

Client Reference No.: 4891/WASA/ABT/RE/Lab-171

Dated: 08-10-2025

SOM Lab Ref: CED/SOM/1944

Dated: 15-10-2025

Test Type: Load Test of RPC Manhole Cover (H&M Enterprises JV Mehran Builders)

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 (ABT Zone)

EPHE Division, NESPAK Lahore.

- (I. Improvement of Water Supply/ Sewerage System in UC-158 Aziz Bhatti Zone)
- (II. Improvement of Water Supply/ Sewerage System in UC-159 Aziz Bhatti Zone)

This is with reference to your above-mentioned letter and SOM receipt No.1944 dated: 15-10-2025. 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	640 mm	63.5 mm	14100 kg	The sample was cracked at this load

Ameersons

Test Performed By:

Dr. /Engr.

Wasim Abbas

Engineering and Management Pvt Ltd.(Project Located at Syed Muratab Ali Road Gulberg II Lahore)

Client Reference: Nil

SOM Lab

Ref:

1940 (Page-1/1)

Dated: 15-10-2025

Dated:

15-10-2025

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	1.472	6	0.743	0.44	0.433	13.97	18.27	70000	71130	91560	93040	1.30	8.0	16.3	
2	1.468	6	0.741	0.44	0.431	14.37	18.45	72050	73550	92480	94410	1.20	8.0	15.0	
3	0.665	4	0.498	0.20	0.195	6.85	8.53	75540	77480	94090	96500	1.00	8.0	12.5	
4	0.661	4	0.497	0.20	0.194	6.88	8.63	75880	78220	95210	98160	1.10	8.0	13.8	
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Witnessed By: M.Shaharyar (Site Engr), Iqbal (Client),Imran (Client)

BEND TEST:

6 Sample bend through 180 degrees Satisfactorily without any crack

4 Sample bend through 180 degrees Satisfactorily without any crack

Note:-Only Six Samples
Received and TestedNote: Please always confirm the results of above report on web www.uet-civil.edu.pk

Anwar Ul Haq
PM IKAN Engineering Services Pvt Ltd.(Const Of Zong MSC Faisalabad)

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IKAN-FSD-SITE-UET/060

SOM Lab

Ref: 1942 (Page-1/1)

Dated: 15-10-2025

Dated: 15-10-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Ittehad 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	2.611	8	0.988	0.79	0.767	30.78	36.54	85940	88520	102020	105080	1.20	8.0	15.0	
2	1.473	6	0.743	0.44	0.433	14.39	18.30	72150	73310	91720	93200	1.40	8.0	17.5	
3	0.708	4	0.515	0.20	0.208	6.85	8.89	75540	72640	98020	94250	1.10	8.0	13.8	
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Witnessed By: Saleem Sheikh

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

Mohsin Ali, PM

Test Performed By: Dr. /Engr. Nauman Khurram

AF Builders Lhr.(Premium Toilets,Carwash Existing Building Extension and W/Tanks at WEPL Shami Road Lahore Cantt)

Client Reference: Nil

SOM Lab

Ref: 1943 (Page-1/1)

Dated: Nil

Dated: 15-10-2025

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Mughal Supreme)

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	0.648	4	0.492	0.20	0.190	6.44	8.26	71040	74780	91050	95840	1.40	8.0	17.5	
2	0.647	4	0.492	0.20	0.190	6.27	8.18	69130	72770	90150	94900	1.20	8.0	15.0	
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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

Asim Mushtaq
GM Factory Master Offisys (Pvt) Ltd. Lahore.

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: PEMH05-13

SOM Lab

Ref: 1945 (Page-1/1)

Dated: 13-10-2025

Dated: 15-10-2025

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	0.642	4	0.491	0.20	0.189	6.22	8.15	68570	72560	89930	95160	1.40	8.0	17.5	
2	0.639	4	0.489	0.20	0.188	6.12	8.12	67450	71750	89590	95310	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

Maqsood Ahmad

Test Performed By:

Dr. /Engr. Wasim Abbas

Professional Construction Services (Pvt) Ltd.(Academic Block,Admission & Marketing Office,Namal Uni Mainwali)

Client Reference: PCS/25/Eng-81-B

SOM Lab

Ref: 1946 (Page-1/1)

Dated: 15-10-2025

Dated: 15-10-2025

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	2.618	8	0.990	0.79	0.769	27.06	33.66	75560	77620	93970	96540	1.40	8.0	17.5	
2	2.614	8	0.989	0.79	0.768	26.25	33.30	73280	75380	92970	95640	1.40	8.0	17.5	
3	1.496	6	0.748	0.44	0.440	17.20	20.90	86200	86200	104750	104750	1.30	8.0	16.3	
4	1.519	6	0.754	0.44	0.446	18.17	20.34	91050	89830	101940	100560	1.20	8.0	15.0	
5	0.622	4	0.483	0.20	0.183	6.70	8.21	73850	80720	90490	98900	1.00	8.0	12.5	
6	0.659	4	0.497	0.20	0.194	6.85	7.82	75540	77880	86220	88890	1.30	8.0	16.3	
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BEND TEST:

--	No Bend test performed	Note:- Only Six Samples Received and Tested

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