

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/009

Dated: 04-08-2021

SOM Lab Ref: CED/SOM/4779(Page-1/2)

Dated: 11-08-2021

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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.970	25	25.38	491	506	243.50	341.20	496	482	695	675	35.0	200	17.5	
2	2.252	20	19.11	314	287	120.50	174.00	384	421	554	607	42.5	200	21.3	
3	1.588	16	16.05	201	202	92.50	138.50	460	458	689	685	35.0	200	17.5	
4	1.016	12	12.84	113	129	63.50	86.20	561	491	762	666	27.5	200	13.8	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Muteen Zafar Malik

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

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

Client Reference: MA/UET/LHR/0109

Dated: 04-08-2021

SOM Lab Ref: CED/SOM/4779(Page-2/2)

Dated: 11-08-2021

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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.975	25	25.38	491	506	245.20	343.20	500	485	699	679	37.5	200	18.8	
2	2.227	20	19.00	314	284	123.70	178.70	394	437	569	631	40.0	200	20.0	
3	1.586	16	16.04	201	202	93.20	139.70	464	462	695	692	32.5	200	16.3	
4	1.010	12	12.80	113	129	62.00	85.50	548	482	756	665	30.0	200	15.0	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Muhammad Waris Jan **Test Performed By:** Dr. /Engr. S. Asa Ali Gillani
 Sr. Engineer (QA/QC) EKL, Lahore (Project: MOL P-618 Construction of Maramzal Compression Fa

Client Reference: nil **Dated:** 11-08-2021
SOM Lab Ref: CED/SOM/4786(Page-1/2) **Dated:** 11-08-2021
Test: Tension Test & 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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.976	12	12.57	113	124	57.50	79.70	508	464	705	643	32.5	200	16.3	
2	1.000	12	12.74	113	127	64.20	83.50	568	504	738	656	30.0	200	15.0	
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BEND TEST:

12mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Waris Jan **Test Performed By:** Dr. /Engr. S. Asa Ali Gillani
 Sr. Engineer (QA/QC) EKL, Lahore (Project: MOL P-618 Construction of Maramzal Compression Fa

Client Reference: nil **Dated:** 11-08-2021

SOM Lab Ref: CED/SOM/4786(Page-2/2) **Dated:** 11-08-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Threaded Rod **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 ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.546	20	20.31	314	324	144.20	170.20	459	446	542	526	35.0	200	17.5	
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BEND TEST:

20mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Wasif Manzoor

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

Salman Developers, Site Office: 8-E/III Gulberg-III, Lahore (Project: Grand Square Mall)

Client Reference: nil

SOM Lab Ref: 4778(Page-1/1)

Dated: 11-08-2021

Dated: 11-08-2021

Test: Tension Test & Bend 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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.438	6	0.734	0.44	0.423	14.55	19.37	72910	75840	97080	100980	1.10	8.0	13.8	
2	1.482	6	0.745	0.44	0.436	16.13	20.74	80830	81580	103980	104930	1.20	8.0	15.0	
3	0.658	4	0.496	0.20	0.193	6.34	8.02	69920	72460	88470	91680	1.00	8.0	12.5	
4	0.647	4	0.492	0.20	0.190	6.22	8.43	68570	72180	92960	97860	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Muhammad Farooq Ashraf

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

Resident Engineer, Metroplan-Asian JV, Site Office Talagang Road Mianwali

Client Reference: Metroplan Asian JV-Nexus-MMCH-RE-83 **SOM Lab Ref:** 4780(Page-1/1)

Dated: 12-04-2021

Dated: 11-08-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (SJ 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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.703	8	1.005	0.79	0.794	27.06	34.48	75560	75180	96250	95760	1.20	8.0	15.0	
2	2.647	8	0.995	0.79	0.778	26.15	35.98	73000	74120	100460	102010	1.30	8.0	16.3	
3	1.485	6	0.745	0.44	0.436	15.11	19.62	75720	76420	98360	99260	1.50	8.0	18.8	
4	1.476	6	0.743	0.44	0.434	15.11	19.59	75720	76770	98210	99560	1.50	8.0	18.8	
5	1.494	6	0.748	0.44	0.439	15.24	19.78	76390	76560	99130	99350	1.50	8.0	18.8	
6	1.514	6	0.753	0.44	0.445	14.80	20.69	74190	73360	103720	102560	1.20	8.0	15.0	
7	0.670	4	0.501	0.20	0.197	6.60	9.02	72730	73840	99480	101000	1.40	8.0	17.5	
8	0.670	4	0.501	0.20	0.197	6.63	9.02	73070	74180	99480	101000	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Twelve Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 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

Engr. Asif Jah

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

X.E.N Tamirat Committee, Anjuman Himayat-I-Islam, 119 multan Road Lahore

Client Reference: AHI/TM/1160

SOM Lab Ref: 4781(Page-1/1)

Dated: 26-05-2021

Dated: 11-08-2021

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.723	8	1.009	0.79	0.800	26.57	34.32	74190	73260	95820	94620	1.50	8.0	18.8	
2	1.508	6	0.751	0.44	0.443	15.49	19.98	77670	77140	100150	99470	1.50	8.0	18.8	
3	0.666	4	0.500	0.20	0.196	6.65	9.07	73290	74790	100050	102090	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Executive Engineer (UCET)
University of Sargodha

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

Client Reference: SU/XEN(UCET)/856

SOM Lab Ref: 4783(Page-1/1)

Dated: 09-08-2021

Dated: 11-08-2021

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.512	6	0.752	0.44	0.444	16.00	20.39	80220	79500	102190	101270	1.30	8.0	16.3	
2	1.492	6	0.747	0.44	0.438	15.82	19.85	79300	79660	99480	99940	1.20	8.0	15.0	
3	0.678	4	0.503	0.20	0.199	6.27	9.68	69130	69480	106790	107330	1.30	8.0	16.3	
4	0.673	4	0.502	0.20	0.198	6.22	9.65	68570	69260	106450	107530	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Ajaz Ahmad Gondal

Test Performed By:

Dr. /Engr. S. Asad Ali Gillani

Acting Chief Resident Engineer, Trimu Panjnad Barrages Consultants(TPB Consultants)

Client Reference: TPBC/CRE/NCB-01/5154

SOM Lab Ref: 4784(Page-1/1)

Dated: 01-08-2021

Dated: 11-08-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Mughal 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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.598	4	0.473	0.20	0.176	6.44	8.28	71040	80730	91280	103720	1.00	8.0	12.5	
2	0.603	4	0.475	0.20	0.177	5.81	7.87	64080	72400	86780	98060	0.90	8.0	11.3	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk