

Saif- ur- Rehman

Test Performed By:

Dr. /Engr.

Nauman Khurram

Admin Officer, The Trust School, Aamir Town Harbanspura, Lahore

Client Reference: SBL/2021/UET-TEDDS/1222

SOM Lab

Ref:

4312(Page-1/1)

Dated: 07-05-2021

Dated:

07-05-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed

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	2.665	8	0.998	0.79	0.783	24.67	33.44	68870	69490	93340	94180	1.50	8.0	18.8	
2	2.660	8	0.998	0.79	0.782	24.74	33.49	69070	69780	93490	94440	1.30	8.0	16.3	
3	1.453	6	0.737	0.44	0.427	12.92	18.22	64740	66710	91310	94090	1.30	8.0	16.3	
4	1.470	6	0.742	0.44	0.432	14.50	19.88	72660	74000	99640	101480	1.20	8.0	15.0	
5	0.655	4	0.494	0.20	0.192	5.98	8.21	65990	68740	90490	94260	1.50	8.0	18.8	
6	0.655	4	0.494	0.20	0.192	5.96	8.23	65760	68500	90720	94500	1.40	8.0	17.5	
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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

M. D.,
Baig Construction Co. (Marqaz Islami Ijtimah Chowk Raiwind)

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: nil

SOM Lab

Ref: 4314(Page-1/1)

Dated: 17-05-2021

Dated: 17-05-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed Bar (S J

Gauge Length: 8 inch

Sample Type:

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	2.644	8	0.995	0.79	0.777	23.90	34.53	66740	67850	96390	98000	1.30	8.0	16.3	
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BEND TEST:

# 8	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

Incharge Works / APO
CUI - Sahiwal Campus, Comsats University, Islamabad

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: COMSATS/SWL/WD/942
Dated: 28-04-2021
Test: Tension Test & Bend Test
Gauge Length: 8 inch

SOM Lab
Ref: 4320(Page-1/1)
Dated: 17-05-2021
ASTM-A-615
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	2.635	8	0.993	0.79	0.774	23.47	38.18	65510	66870	106580	108780	1.30	8.0	16.3	
2	1.461	6	0.739	0.44	0.429	15.70	19.72	78690	80710	98870	101400	1.10	8.0	13.8	
3	0.668	4	0.500	0.20	0.196	6.98	9.02	77000	78570	99480	101510	1.00	8.0	12.5	
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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

Test Performed by: Dr. S. Asad Ali Gillani

Ghulam Sarwar

Resident Engineer

NESPAK – Zeeruk (JV)

CPEC (WR), Package-II

ISAKHEL

Project: China Pakistan Economic Corridor (CPEC) Western Route Hakla (On M1)
to D. I. Khan Motorway-Rehmani Khel to Kot Balian- Package-2C

Reference No.: RE/NESPAK/P-2C/CPEC-WR/647

Dated: 24-05-2021

SOM Lab Ref: CED/SOM/4318(Page-1/2)

Dated: 17-05-2021

Test: Tensile Test, Elongation at Break, Hardness Test & Comp Set Test

Sample Type: Expansion Joint

TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm ²)	Elongation at Break(%)
1	6.0 x 3.2	0.47	24.48	249.61	540

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.20	3.15	1.562

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	Sample Type	Hardness (Shore A)
1	Exp. JOINT	48.33

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

Test Performed by: Dr. S. Asad Ali Gillani

Ghulam Sarwar

Resident Engineer

NESPAK – Zeeruk (JV)

CPEC (WR), Package-II

ISAKHEL

Project: China Pakistan Economic Corridor (CPEC) Westerm Route Hakla (On M1)
to D. I. Khan Motorway-Rehmani Khel to Kot Balian- Package-2C

Reference No.: RE/NESPAK/P-2C/CPEC-WR/647

Dated: 24-05-2021

SOM Lab Ref: CED/SOM/4318(Page-2/2)

Dated: 17-05-2021

Test: Tensile Test

Sample Type: Anchor Bolt (Expansion Joint)

Tensile Test Results

Sample No.	Original Diameter of Anchor Bolt (mm)	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	Elongation (%)
1	14.0	10.0	44.7	569.0	20.0

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

Test Performed by: Dr. S. Asad Ali Gillani

Resident Engineer,
PICIIP SAHIWAL
73-A W Block Farid Town Sahiwal

Client Reference No.: 3976/11/MTL/Lot-2/110

Dated: 05-04-2021

SOM Lab Ref: CED/SOM/4319(Page-1/2)

Dated: 17-05-2021

Test: Tensile Test & Elongation Test , Hardness Test, Comp Set. & Water Absorption Test

Sample Type: Rubber Ring (Gaskets) for RCC Pipe of Diameter 33”:

Tensile Strength & Elongation Test (ASTM-D-412)

S. No.	Sample Type	Sample Size(mm)	Tensile Load (kN)	Tensile Strength Kgs/cm ²	% Elongation
1	Rubber Gasket (72”)	17.0	1.3	58.388	410

Hardness Test A
-

Shore (ASTM-D-2240)

S. No	Sample Type	Hardness (A- Shore)
1	Rubber Gasket (72”)	60.67

COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	17.0	16.2	4.705

Water Absorption (ASTM-D-2240)

S. No	Sample Type	Remarks
1	Rubber Gaskets Joints (72 inch)	No absorption

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

Test Performed by: Dr. S. Asad Ali Gillani

Resident Engineer,
PICIIP SAHIWAL
73-A W Block Farid Town Sahiwal

Client Reference No.: 3976/11/MTL/Lot-2/112

Dated: 05-04-2021

SOM Lab Ref: CED/SOM/4319(Page-2/2)

Dated: 17-05-2021

Test: Tensile Test & Elongation Test , Hardness Test, Comp Set. & Water Absorption Test

Sample Type: Rubber Ring (Gaskets) for RCC Pipe of Diameter 72:

Tensile Strength & Elongation Test (ASTM-D-412)

S. No.	Sample Type	Sample Size(mm)	Tensile Load (kN)	Tensile Strength Kgs/cm ²	% Elongation
1	Rubber Gasket (33")	10.0	1.20	155.80	520.0

Hardness
Test A
-

Shore (ASTM-D-2240)

S. No	Sample Type	Sample Size	Hardness (A- Shore)
1	Rubber Gasket (33")	33 inch	52.333

COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	10.0	9.5	5.0

Water Absorption (ASTM-D-2240)

S. No	Sample Type	Remarks
1	Rubber Gaskets Joints (33 inch)	No absorption

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

