Test Performed by: Dr. S. Asad Ali Gillani

Executive Engineer.
GOP Irrigation Deptt. Chakbandi Division Lahore.
(Construction of Gated Head Regulators of BRBD Link Canal)

Client Reference No.: 002/Test/Camp Dated: 16-01-2024
SOM Lab Ref: CED/SOM/3518(Page-2/2) Dated: 16-01-2024
Test: Tensile Test & Elongation Test, Hardness Test
Sample Type: PVC Water Stopper

TENSILE STRENGTH TEST (AS PER ASTM-D-412)

S. No	**Sample Size (mm x mm)**	**Tensile Load (kN)**	**Tensile Strength (MPa)**	**% age Elongation**
1	17.5 x 9.4	1.30	7.90	200.0
2	17.7 x 9.7	1.25	7.28	220.0

- HARDNESS TEST (AS PER ASTM-D-2240)

S. No	**Sample Type**	**Hardness (Shore A)**avg
1	PVC Water Stopper	**58.66**

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

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

High-Q Constructions Lhr.(Const Of High-Q Mall at 3-A Gulberg II Lahore)

Client Reference: QC/HQ/CIVIL/174 **Dated :** 16-01-2024

SOM Lab Ref: CED/SOM/3514(Page-1/1) **Dated :** 16-01-2024

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

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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	3.936	25	25.26	491	501	264.50	368.20	539	528	750	735	37.5	200	18.8	
2	3.911	25	25.19	491	498	270.20	371.70	550	543	757	746	35.0	200	17.5	
3	2.399	20	19.73	314	306	161.20	221.00	513	528	703	724	32.5	200	16.3	
4	2.444	20	19.91	314	311	169.70	233.00	540	546	742	749	32.5	200	16.3	
5	1.517	16	15.69	201	193	100.70	130.70	501	521	650	677	30.0	200	15.0	
6	1.512	16	15.66	201	193	100.00	128.70	497	520	640	669	32.5	200	16.3	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
20mm	Sample bend through 180 degrees Satisfactorily without any crack
16mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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

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

PM High-Q Constructions Lhr.(Const Of High-Q Mall at 3-A Gulberg II Lahore)

Client Reference: QC/HQ/CIVIL/175 **Dated:** 16-01-2024

SOM Lab Ref: CED/SOM/3515(Page-1/1) **Dated:** 16-01-2024

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

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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	0.895	12	12.05	113	114	68.20	88.70	603	599	784	779	30.0	200	15.0	
2	0.891	12	12.03	113	114	60.20	80.20	532	531	709	707	30.0	200	15.0	
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BEND TEST:

12mm	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

Dr.Adil Khan, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Nespak.(Dev Of Internal Infrastructure Of CBD Walton & Flyover Connecting Bab-e-Pakistan To Walton)

Client Reference: 4322/13/DAK/02/90 **SOM Lab Ref:** 3509 (Page-1/1)

Dated: 28-12-2023 **Dated:** 16-01-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Premium Batala)

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	1.648	6	0.785	0.44	0.484	16.51	22.19	82780	75250	111230	101120	1.20	8.0	15.0	
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BEND TEST:

# 6	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

Dr.Adil Khan, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Nespak.(Dev Of Internal Infrastructure Of CBD Walton & Flyover Connecting Bab-e-Pakistan To Walton)

Client Reference: 4322/13/DAK/02/91 **SOM Lab Ref:** 3510 (Page-1/1)

Dated: 28-12-2023 **Dated:** 16-01-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Premium Batala)

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	0.655	4	0.494	0.20	0.192	7.05	9.04	77790	81030	99710	103860	0.80	8.0	10.0	
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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

Dr.Adil Khan, RE **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Nespak.(Dev Of Internal Infrastructure Of CBD Walton&Flyover Connecting Bab-e-Pakistan To Walton)

SOM Lab

Client Reference: 4322/13/DAK/02/92 **Ref:** 3511 (Page-1/1)

Dated: 28-12-2023 **Dated:** 16-01-2024

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

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Premium Batala)

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	2.646	8	0.995	0.79	0.778	21.81	35.37	60900	61840	98750	100270	1.60	8.0	20.0	
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BEND TEST:

# 8	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

Engr. Mehar Ali Qurashi,RE **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

AL HAMRA TOWN Lahore.(Const Of 100,000 Galloons Over Head Water Tank at Al Hamra Town)

SOM Lab

Client Reference: ALHM/OHW/1524 **Ref:** 3512-13(Page-1/1)

Dated: 15-01-2024 **Dated:** 16-01-2024

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	2.677	8	1.001	0.79	0.787	25.89	35.49	72290	72560	99090	99470	1.50	8.0	18.8	
2	1.503	6	0.750	0.44	0.442	13.86	19.39	69490	69180	97180	96740	1.50	8.0	18.8	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

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

Kashif Maqbool Gill
Lahore

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: Nil
Dated: 16-01-2024

SOM Lab
Ref: 3516 (Page-1/1)
Dated: 16-01-2024

Test: Tension Test & Bend Test
Gauge Length: 8 inch
Test Specification: ASTM-A-615
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	1.538	6	0.759	0.44	0.452	16.31	22.22	81750	79580	111390	108430	1.00	8.0	12.5	
2	1.535	6	0.758	0.44	0.451	16.46	22.19	82520	80510	111230	108520	1.20	8.0	15.0	
3	0.678	4	0.503	0.20	0.199	6.57	9.25	72510	72870	101960	102470	0.90	8.0	11.3	
4	0.658	4	0.496	0.20	0.193	8.00	10.06	88240	91440	110950	114970	0.80	8.0	10.0	
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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 Tested

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

Bilal Hayder,CEO (TPMC) **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

The Property Maintenance Company.(Project In Descon Head Quarter Lahore)

Client Reference: Nil **SOM Lab Ref:** 3517(Page-1/1)

Dated: 11-01-2024 **Dated:** 16-01-2024

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	1.471	6	0.742	0.44	0.432	14.24	19.95	71380	72700	99990	101850	1.50	8.0	18.8	
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BEND TEST:

# 6	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

Executive Engineer **Test Performed By:** **Dr. /Engr.** Nauman Khurram

GOP Irrigation Deptt.Chakbandi Div Lhr.(Const Of Gated Head Regulators of BRBD Link Canal)

SOM Lab

Client Reference: 002/Test/Camp **Ref:** 3518 (Page-1/2)

Dated: 16-01-2024 **Dated:** 16-01-2024

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	2.599	8	0.986	0.79	0.764	28.66	36.75	80030	82750	102590	106080	1.20	8.0	15.0	
2	2.608	8	0.988	0.79	0.766	26.42	34.56	73770	76080	96470	99500	1.30	8.0	16.3	
3	1.484	6	0.745	0.44	0.436	15.19	19.39	76130	76830	97180	98080	1.40	8.0	17.5	
4	1.493	6	0.748	0.44	0.439	15.70	19.75	78690	78870	98970	99200	1.30	8.0	16.3	
5	1.111	5	0.644	0.31	0.326	13.20	15.85	93920	89310	112770	107240	1.10	8.0	13.8	
6	1.109	5	0.644	0.31	0.326	12.92	15.75	91890	87380	112050	106550	1.20	8.0	15.0	
7	0.658	4	0.496	0.20	0.193	6.12	8.92	67450	69890	98360	101930	1.20	8.0	15.0	
8	0.661	4	0.497	0.20	0.194	6.09	8.82	67110	69190	97230	100240	1.40	8.0	17.5	
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BEND TEST:

# 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:-

Only Twelve Samples Received and Tested

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

Canal Residence
Lahore.

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

Client Reference: Nil
Dated: 16-01-2024

SOM Lab Ref: 3519 (Page-1/1)
Dated: 16-01-2024

Test: Tension Test & Bend Test
Gauge Length: 8 inch
Test Specification: ASTM-A-615
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	1.532	6	0.757	0.44	0.450	13.07	19.95	65510	64050	99990	97770	1.20	8.0	15.0	
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BEND TEST:

# 6	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