Client Reference No.: 427/DO(I&S)/OK

Dated: 02-12-2024

SOM Lab Ref: CED/SOM/334 **Dated:** 09-12-2024

Test Type: Load Test of RPC Manhole Cover

(Supply of RPC Manhole Cover for Distt Okara)

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(19.0mm) steel plate of 377mm diameter]

Test Performed by: Dr. Asad Ali Gillani										
District Officer (I&S)										
District Council, Okara										

This is with reference to your above-mentioned letter and SOM receipt No.334 dated: 09-12-2024. The sample of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Weight	Diameter of Ring	Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
54.20 Kg	660mm	640mm	70.2mm	16500 kg	Manhole Cover was cracked at this load

Heaven's Way

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

Zipline Adventure (Pvt) Ltd.Islamabad.(Sherwan Adventure Family Park, Abbottabad)

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

 Client Reference:
 6/12/2024/159
 Dated:
 06-12-2024

 SOM Lab Ref:
 CED/SOM/333 (Page-1/1)
 Dated:
 09-12-2024

 Test:
 Tension Test & Bend Test
 Test Specification:
 ASTM-F 1554

Sample Type: Anchor Bolt (U-Shape) Gauge Length: 200 mm

				T		1	1			ı		1			· ·
			ia.	Ar	ea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.944	25	25.28	491	502	380.90	427.70	776	759	871	852	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BE	ND TE	ST:													
		No Be	end test	perforr	ned						Note:-				
											Only One Sample				

Received and Tested

Waqas Ahmed Ghumman,PM Test Performed By: Dr. /Engr. Asad Ali Gillani

High-Q Constructions Lhr.(Const Of High-Q Tower at CBD Lahore)

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

Client Reference:QC/HQ-CBD/CIVIL/003Dated:09-12-2024SOM Lab Ref:CED/SOM/337 (Page-1/1)Dated:09-12-2024Test:TensionTest & Bend TestTest Specification:ASTM-A 615

Sample Type: Deformed Bar Gauge Length: 200 mm

	T	1		ı		ı				Т		ı	1		
			ia.	Ar	ea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.991	25	25.43	491	508	243.00	381.70	495	479	778	752	30.0	200	15.0	
2	3.965	25	25.36	491	505	251.00	381.20	511	497	777	755	27.5	200	13.8	
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BE	ND TE	ST:													
2	5mm	Samp	le bend	through	180 de	egrees Sa	atisfactorily	without a	ny crack		Note:-				
												hree	Sam	ples	

Received and Tested

Engr. Abrar Ahmed **Test Performed By:** Dr. /Engr. Asad Ali Gillani Div Engr. (Civil) Engg Services Maint.& Dev PAA, AllAP,Lhr. (Camb and Water Proofing of All Offices)

SOM Lab

 Client Reference:
 AllAP/1659-01/059/LACV/IV/877
 Ref:
 331 (Page-1/1)

 Dated:
 09-12-2024
 Dated:
 09-12-2024

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

Gauge Length: 8 inch Sample Type: Deformed Bar (FF Steel)

- Judge Length.										Scioimed Bar (FF Steel)					
		С	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.649	4	0.493	0.20	0.191	6.49	9.07	71610	74980	100050	104760	1.20	8.0	15.0	
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	ND TE										Γ				
	# 4	Sample bend through 180 degrees Satisfactorily without any crack								Note:	•				
											Only T Receiv	wo S ved a	Sam _l ind T	ples Γeste	d

Mehmood Iqbal Asghar,RE

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Nespak-Turk Pak JV.(Estb Of 200 Bedded Mother & Child Hospital & Nursing College at Distt Bwn)

SOM Lab

Client Reference: 4460/13/MA/04/431

Ref: 332 (Page-1/1) Dated: 09-12-2024

Dated: 04-12-2024

Test Specification:

ASTM-A-615

Test: Tension Test & Bend Test Gauge Length:

8 inch

Sample Type: **Deformed Bar**

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.716	8	1.008	0.79	0.798	24.46	33.40	68300	67620	93260	92320	1.40	8.0	17.5	
2	2.717	8	1.008	0.79	0.798	25.66	34.40	71630	70910	96050	95080	1.40	8.0	17.5	
3	1.511	6	0.752	0.44	0.444	15.29	19.64	76640	75950	98460	97570	1.40	8.0	17.5	
4	1.508	6	0.751	0.44	0.443	15.46	19.54	77510	76990	97950	97290	1.30	8.0	16.3	
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# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
		Only Six Samples
		Received and Tested

Sub Divisional officer, Test Performed By: Dr. /Engr. Asad Ali Gillani

USD No. 2 Revealaindi (Const Of Elvavor Khawaia Corporation Chawk to Advala Rd Diett Revealaindi)

HSD No.2 Rawalpindi.(Const Of Flyover Khawaja Corporation Chowk to Adyala Rd Distt Rawalpindi)

SOM Lab

 Client Reference:
 1470/H-2
 Ref:
 335 (Page-1/1)

 Dated:
 05-12-2024
 Dated:
 09-12-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.666	8	0.998	0.79	0.783	24.03	33.38	67080	67680	93200	94030	1.40	8.0	17.5	
2	2.672	8	1.000	0.79	0.785	24.57	33.86	68590	69020	94540	95140	1.30	8.0	16.3	
3	1.505	6	0.750	0.44	0.442	15.90	20.44	79710	79350	102450	101980	1.40	8.0	17.5	
4	1.508	6	0.751	0.44	0.443	15.85	20.41	79450	78920	102290	101600	1.40	8.0	17.5	
5	0.668	4	0.500	0.20	0.196	6.39	8.63	70480	71920	95210	97150	1.30	8.0	16.3	
6	0.666	4	0.500	0.20	0.196	6.32	8.56	69700	71120	94420	96350	1.20	8.0	15.0	
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BEND TEST:

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

Muhammad Imran Snr PM IDAP Lahore. Test Performed By:

Dr. /Engr.

Wasim Abbas

SOM Lab

Client Reference: SPM(NETZERO)/IDAP/2024/20918

Ref: Dated: 336 (Page-1/1) 09-12-2024

Dated: 09-12-2024

Test Specification:

ASTM-A-615

Gauge Length:

Test:

8 inch

Tension Test & Bend Test

Sample Type:

Deformed Bar (Karachi Steel)

						NC 11	1.114	VC - L-I	04	1114 6	\.				
			ia.	A	rea	Yield	Ultimate	Yield	Stress	UIt. S	Stress		4	on	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.482	6	0.745	0.44	0.436	14.83	19.59	74350	75030	98210	99110	1.20	8.0	15.0	
2	1.488	6	0.746	0.44	0.437	14.60	19.27	73170	73670	96570	97230	1.20	8.0	15.0	
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BE	ND TE	ST:													
	# 6	Samp	le bend	througl	n 180 de	grees Sa	atisfactorily	without a	ny crack		Note:	-			

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

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

ME Banu Mukhtar Contracting(Pvt.) Ltd.(Burj-1 By AJWA Builders)

SOM Lab

Client Reference: DOC-BMC/AJWA/149 Ref: 338 (Page-1/2) Dated: 09-12-2024

Dated: 09-12-2024

Gauge Length:

Test:

Tension Test & Bend Test **Test Specification:** ASTM-A-615 8 inch Sample Type: **Deformed Bar**

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			디	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.622	8	0.991	0.79	0.771	28.05	38.07	78320	80250	106290	108910	1.20	8.0	15.0	
2	2.624	8	0.991	0.79	0.771	26.07	34.81	72770	74560	97190	99580	1.30	8.0	16.3	
3	1.518	6	0.754	0.44	0.446	15.36	20.05	77000	75970	100500	99150	1.20	8.0	15.0	
4	1.502	6	0.749	0.44	0.441	15.49	20.03	77670	77490	100400	100170	1.20	8.0	15.0	
5	0.663	4	0.498	0.20	0.195	6.75	8.84	74420	76320	97460	99960	1.20	8.0	15.0	
6	0.665	4	0.498	0.20	0.195	6.80	8.87	74980	76900	97800	100300	1.30	8.0	16.3	
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BEND TEST:

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

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

ME Banu Mukhtar Contracting(Pvt.) Ltd.(Burj-1 By AJWA Builders)

SOM Lab

 Client Reference:
 DOC-BMC/AJWA/150
 Ref:
 338 (Page-2/2)

 Dated:
 09-12-2024
 Dated:
 09-12-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Area		Yield	Ultimate	Yield	Stress	Ult. S	tress			L	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	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	6.73	8.84	74190	75710	97460	99450	1.20	8.0	15.0	
2	0.665	4	0.498	0.20	0.195	6.75	8.89	74420	76320	98020	100530	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
		<u> </u>

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

PM UMT Lahore. (University of Management and Technology Lahore) (For Exhibition Building)

SOM Lab

 Client Reference:
 EXB-1/76
 Ref:
 339 (Page-1/1)

 Dated:
 05-12-2024
 Dated:
 09-12-2024

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

Gauge Length: 8 inch Sample Type: Deformed Bar (Hunza steel)

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.603	8	0.987	0.79	0.765	25.66	33.59	71630	73970	93770	96830	1.40	8.0	17.5	
2	2.592	8	0.985	0.79	0.762	22.94	31.96	64030	66390	89220	92500	1.60	8.0	20.0	
3	1.454	6	0.737	0.44	0.427	12.44	17.69	62340	64240	88650	91350	1.60	8.0	20.0	
4	1.471	6	0.742	0.44	0.432	14.19	19.27	71130	72440	96570	98360	1.40	8.0	17.5	
5	0.660	4	0.497	0.20	0.194	6.63	8.53	73070	75330	94090	97000	1.10	8.0	13.8	
6	0.663	4	0.498	0.20	0.195	6.70	8.63	73850	75750	95210	97650	1.30	8.0	16.3	
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BEND TEST:

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

Muhammad Amjad Aqeel

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

AE B&R CMES (PAF) Sargodha.(Estb Of Cattle Form & Horse Breeding Facilities at PAF Chander)

SOM Lab

Client Reference: 6000-HB/39/E6 Ref: Dated: 340 (Page-1/1)

Dated: 05-12-2024

09-12-2024

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length:

8 inch

Sample Type: **Deformed Bar**

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			<u>_</u>	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.502	6	0.749	0.44	0.441	14.02	20.08	70260	70100	100660	100430	1.20	8.0	15.0	
2	1.506	6	0.751	0.44	0.443	14.58	19.67	73070	72570	98610	97950	1.30	8.0	16.3	
3	0.674	4	0.502	0.20	0.198	6.63	8.99	73070	73810	99150	100150	1.20	8.0	15.0	
4	0.673	4	0.502	0.20	0.198	6.93	9.73	76440	77210	107350	108440	1.10	8.0	13.8	
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BEND TEST:

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