

Test Performed by: Dr. Asad Ali Gillani

Engr. Farrukh Alvi,
Dy. General Manager (Works)
Habib Rafiq Engineering (Pvt.) Ltd, Lahore
(101 Tower, Lahore)

Client Reference No.: HRLE/SKG/2025/L-19/90-12,15-22/229(Re-Tests) Dated: 26-09-2025

SOM Lab Ref: CED/SOM/1837Page-1/1) Dated: 26-09-2025

Test: Tensile Test

Sample Type: M.S Deformed Steel bar with Coupler (Zahid Engineering)

Tension Test Results

Sr. No.	Bar Size	Area	Yield Load	Ultimate Load	Yield Stress	Ultimate stress	Remarks
	(mm)	(mm ²)	kN	kN	(Mpa)	(Mpa)	
1	22	387	161.2	242.7	417	627	Steel Sample breaks at this load
2	12	113	47.0	60.7	416	537	Steel Sample breaks at this load

Witnessed by : Muhammad Akram (101 Group)

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

Imtinan Shaukat
Civil Generalist Deptt of Engineering ICL Power Pvt.Ltd Lahore.

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

Client Reference: Nil

SOM Lab Ref: 1839 (P-1/1)

Dated: 26-09-2025

Dated: 26-09-2025

Test: Tension Test

Test Specification: ASTM-A-615

Guage Length: 200 mm

Sample Type: Deformed Bar (Afaq 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)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.852	25	25.00	491	491	238.00	354.70	485	485	722	723	32.5	200	16.3	
2	3.930	25	25.25	491	501	256.00	341.20	521	512	695	682	37.5	200	18.8	
3	2.429	20	19.85	314	309	175.00	209.20	557	566	666	676	27.5	200	13.8	
4	2.372	20	19.62	314	302	165.00	203.50	525	546	648	674	27.5	200	13.8	
5	1.562	16	15.92	201	199	85.00	118.70	423	428	591	597	37.5	200	18.8	
6	1.563	16	15.92	201	199	83.50	117.70	415	420	586	592	32.5	200	16.3	
7	0.870	12	11.88	113	111	59.70	76.00	528	539	673	686	30.0	200	15.0	
8	0.882	12	11.96	113	112	62.20	78.20	550	554	692	697	27.5	200	13.8	
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BEND TEST:

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

I. H ZARRAR

Test Performed By:

Dr. /Engr.

Irfan Ul Hassan

Engineering Design Bureau.(DG Room Column at Zong MSC Kot Lakhpat Lahore)

Client Reference: EDB/81

SOM Lab Ref:

1840 (P-1/1)

Dated: 26-09-2025

Dated:

26-09-2025

Test: Tension Test

Test Specification:

ASTM-A706

Guage Length: 200 mm

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)				
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.874	25	25.08	491	494	268.70	337.70	547	544	688	684	35.0	200	17.5	
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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

Client Reference No.: 4891/WASA/WT/RE/Lab-118
2025

Dated: 01-09-

SOM Lab Ref: CED/SOM/1843
26-09-2025

Dated:

Test Type: Load Test of RPC Manhole Cover (M/S Abdul Hamid Ghouri & Co)

Test Standard: Non-standard test was performed as per requirement of the client [Application of load at the center of the Manhole Cover through circular thick steel plate of 15 Inch diameter]

Test Performed by: Dr. Asad Ali Gillani

Resident Engineer (WT Zone)

EPHE Division, NESPAK Lahore.

[Provision of Water Supply Sewerage System in Rampura UC-178 Wagha Zone Lahore]

This is with reference to your above-mentioned letter and SOM receipt No.1843 dated: 26-09-2025. The samples of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Sr. No	Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
1	645 mm	64.9 mm	12000 kg	The sample was cracked at this load

Resident Engineer

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

NespaK Lahore.(Impro of Water Supply/Sewerage System UC-153 Shalimar Zone Lahore)

Client Reference: NESPAK/LDP/LHR/ST/LAB-063

SOM Lab

Ref: 1833 (Page-1/1)

Dated: 25-08-2025

Dated: 26-09-2025

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	0.672	4	0.501	0.20	0.197	6.32	8.33	69700	70760	91840	93240	0.90	8.0	11.3	
2	0.662	4	0.498	0.20	0.195	7.14	9.28	78690	80710	102290	104920	0.80	8.0	10.0	
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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

Engineer Muhammad Irfan
Dy Dir Infra. DHA Gujranwala.(Const Of Main Boulevard)

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

Client Reference: 111/DD/Infra/Lab/27

SOM Lab

Ref: 1835 (Page-1/2)

Dated: 11-09-2025

Dated: 26-09-2025

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	0.664	4	0.498	0.20	0.195	6.57	8.53	72510	74360	94090	96500	1.10	8.0	13.8	
2	0.664	4	0.498	0.20	0.195	6.95	8.77	76660	78630	96670	99150	1.10	8.0	13.8	
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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

Engineer Muhammad Irfan
Dy Dir Infra. DHA Gujranwala.(Const Of Main Boulevard)

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

Client Reference: 111/DD/Infra/Lab/MB-1/31

SOM Lab

Ref: 1835 (Page-2/2)

Dated: 22-09-2025

Dated: 26-09-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Ak Smelters)

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	0.661	4	0.497	0.20	0.194	6.60	8.97	72730	74980	98920	101980	1.10	8.0	13.8	
2	0.663	4	0.498	0.20	0.195	6.49	8.84	71610	73440	97460	99960	1.30	8.0	16.3	
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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

Arslan Ahmad
Manager Sales Model Steel Lahore.

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

Client Reference: Nil

SOM Lab

Ref: 1836 (Page-1/1)

Dated: 26-09-2025

Dated: 26-09-2025

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	0.562	4	0.458	0.20	0.165	5.07	6.60	55870	67720	72730	88160	1.50	8.0	18.8	
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BEND TEST:

# 4	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

Hasham-UI Haq
Construction Manager COLARO Sports Sialkot

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

Client Reference: Nil

SOM Lab

Ref: 1838 (Page-1/1)

Dated: 26-09-2025

Dated: 26-09-2025

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Model 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	2.653	8	0.997	0.79	0.780	26.40	37.89	73710	74650	105780	107140	1.00	8.0	12.5	
2	2.669	8	0.999	0.79	0.784	23.24	36.46	64890	65380	101800	102570	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
# 8(B)	Sample bend through 180 degrees Satisfactorily without any crack	
# 8(B)	Sample bend through 180 degrees Satisfactorily without any crack	
# 8(B)	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

Resident Engineer

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

JERS Consultancy (Pvt) Ltd. PWWF Phase-II.(Estb of Workers Welfare Complex,Distt Kasur)

Client Reference: PWWF-P-II-Sunder/H-02

SOM Lab

Ref: 1841-42 (Page-1/1)

Dated: 25-09-2025

Dated: 26-09-2025

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	1.480	6	0.744	0.44	0.435	16.11	19.27	80730	81660	96570	97680	1.20	8.0	15.0	
2	1.474	6	0.743	0.44	0.433	15.70	18.96	78690	79960	95040	96570	1.10	8.0	13.8	
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Witnessed By: Ameer Butt (Jers)

BEND TEST:

# 6	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