Client Reference No.: MMP/WZD/RPC/28/2025 **Dated:** 15-07-2025

SOM Lab Ref: CED/SOM/1525 **Dated:** 18-07-2025

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

Waqas Khan

Assistant Resident Engineer

PCP Pkg-01 Wazirabad, MM Pakistan

(Construction of Sewerage System and Waste Water Treatment Plant for Southern Eastern Area of Wazirabad City)

This is with reference to your above-mentioned letter and SOM receipt No. 1525 dated: 18-07-2025. 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	58.9 mm	13200 kg	Manhole Cover was cracked at this load

Witnessed by: M. Abdul Shoaib (Inspector)

Test Performed by: Dr.S.Asad Ali Gillani

Han Jin Jang
Construction Supervisor/Deputy PM
SUNJIN Engineering & amp; Architecture Co., Ltd.
Technology Park Development Project

Client Reference No.: PK-IT-SUN-C-10-JUL-005 Dated: 10-07-2025

SOM Lab Ref: CED/SOM/1528(Page 1/1) Dated: 18-07-2025

Load Test Results

Sr No.	Sample Type	Ultimate Load (kN)	Max. Deflection (mm)	Remarks
1	PEDESTAL Rod	49.50	1.0	Pedestal buckles at this load

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

Test Performed by: Dr.S.Asad Ali Gillani

Han Jin Jang
Construction Supervisor/Deputy PM
SUNJIN Engineering & amp; Architecture Co., Ltd.
Technology Park Development Project

Client Reference No.: PK-IT-SUN-C-14-JUL-001 Dated: 18-07-2025

SOM Lab Ref: CED/SOM/1529(Page 1/1) Dated: 18-07-2025

Test Type: Tensile Test

Sample Type: Bolt and Nuts M20, M22

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation	Remarks
1	Bolt M20	14.0	171.7	1115.9	20.0	Sample breaks at this Load
2	Bolt M20	14.1	179.0	1147.0	25.0	Sample breaks at this Load
3	Bolt M22	14.0	175.0	1137.4	20.0	Sample breaks at this Load
4	Bolt M22	14.0	174.0	1130.9	20.0	Sample breaks at this Load

Engr. Farrukh Alvi **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

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

Client Reference: HRLE/SKG/2025/Hunza/25-28.530/214 **SOM Lab Ref:** 1530 (P-1/1)

Dated: 18-07-2025 **Dated:** 18-07-2025

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

Guage Length: 200 mm **Sample Type:** Deformed Bar (Hunza 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	3.897	25	25.13	491	496	233.00	310.20	475	470	632	626	42.5	200	21.3	
2	3.837	25	24.95	491	489	237.50	311.00	484	486	633	637	40.0	200	20.0	
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BEND TEST:

25mm	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

Muhammad Nadeem Akhtar **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

RE NESPAK Lahore.(Re-Const/Rehb of G.T Road From Quaid-E-Azam Interchange To Wahga Border)

Client Reference: Nespak/GT-W/MNA/048 **SOM Lab Ref:** 1524 (Page-1/1)

Dated: 15-07-2025 **Dated:** 18-07-2025

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Ravi 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	0.651	4	0.493	0.20	0.191	5.76	8.89	63510	66510	98020	102640	1.00	8.0	12.5	
2	0.652	4	0.494	0.20	0.192	5.86	9.04	64640	67330	99710	103860	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

Muhammad Azmat, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

NESPAK-Turkpak JV Lhr.(Reconstruction of Lady Willingdon Hospital,Lahore)

Client Reference: 4729/13/MA/04/311 **SOM Lab Ref:** 1526 (Page-1/1)

Dated: 17-06-2025 **Dated:** 18-07-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar (AF 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	0.663	4	0.498	0.20	0.195	6.85	9.19	75540	77480	101390	103990	1.00	8.0	12.5	
2	0.662	4	0.498	0.20	0.195	6.70	9.04	73850	75750	99710	102260	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

Major Muhammad Haris **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

GE(A)-II Gwa.(Const of 15 x Watch Towers at 177 Br Bn Engr Qbd)

Client Reference: 600-1148/17/E-6 **SOM Lab Ref:** 1527 (Page-1/1)

Dated: 11-07-2025 **Dated:** 18-07-2025

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	1.339	6	0.708	0.44	0.394	14.42	18.37	72300	80740	92070	102820	1.10	8.0	13.8	
2	1.327	6	0.705	0.44	0.390	14.22	18.27	71280	80420	91560	103300	1.20	8.0	15.0	
3	1.050	5	0.627	0.31	0.309	11.28	14.48	80280	80540	102980	103320	1.00	8.0	12.5	
4	1.013	5	0.616	0.31	0.298	11.06	14.14	78690	81860	100590	104640	1.00	8.0	12.5	
5	0.587	4	0.469	0.20	0.173	6.34	7.87	69920	80830	86780	100320	1.20	8.0	15.0	
6	0.584	4	0.468	0.20	0.172	6.24	7.70	68800	80000	84870	98690	1.20	8.0	15.0	
7	0.587	4	0.469	0.20	0.173	6.29	7.75	69360	80180	85430	98770	1.30	8.0	16.3	
8	0.581	4	0.467	0.20	0.171	6.32	7.62	69700	81510	84080	98340	1.20	8.0	15.0	
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BEND TEST:

# 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
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

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