specification: ASTM-A-615

Sample Type: Deformed Bar(AFCO 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	3.766	25	24.72	491	480	211.00	324.00	430	440	660	675	35.0	200	17.5	
2	3.767	25	24.72	491	480	220.00	340.00	448	459	693	709	35.0	200	17.5	
3	1.595	16	16.09	201	203	81.00	110.70	403	399	551	545	40.0	200	20.0	
4	1.610	16	16.16	201	205	82.00	113.50	408	400	565	554	40.0	200	20.0	
5	1.012	12	12.81	113	129	56.00	75.00	495	435	663	583	32.5	200	16.3	
6	0.993	12	12.69	113	127	57.70	76.20	510	456	674	603	32.5	200	16.3	
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**BEND TEST:**

25mm	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)

Syed Mohsin Ali

**Test Performed By:**

Dr. /Engr. M. Irfan UI Hassan

Resident Engineer, QA/QC, Department, Bahria Town, (Pvt) Ltd Lahore

**Client Reference:** QA/QC-Steel-2391

**SOM Lab Ref:** 4865(Page-1/1)

**Dated:** 25-08-2021

**Dated:** 26-08-2021

**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	0.678	4	0.503	0.20	0.199	7.03	9.79	77560	77950	107910	108460	1.00	8.0	12.5	
2	0.681	4	0.505	0.20	0.200	6.57	8.89	72510	72510	98020	98020	1.10	8.0	13.8	
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**BEND TEST:**

# 4	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)

Manager

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

Builders & Co. R - 17 Air EX Avenue Phase 8,DHA Lahore

Client Reference: Nil

SOM Lab Ref: 4866(Page-1/1

Dated: 26-08-2021

Dated: 26-08-2021

Test: Tension Test

Test Specification:

ASTM-A-615

Guage 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	2.619	8	0.990	0.79	0.770	25.61	34.76	71490	73350	97040	99560	1.10	8.0	13.8	
2	1.503	6	0.750	0.44	0.442	12.84	20.25	64380	64090	101530	101070	1.30	8.0	16.3	
3	0.661	4	0.497	0.20	0.194	6.09	9.40	67110	69190	103640	106850	1.00	8.0	12.5	
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**BEND TEST:**

--	No Bend test performed	<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)

Saqib Baig  
Deputy Manager Civil, Nishat Chunian Group Zone 2,

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

**Client Reference:** NCL/22/Civil/0001

**SOM Lab Ref:** 4867(Page-1/1)

**Dated:** 28-08-2021

**Dated:** 26-08-2021

**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	2.561	8	0.979	0.79	0.753	22.68	33.05	63320	66430	92260	96800	1.30	8.0	16.3	
2	2.550	8	0.977	0.79	0.749	22.48	32.90	62750	66190	91840	96860	1.30	8.0	16.3	
3	1.586	6	0.770	0.44	0.466	13.71	18.37	68730	64890	92070	86940	1.40	8.0	17.5	
4	1.589	6	0.771	0.44	0.467	13.35	18.44	66940	63070	92430	87090	1.50	8.0	18.8	
5	0.994	5	0.610	0.31	0.292	8.92	12.15	63460	67370	86450	91780	1.60	8.0	20.0	
6	1.005	5	0.613	0.31	0.295	8.84	12.22	62880	66080	86960	91380	1.70	8.0	21.3	
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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	
# 5	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)

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

Engineering Management &amp; Construction Company,

**Client Reference:** nil**SOM Lab Ref:** 4868-69(Page-1/1)**Dated:** 26-08-2021**Dated:** 26-08-2021**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	2.671	8	1.000	0.79	0.785	24.82	34.98	69300	69740	97670	98290	1.30	8.0	16.3	
2	2.664	8	0.998	0.79	0.783	23.57	33.15	65800	66390	92550	93370	1.50	8.0	18.8	
3	1.501	6	0.749	0.44	0.441	13.15	18.65	65910	65770	93510	93290	1.40	8.0	17.5	
4	1.510	6	0.752	0.44	0.444	12.64	18.35	63360	62790	91970	91140	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)

Shahzad Muneer

**Test Performed By:**

Dr. /Engr. S. Asad Ali Gillani

Resident Engineer, G3, Engineering, Consultants (Pvt) Ltd. Lahore

**Client Reference:** G3 / 237/RE - 36

**SOM Lab Ref:** 4871(Page-1/2)

**Dated:** 25-08-2021

**Dated:** 26-08-2021

**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	2.631	8	0.992	0.79	0.773	26.20	36.11	73140	74750	100800	103020	1.30	8.0	16.3	
2	2.637	8	0.993	0.79	0.775	26.42	36.14	73770	75190	100880	102840	1.20	8.0	15.0	
3	1.480	6	0.744	0.44	0.435	14.02	19.44	70260	71070	97440	98560	1.10	8.0	13.8	
4	1.497	6	0.748	0.44	0.440	14.29	20.00	71640	71640	100250	100250	1.10	8.0	13.8	
5	0.645	4	0.492	0.20	0.190	5.88	8.38	64860	68280	92400	97260	1.00	8.0	12.5	
6	0.646	4	0.492	0.20	0.190	5.63	8.36	62050	65320	92180	97030	0.90	8.0	11.3	
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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)

Shahzad Muneer  
Resident Engineer, G3, Engineering, Consultants (Pvt) Ltd. Lahore

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

**Client Reference:** G3 / 237/ 32

**SOM Lab Ref:** 4871(Page-2/2)

**Dated:** 02-08-2021

**Dated:** 26-08-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

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	1.507	6	0.751	0.44	0.443	14.71	20.97	73730	73230	105100	104390	1.20	8.0	15.0	
2	1.509	6	0.751	0.44	0.443	14.51	21.02	72710	72220	105360	104650	1.10	8.0	13.8	
3	0.679	4	0.505	0.20	0.200	6.29	8.58	69360	69360	94650	94650	1.10	8.0	13.8	
4	0.681	4	0.505	0.20	0.200	5.98	8.28	65990	65990	91280	91280	1.20	8.0	15.0	
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**BEND TEST:**

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