

Project Manager
Engineering Kinetics (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 3528(Page-1/1)

Dated: 29-12-2020

Dated: 30-12-2020

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.602	8	0.987	0.79	0.765	26.35	36.56	73570	75970	102080	105420	1.10	8.0	13.8	
2	1.490	6	0.747	0.44	0.438	14.27	20.00	71540	71860	100250	100710	1.20	8.0	15.0	
3	0.661	4	0.497	0.20	0.194	5.98	9.09	65990	68030	100270	103370	1.10	8.0	13.8	
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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

Umair Maqsood
Sub Divisional Officer, Building Sub Division, Assembly, Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 3141-

SOM Lab

Ref: 3529(Page-1/1)

Dated: 16-12-2020

Dated: 30-12-2020

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.675	8	1.000	0.79	0.786	25.43	33.81	71000	71370	94400	94880	1.20	8.0	15.0	
2	2.678	8	1.001	0.79	0.787	25.23	33.86	70440	70700	94540	94900	1.30	8.0	16.3	
3	1.501	6	0.749	0.44	0.441	13.63	19.27	68320	68160	96570	96350	1.00	8.0	12.5	
4	1.506	6	0.751	0.44	0.443	14.12	19.80	70770	70290	99230	98560	1.10	8.0	13.8	
5	0.670	4	0.501	0.20	0.197	6.73	9.73	74190	75320	107350	108990	1.10	8.0	13.8	
6	0.670	4	0.501	0.20	0.197	6.70	9.81	73850	74980	108140	109780	1.10	8.0	13.8	
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BEND TEST:

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

Muhammad Imran
Engineering Executivem T & T Brothers, Peshawar

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: TTB-20/S-159

SOM Lab

Ref: 3531(Page-1/1)

Dated: 30-12-2020

Dated: 30-12-2020

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.515	6	0.753	0.44	0.445	15.51	19.11	77770	76890	95800	94730	1.00	8.0	12.5	
2	1.037	5	0.623	0.31	0.305	10.65	13.51	75790	77030	96090	97670	1.10	8.0	13.8	
3	0.655	4	0.494	0.20	0.192	5.93	8.99	65420	68150	99150	103280	1.00	8.0	12.5	
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BEND TEST:

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

Sub Divisional Officer
Public Health Engg: Sub Division Khushab

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: 773/KHB

SOM Lab

Ref: 3532(Page-1/1)

Dated: 30-12-2020

Dated: 30-12-2020

Test: Tension 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	0.529	4	0.444	0.20	0.155	4.18	5.93	46090	59470	65420	84420	1.50	8.0	18.8	
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BEND TEST:

--	No Bend test performed	Note:- Only One Sample Received and Tested

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

Test Performed by: .S. Asad Ali Gillani

Haseeb A. Khawaja
Deputy Team Leader
TPB Consultants,
Trimmu Panjnad Barrages Consultants, (TPBIP)

Client Reference No.: TPBC/2020/MISC/5593

Dated: 22-12-2020

SOM Lab Ref: CED/SOM/3530 (Page 1/2)

Dated: 30-12-2020

Test Type: Tensile Test

Sample Type: Nut - Bolts (16mm, 12mm) & J-Bolt (3/8")

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt - 8.8 (16x45mm)	10.4	75.2	885.2	20
2	Nut- Bolt - 8.8 (12x40mm)	6.8	33.7	927.9	30.0
3	J- Bolt (3/8")	5.2	14.7	692.0	10.0

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

Test Performed by: .S. Asad Ali Gillani

Haseeb A. Khawaja
Deputy Team Leader
TPB Consultants,

Client Reference No.: TPBC/2020/MISC/5593
SOM Lab Ref: CED/SOM/3530 (Page 2/2)

Dated: 22-12-2020
Dated: 30-12-2020

Sample Type: Nut - Bolts (16mm, 12mm & J-Bolt (3/8"))
Test Type: Hardness Test

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine
(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

Hardness Test Results

Sample No.	Sample Type	Hardness	Sample Type	Hardness
1	Bolt 16mm	HR – 95.83 – B	Nut	HR – 78.83 – B
2	Bolt 12mm	HR – 94.33 – B	Nut	HR – 71.66 – B
3	J-Bolt 3/8"	HR – 92.0 – B	Nut	HR – 91.16 – B

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