

Syed Adnan Aqib  
Project Engineer, M. Saleem Construction Co. Faisalabad

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: B.I/CIVIL/21-107

SOM Lab

Ref: 3583(Page-1/1)

Dated: 04-01-2021

Dated: 07-01-2021

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	1.481	6	0.744	0.44	0.435	16.51	20.90	82780	83730	104750	105950	1.30	8.0	16.3	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<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)

Amjad Saeed  
Resident Engineer, NESPAK (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 3994/103/AS/03/329

SOM Lab

Ref: 3586(Page-1/1)

Dated: 04-01-2021

Dated: 07-01-2021

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	2.622	8	0.991	0.79	0.771	28.56	35.90	79740	81710	100230	102700	1.30	8.0	16.3	
2	2.613	8	0.989	0.79	0.768	28.54	35.34	79680	81970	98660	101490	1.40	8.0	17.5	
3	1.489	6	0.747	0.44	0.438	15.90	20.87	79710	80070	104590	105070	1.00	8.0	12.5	
4	1.492	6	0.747	0.44	0.438	14.85	20.05	74450	74790	100500	100960	1.20	8.0	15.0	
5	0.680	4	0.505	0.20	0.200	7.44	9.02	82060	82060	99480	99480	1.20	8.0	15.0	
6	0.689	4	0.507	0.20	0.202	7.44	9.07	82060	81250	100050	99050	1.10	8.0	13.8	
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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>
# 8	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4(S. 5,6)	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)

Imran Khan  
CEO, Crust Builders (Pvt) Ltd. Lahore

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

Client Reference: Crust/CCL/01

SOM Lab

Ref: 3585(Page-1/1)

Dated: 06-01-2021

Dated: 07-01-2021

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	1.519	6	0.754	0.44	0.446	20.10	23.41	100760	99400	117370	115790	1.30	8.0	16.3	
2	1.518	6	0.754	0.44	0.446	19.98	23.21	100150	98800	116340	114780	1.00	8.0	12.5	
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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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/036

SOM Lab

Ref: 3587(Page-1/1)

Dated: 06-01-2021

Dated: 07-01-2021

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	0.664	4	0.498	0.20	0.195	7.19	9.53	79250	81280	105100	107800	1.10	8.0	13.8	
2	0.664	4	0.498	0.20	0.195	7.26	9.58	80040	82090	105670	108370	1.00	8.0	12.5	
3	0.647	4	0.492	0.20	0.190	6.73	9.09	74190	78100	100270	105550	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 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/029

SOM Lab

Ref: 3588(Page-1/1)

Dated: 01-01-2021

Dated: 07-01-2021

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	0.656	4	0.496	0.20	0.193	6.88	9.38	75880	78630	103420	107170	1.10	8.0	13.8	
2	0.653	4	0.494	0.20	0.192	7.10	9.55	78350	81620	105330	109720	1.00	8.0	12.5	
3	0.661	4	0.497	0.20	0.194	6.98	9.63	77000	79380	106230	109510	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 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/033

SOM Lab

Ref: 3589Page-1/1)

Dated: 06-01-2021

Dated: 07-01-2021

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	0.660	4	0.497	0.20	0.194	6.98	9.48	77000	79380	104540	107770	1.10	8.0	13.8	
2	0.655	4	0.494	0.20	0.192	6.85	9.48	75540	78690	104540	108900	1.10	8.0	13.8	
3	0.667	4	0.500	0.20	0.196	7.80	10.09	85990	87750	111290	113560	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 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/034

SOM Lab

Ref: 3590Page-1/1)

Dated: 04-01-2021

Dated: 07-01-2021

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	2.636	8	0.993	0.79	0.775	23.31	35.12	65090	66350	98040	99940	1.50	8.0	18.8	
2	2.623	8	0.991	0.79	0.771	23.09	34.86	64460	66050	97330	99730	1.40	8.0	17.5	
3	2.644	8	0.995	0.79	0.777	23.24	34.81	64890	65970	97190	98810	1.50	8.0	18.8	
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**BEND TEST:**

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

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/028  
Dated: 0101-2021

SOM Lab  
Ref: 3590Page-1/1)  
Dated: 07-01-2021

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	1.481	6	0.744	0.44	0.435	14.27	19.27	71540	72360	96570	97680	1.60	8.0	20.0	
2	1.479	6	0.744	0.44	0.435	14.42	19.62	72300	73130	98360	99490	1.50	8.0	18.8	
3	1.489	6	0.747	0.44	0.438	14.58	19.83	73070	73400	99380	99830	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 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/031

SOM Lab  
Ref: 3593Page-1/1)

Dated: 06-01-2021

Dated: 07-01-2021

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	1.469	6	0.742	0.44	0.432	14.24	19.42	71380	72700	97340	99140	1.50	8.0	18.8	
2	1.469	6	0.742	0.44	0.432	14.48	19.62	72560	73900	98360	100180	1.40	8.0	17.5	
3	1.465	6	0.741	0.44	0.431	14.58	19.67	73070	74590	98610	100670	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 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)

Muhammad Shahbaz  
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/030

SOM Lab

Ref: 3594(Page-1/1)

Dated: 04-01-2021

Dated: 07-01-2021

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	1.518	6	0.754	0.44	0.446	13.71	19.03	68730	67800	95400	94110	1.50	8.0	18.8	
2	1.477	6	0.743	0.44	0.434	17.23	21.66	86350	87550	108580	110080	1.30	8.0	16.3	
3	1.517	6	0.754	0.44	0.446	13.63	18.83	68320	67400	94370	93100	1.50	8.0	18.8	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<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)