

Test Performed by: S. Asad Ali Gillani

NESPAK

Assistant Resident Engineer

EPCM-PIICP

Sahiwal.

(Rehabilitation/Improvement of Water Supply System Sahiwal-LOT 1)

Client Reference No.:3976/11/FA/01/Lot-1/01/878

Dated: 26-02-2024

SOM Lab Ref: CED/SOM/3902 (Page 1/1)

Dated: 29-03-2024

Test Type: Tensile Test

Sample Type: MS Pipe

Gauge Length: 2 inches

### Tensile Test Results

Sr. No.	Size of strip (mm)	X Section Area (mm <sup>2</sup> )	Yield Load (kN)	Ultimate Load (kN)	Yield Stress (MPa)	Ultimate Tensile Stress (MPa)	Elongation (inch)	% Elongation
1	32.0 x 5.2	166.40	59.0	68.0	354.57	408.65	0.6	30.0

Note: Please always confirm the results on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

**Test Performed by:** Dr. S. Asad Ali Gillani

Engr.Abrarullah Noor  
Snr.Material Engr  
QA&QC Sec  
DHA Quetta

**Client Reference No.:**DHAQ/Cmrl/SL/002  
**SOM Lab Ref:** CED/SOM/3903(Page-1/1)

Dated: 28-02-2024  
Dated: 29-03-2024

**Test:** Tensile Test, Elongation at Break

**Sample Type:** RCC Pipes Joining Gasket Ring (M/S Longman)

**TENSILE STRENGTH AND ELONGATION TEST.**

S. No	Sample Diameter (mm)	Ultimate Load (kN)	Tensile Strength (N/mm <sup>2</sup> )	Elongation at Break(%)
1	5.70	0.58	22.73	400.0
2	5.85	0.60	22.32	420.0

**- HARDNESS TEST**

S. No	Sample Type	Hardness <sub>avg</sub> (Shore A)
1	Gasket Ring (Rubber)	52.0

Goher Abbas

Test Performed By:

Dr. /Engr.

Irfan UI Hassan

Five Star Construction Co.(Const Of Storm Water Drain @ CCI LHR)

Client Reference: Nil

Dated: 29-03-2024

SOM Lab Ref: CED/SOM/3899(Page-1/1)

Dated: 29-03-2024

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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.221	20	18.98	314	283	141.00	203.20	449	499	647	719	30.0	200	15.0	
2	2.210	20	18.93	314	281	150.00	203.00	477	533	646	722	27.5	200	13.8	
3	1.562	16	15.92	201	199	103.00	125.20	512	518	623	630	27.5	200	13.8	
4	1.569	16	15.96	201	200	120.00	139.70	597	601	695	699	30.0	200	15.0	
5	0.953	12	12.43	113	121	62.00	78.00	548	511	690	643	27.5	200	13.8	
6	0.956	12	12.45	113	122	60.70	78.20	537	499	691	643	25.0	200	12.5	
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**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p>Only Nine Samples Received and Tested</p>
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](http://www.uet-civil.edu.pk)

Karamat Ali  
 AB Contractor Lahore.(MCB Bank Ltd,Bhagowal,Distt Sialkot)

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

**Client Reference:** ABC/2024/01-1

**SOM Lab**

**Ref:** 3897 (Page-1/1)

**Dated:** 24-01-2024

**Dated:** 29-03-2024

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.697	8	1.005	0.79	0.793	28.21	35.88	78750	78450	100170	99790	1.10	8.0	13.8	
2	2.706	8	1.006	0.79	0.795	28.75	36.70	80250	79750	102450	101810	1.00	8.0	12.5	
3	1.512	6	0.752	0.44	0.444	14.44	18.78	72400	71750	94120	93270	1.10	8.0	13.8	
4	1.509	6	0.751	0.44	0.443	14.60	18.88	73170	72670	94630	93990	1.00	8.0	12.5	
5	0.653	4	0.494	0.20	0.192	6.85	8.53	75540	78690	94090	98010	1.10	8.0	13.8	
6	0.652	4	0.494	0.20	0.192	6.98	8.53	77000	80210	94090	98010	1.00	8.0	12.5	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M.Mudassar  
Klash Pvt Ltd Faisalabad.

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

Client Reference: Nil

SOM Lab

Ref: 3898 (Page-1/1)

Dated: 28-03-2024

Dated: 29-03-2024

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	2.680	8	1.002	0.79	0.788	25.81	36.36	72060	72240	101510	101770	1.20	8.0	15.0	
2	2.588	8	0.984	0.79	0.761	26.52	36.75	74050	76870	102590	106500	1.30	8.0	16.3	
3	1.474	6	0.743	0.44	0.433	14.78	19.32	74090	75290	96830	98390	1.00	8.0	12.5	
4	1.464	6	0.740	0.44	0.430	14.55	19.11	72910	74610	95800	98030	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 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 Iftikhar,AEE-I

Test Performed By: Dr./Engr. Irfan UI Hassan

CCD No.1Pak PWD Lhr.(Const of New Office Accommodation For MCMC/SMC at Pas Campus Lhr)

Client Reference: AEE-I/CCD-I/LHR/02

SOM Lab

Ref: 3901 (Page-1/1)

Dated: 06-03-2024

Dated: 29-03-2024

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.476	6	0.743	0.44	0.434	13.97	19.05	70000	70970	95500	96820	1.40	8.0	17.5	
2	1.474	6	0.743	0.44	0.433	14.07	18.98	70510	71650	95140	96680	1.30	8.0	16.3	
3	1.046	5	0.625	0.31	0.307	10.70	14.27	76150	76890	101530	102520	1.00	8.0	12.5	
4	1.049	5	0.626	0.31	0.308	10.67	14.12	75930	76430	100440	101100	1.10	8.0	13.8	
5	0.670	4	0.501	0.20	0.197	6.17	8.94	68010	69050	98580	100080	1.00	8.0	12.5	
6	0.672	4	0.501	0.20	0.197	6.37	9.04	70260	71330	99710	101230	1.00	8.0	12.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<p><b>Note:-</b></p> <p>Only Nine Samples Received and Tested</p>
# 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](http://www.uet-civil.edu.pk)

