

Client Reference No.: MMP/1095/Kamalia/SEW/124/2025

SOM Lab Ref: CED/SOM/1203

Test Type: Load Test of RPC Manhole Cover 24” Diameter

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 steel plate of 15 Inches diameter]

Test Performed by: Dr. Asad Ali Gillani

Dated: 30-04-2025

Dated: 13-05-2025

Muhammad Shafiq

Assistant Resident Engineer

PCP Pkg-III Kamalia, MM Pakistan

(Improvement of Sewerage System and Construction of Waste Water Treatment Plant-Kamalia City Package-1 Sewerage System)

This is with reference to your above-mentioned letter and SOM receipt No. 1203 dated: 13-05-2025. The sample of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
640 mm	70.0 mm	10700 kg	Manhole Cover was cracked at this load

Witnessed by: Muhammad Shafiq (ARE Kamalia)

Engr. Rashid

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Site Engineer Husnain Builders Lahore.(Lahore Grammar School Architect Society Lahore)

Client Reference: Nil

Dated: Nil

SOM Lab

Ref: 1199 (Page-1/1)

Dated: 13-05-2025

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	2.651	8	0.996	0.79	0.779	22.73	31.04	63460	64360	86660	87880	1.60	8.0	20.0	
2	2.679	8	1.001	0.79	0.787	22.48	31.86	62750	62990	88930	89270	1.70	8.0	21.3	
3	1.486	6	0.746	0.44	0.437	12.81	18.04	64230	64670	90440	91060	1.50	8.0	18.8	
4	1.522	6	0.754	0.44	0.447	12.86	18.17	64480	63470	91050	89630	1.50	8.0	18.8	
5	0.666	4	0.500	0.20	0.196	6.24	8.38	68800	70200	92400	94290	1.20	8.0	15.0	
6	0.665	4	0.498	0.20	0.195	6.44	8.51	71040	72870	93860	96270	1.30	8.0	16.3	
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<u>BEND TEST:</u>															
# 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															

Naeem Akhtar **Test Per**
Director Usman Ibrahim Construction.(Const Of Alam Tower)

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

Dated: Nil

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 1200 (Page-1/1)

Dated: 13-05-2025

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	3.324	9	1.115	1.00	0.977	34.10	46.10	75200	76970	101660	104060	1.50	8.0	18.8	
2	3.330	9	1.116	1.00	0.979	31.96	42.17	70480	71990	93010	95000	1.50	8.0	18.8	
3	2.735	8	1.012	0.79	0.804	23.85	33.10	66590	65430	92400	90800	1.40	8.0	17.5	
4	2.608	8	0.988	0.79	0.766	23.67	34.37	66080	68150	95960	98970	1.30	8.0	16.3	
5	1.475	6	0.743	0.44	0.433	14.09	18.93	70620	71760	94880	96420	1.10	8.0	13.8	
6	1.466	6	0.741	0.44	0.431	14.60	20.15	73170	74700	101020	103130	1.20	8.0	15.0	
7	1.031	5	0.621	0.31	0.303	9.65	13.32	68680	70270	94790	96980	1.40	8.0	17.5	
8	1.026	5	0.620	0.31	0.302	9.96	14.27	70860	72730	101530	104220	1.50	8.0	18.8	
9	0.668	4	0.500	0.20	0.196	6.85	8.99	75540	77080	99150	101170	1.10	8.0	13.8	
10	0.641	4	0.489	0.20	0.188	6.49	8.53	71610	76180	94090	100090	1.10	8.0	13.8	
<u>BEND TEST:</u>															
# 9	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Fifteen Samples Received and Tested				
# 8	Sample bend through 180 degrees Satisfactorily without any crack														
# 6	Sample bend through 180 degrees Satisfactorily without any crack														
# 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															

Engr.Aziz Ur Rehman, ARE **Test Perf**
ACE-Arts Limited, Net Zero Energy Building Gulbarg III Lahore.

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

Client Reference: NZEB/ACE/LAB/2025/42
Dated: 13-05-2025

SOM Lab
Ref: 1201 (Page-1/1)
Dated: 13-05-2025

Test:	Tension Test & Bend Test	Test Specification:	ASTM-A-615
Gauge Length:	8 inch	Sample Type:	Deformed Bar (AK Supreme 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	1.559	6	0.764	0.44	0.458	14.22	19.52	71280	68480	97850	94000	1.40	8.0	17.5	
2	1.464	6	0.740	0.44	0.430	14.68	19.83	73580	75290	99380	101690	1.20	8.0	15.0	
3	0.651	4	0.493	0.20	0.191	6.75	8.58	74420	77920	94650	99110	1.30	8.0	16.3	
4	0.653	4	0.494	0.20	0.192	7.21	8.87	79470	82790	97800	101870	1.10	8.0	13.8	
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<u>BEND TEST:</u>															
# 6	Sample bend through 180 degrees Satisfactorily without any crack										Note:- Only Six Samples Received and Tested				
# 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															

Ravi Construction Company

Test Performed By:

Dr. /Engr.

Wasim Abbas

Lahore.(Project: Repetify 2 QABP, Sheikhupura)(Novatex Limited)

Client Reference: Nil

Dated: 13-05-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 1204 (Page-1/1)

Dated: 13-05-2025

ASTM-A-615

Test Specification:

Sample Type:

Deformed Bar (Al Moiz 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	0.654	4	0.494	0.20	0.192	6.44	8.31	71040	74000	91610	95430	1.50	8.0	18.8	
2	0.653	4	0.494	0.20	0.192	6.47	8.36	71380	74360	92180	96020	1.50	8.0	18.8	
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<u>BEND TEST:</u>															
# 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															

M.Yasir Kiani, RE

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

JCP Wahga NESPAK. (Expension Of Joint Check Post Wahga, Lahore)

Client Reference: 4749/031/YK/01/176

Dated: 13-05-2025

Test: Tension Test

Gauge Length: 8 inch

SOM Lab

Ref: 1205 (Page-1/1)

Dated: 13-05-2025

Test Specification:

ASTM-A-615

Sample Type:

Deformed Bar (Aziz 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	0.667	4	0.500	0.20	0.196	6.60	8.79	72730	74210	96900	98880	1.20	8.0	15.0	
2	0.668	4	0.500	0.20	0.196	6.47	8.97	71380	72840	98920	100940	1.10	8.0	13.8	
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<u>BEND TEST:</u>															
# 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															

Sub Divisional officer,

Test Performed By: Dr. /Engr. Wasim Abbas

Road Const SD No.1 Lhr.(Rehb Of Barki Road From BRB Canal To Hudiaara Drain I/C Bridge)

Client Reference: 312/RCSD-1

Dated: 06-05-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 1207 (Page-1/1)

Dated: 13-05-2025

ASTM-A-615

Test Specification:	ASTM-A-615
Sample Type:	Deformed Bar

[illegible]

BEND TEST:

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