

Noor Ur Rehman Nasir

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

Resident Engineer, NESPAK, (Pvt) Ltd D I Khan Motorway, Package-3

Client Reference: CPEC/NESPAK/CS/RE/PKG3/19/836

Dated: 24-02-2019

SOM Lab Ref: CED/SOM/385(Page-1-1)

Dated: 28-02-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Sample Type: M S Deformed Bar(Ittefaq & 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	3.972	25	25.38	491	506	306.70	371.70	625	607	757	735	30.0	200	15.0	
2	4.002	25	25.48	491	510	283.50	353.00	578	557	719	693	25.0	200	12.5	
3	1.824	20	17.20	314	232	172.50	208.70	549	743	664	899	25.0	200	12.5	
4	2.209	20	18.93	314	281	166.50	205.50	530	592	654	731	30.0	200	15.0	
5	1.008	16	12.79	201	128	72.70	92.00	362	567	458	717	30.0	200	15.0	
6	1.004	16	12.76	201	128	72.50	91.50	361	567	455	716	27.5	200	13.8	
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**BEND TEST:**

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

Noor Ur Rehman Nasir

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

Resident Engineer, NESPAK, (Pvt) Ltd D I Khan Motorway, Package-3

Client Reference: CPEC/NESPAK/CS/RE/PKG3/19/836

Dated: 24-02-2019

SOM Lab Ref: CED/SOM/387(Page-1-1)

Dated: 28-02-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A 615

Sample Type: M S Deformed Bar(Ittefaq & 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	3.972	25	25.38	491	506	306.70	371.70	625	607	757	735	30.0	200	15.0	
2	4.002	25	25.48	491	510	283.50	353.00	578	557	719	693	25.0	200	12.5	
3	1.824	20	17.20	314	232	172.50	208.70	549	743	664	899	25.0	200	12.5	
4	2.209	20	18.93	314	281	166.50	205.50	530	592	654	731	30.0	200	15.0	
5	1.008	12	12.79	113	128	72.70	92.00	643	567	813	717	30.0	200	15.0	
6	1.004	12	12.76	113	128	72.50	91.50	641	567	809	716	27.5	200	13.8	
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**BEND TEST:**

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

SARA QAMAR

Test Performed By: Dr. /Engr. M Rizwan Riaz

Sub Divisional Officer, Buildings Sub Division No. 1, Faisalabad. (Const. of Civil Dispensaries)

Client Reference: 1857-

SOM Lab

Ref: 383(Page-1/2)

Dated: 09-02-2019

Dated: 28-02-2019

Test: Tension 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	1.497	6	0.748	0.44	0.440	17.23	21.20	86350	86350	106280	106280	1.10	8.0	13.8	
2	1.495	6	0.748	0.44	0.439	17.50	21.61	87730	87930	108320	108570	1.10	8.0	13.8	
3	0.665	4	0.498	0.20	0.195	6.32	9.53	69700	71480	105100	107800	1.30	8.0	16.3	
4	0.663	4	0.498	0.20	0.195	6.57	9.43	72510	74360	103980	106650	1.20	8.0	15.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-  Only Four 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)

SARA QAMAR

Test Performed By: Dr. /Engr. M Rizwan Riaz

S. D. O., Buildings Sub Division No. 1, Fsd (Const. of Boundary Wall of Govt. Boys Primary School.

Client Reference: 1857-

SOM Lab

Ref: 383(Page-2/2)

Dated: 09-02-2019

Dated: 28-02-2019

Test: Tension 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	0.668	4	0.500	0.20	0.196	6.29	9.45	69360	70770	104200	106330	1.20	8.0	15.0	
2	0.669	4	0.501	0.20	0.197	6.34	9.45	69920	70990	104200	105790	1.00	8.0	12.5	
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**BEND TEST:**

--	No Bend test performed	<b>Note:- Only Two 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)

Maj Adnan khalid®

Test Performed By: Dr. /Engr. M Rizwan Riaz

Dy Dir MTL, Const. of Defence Community Club at Sector - K, DHA PH-VI -, (M/S MAAKSONS)

Client Reference: 408/241/E/Lab/463/1514

SOM Lab

Ref: 384(Page-1/1)

Dated: 27-02-2019

Dated: 28-02-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Mughal 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	0.686	4	0.507	0.20	0.202	6.60	9.19	72730	72010	101390	100390	1.10	8.0	13.8	
2	0.662	4	0.498	0.20	0.195	6.60	9.02	72730	74600	99480	102030	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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)

Maj Adnan khalid®

Test Performed By: Dr. /Engr. M Rizwan Riaz

Dy Dir MTL, Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI, (M/S Construct)

Client Reference: 408/241/E/Lab/459/437

SOM Lab

Ref: 285(Page-2/2)

Dated: 26-02-2019

Dated: 28-02-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Kamran 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	1.482	6	0.745	0.44	0.436	13.40	18.65	67190	67810	93510	94360	1.40	8.0	17.5	
2	1.508	6	0.751	0.44	0.443	13.27	19.52	66530	66080	97850	97190	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 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)

Maj Adnan khalid®

Test Performed By: Dr. /Engr. M Rizwan Riaz

Dy Dir MTL, Const. of Kanal Villas at Drgcc Ph-III, DHA Ph-VI, (M/S Construct)

Client Reference: 408/241/E/Lab/459/437

SOM Lab

Ref: 385(Page-2/2)

Dated: 26-02-2019

Dated: 28-02-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (Kamran 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	1.482	6	0.745	0.44	0.436	13.40	18.65	67190	67810	93510	94360	1.40	8.0	17.5	
2	1.508	6	0.751	0.44	0.443	13.27	19.52	66530	66080	97850	97190	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 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)

Noor Ur Rehman Nasir  
Resident Engineer, NESPAK, (Pvt) Ltd D I Khan Motorway, Package-3

Test Performed By: Dr. /Engr. M rizwan Riaz

Client Reference: CPEC/NESPAK/CS/RE/PKG3/19/836

SOM Lab

Ref: 387(Page-1/1)

Dated: 24-02-2019

Dated: 28-02-2019

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	1.530	6	0.757	0.44	0.450	14.80	20.34	74190	72540	101940	99670	1.60	8.0	20.0	
2	1.516	6	0.754	0.44	0.446	14.78	20.59	74090	73090	103210	101820	1.00	8.0	12.5	
3	1.513	6	0.753	0.44	0.445	14.68	20.64	73580	72750	103470	102310	1.10	8.0	13.8	
4	1.026	5	0.620	0.31	0.302	9.58	12.97	68170	69980	92250	94690	1.50	8.0	18.8	
5	1.028	5	0.620	0.31	0.302	9.84	13.27	69990	71840	94420	96930	1.40	8.0	17.5	
6	1.027	5	0.620	0.31	0.302	9.76	13.25	69410	71240	94280	96780	1.40	8.0	17.5	
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**BEND TEST:**

# 6 (S. 1,2)	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Nine Samples Received and Tested</b>
# 5(S. 4,5)	Sample bend through 180 degrees Satisfactorily without any crack	
# 4(S. 7,8)	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  
PM, Pace cercle, Lahore

Test Performed By: Dr. /Engr. M Riazwan Riaz

Client Reference: nil

SOM Lab

Ref: 388(Page-1/1)

Dated: 28-02-2019

Dated: 28-02-2019

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	1.480	6	0.744	0.44	0.435	14.83	20.00	74350	75200	100250	101400	1.40	8.0	17.5	
2	1.493	6	0.748	0.44	0.439	15.39	20.41	77160	77330	102290	102530	1.50	8.0	18.8	
3	0.652	4	0.494	0.20	0.192	6.65	8.51	73290	76350	93860	97770	1.00	8.0	12.5	
4	0.655	4	0.494	0.20	0.192	6.65	8.53	73290	76350	94090	98010	1.20	8.0	15.0	
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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)

Site Engineer,  
T. S. M. Design, Farooq Associates, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: nil

SOM Lab

Ref: 389 (Page-1/1)

Dated: Nil

Dated: 28-02-2019

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	2.633	8	0.993	0.79	0.774	27.01	35.95	75420	76970	100370	102450	1.30	8.0	16.3	
2	1.455	6	0.738	0.44	0.428	13.22	18.73	66270	68130	93860	96490	1.40	8.0	17.5	
3	0.652	4	0.494	0.20	0.192	6.65	9.23	73290	76350	101730	105970	0.90	8.0	11.3	
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**BEND TEST:**

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

