Test Performed By:Dr. .Dr. S. Asad Ali Gillani

S. Asad Ali **Test Performed By: Sub Divisional Officer** Dr. /Engr. Gillani

Buildings Sub Division, Hafizabad

SOM Lab

Client Reference: Ref: 1048 (Page-1/1) 1203/HZ 17-06-2019 Dated:

03-07-2019 Dated:

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

Deformed

Gauge Length: **Sample Type:** 8 inch Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		_	no	
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	1.426	6	0.730	0.44	0.419	14.95	19.90	74960	78710	99740	104740	1.10	8.0	13.8	
2	0.662	4	0.498	0.20	0.195	7.00	8.63	77230	79210	95210	97650	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 Four Samples
		Received and Tested

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

Maj Adnan Khalid (R)

Dy Dir MTL,

External Elec. Works (U/G) IVY Green Sector-Z,

DHA Ph -VIII - (M/S NLC)

Client Reference: 408/241/E/623/576 SOM Lab Ref: 1047 (Page-1/1)

Dated: 27-06-2019 Dated: 02-07-20197

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

Guage Length: 200 mm Sample Type: J – Bolt (L-Type (25mm))

		Di	a.	Α	rea	Yield	Ultimat	Yield	Stress	Ultimate	. Stress				
Ġ	þţ						е					tion	ength	ngation	f Area(%)
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	Reduction of Area(%)
	kg/m	mm	mm	mm²	mm²	kN	kN	MPa	MPa	MPa	Мра	mm	mm	%	
1	4.046	25	25.61	491	515	176.00	277.20	359	342	565	539	52.5	200	26.3	50.6
2	4.032	25	25.57	491	514	183.70	276.20	374	358	563	538	47.5	200	23.8	47.7
3	3.970	25	25.38	491	506	175.20	270.70	357	347	551	536	45.0	200	22.5	52.5

Note:-

Only Three Samples
Received and Tested

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

Test Performed by: Dr. S. Asad Ali Gillani

Noor Ur Rahman Resident Engineer NESPAK - Zeeruk (JV) CPEC (wstern Route), Package –II, ISAKHEL

Client Reference No.: RE/NESPAK/P-2C/CPEC-WR/385 Dated: 22-06-2019

SOM Lab Ref: CED/SOM/1049(Page-1/1) Dated: 03-07-2019

Test: Tensile, Elongation at Break, Tear Strength, Hardness Test & Comp Set Test

Sample Type: Elastomeric Bearing Pad (Manufacturer: Longman)

TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)

S. No	Sample Size	Ultimate Load	Tensile Strength	Tensile Strength	Elongation at Break(%)
	(mm)	(kN)	(Mpa)	(kg/cm²)	
1	2.7 x 6.5	0.34	19.373	197.54	500

- TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)	Tear Strength (Kg/cm)
1	3.0	0.31	103.33	105.37

- COMPRESSION SET TEST (AS PER ASTM-D-395)

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.42	3.40	0.584

HARDNESS TEST (AS PER ASTM-D-2240)

S. No	Sample Type	Hardness (Shore A)
1	Bearing Rubber Pad	60.33

Test Performed By: Dr. S. Asad Ali Gilllani

Muhammad Abdul Bari Technical Manager M/S Bin Tariq (Pvt) Ltd. Lahore

Client Reference: BT/Sales/LHR/19-206 Dated: 03-07-2019 SOM Laboratory Reference: CED/SOM/1050(Page-1/2) Dated: 03-07-2019

Test: Stiffness Test & Tensile Test,

Sample Type: GRP Pipe (1000mm Diameter)

Stiffness Test (Parallel Plate Loading Test as per ASTM-D-2412) (GRP Pipe 1000mm)

Total Length = 310 mm, External Diameter = 1028 mm, Wall Thickness = 14.0 mm

			Sti			
Re	Percentage eduction in Diameter of Sample	Compression Load, P (kN)	Pipe Stiffness (kN/m²)	Stiffness Factor (N-m)	Specific Tangential initial Stiffness (N/m²)	Remarks
	5%	4.36	295	5734	5734	No Crack Observed

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
GRP Pipe (1000mm)	13.5 x 27.5	12.7	34.208

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

Test Performed By: Dr. S. Asad Ali Gilllani

Muhammad Abdul Bari Technical Manager M/S Bin Tariq (Pvt) Ltd. Lahore

Client Reference: BT/Sales/LHR/19-206 Dated: 03-07-2019 SOM Laboratory Reference: CED/SOM/1050(Page-2/2) Dated: 03-07-2019

Test: Stiffness Test & Tensile Test,

Sample Type: GRP Pipe (900mm Diameter)

Stiffness Test (Parallel Plate Loading Test as per ASTM-D-2412) (GRP Pipe 900mm)

Total Length = 308 mm, External Diameter = 928 mm, Wall Thickness = 14.0 mm

		Sti	Stiffness (Corrected)				
Percentage Reduction in Diameter of Sample	Compression Load, P (kN)	Pipe Stiffness (kN/m²)	Stiffness Factor (N-m)	Specific Tangential initial Stiffness (N/m²)	Remarks		
5%	6.23	471	6691	9179	No Crack Observed		

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
GRP Pipe (900mm)	13.5 x 27.5	11.5	30.976

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

Rasheed & Sons,

Lahore

Client Reference:

408/241/E/Lab/423A-1/637

SOM Laboratory Reference: CED/SOM/238(Page-1/1) Dated

04-02-2019

Test: Stiffness Test, Tensile Test &

Hoop Tensile Test

Sample Type: Fiberglass Stainer

Pipe

G. M. Engineering, M R Electric

Test Performed By:

Concern (Pvt) Ltd.,

Dr. /Engr.

Affifa Akram

Lahore

SOM Lab

Client Reference: MREC/T.N. SPP-02-2015/103

Ref:

3824-

Dated: 21-12-2015

Dated:

4-1-2016

Test: Load Strength,

Sample Type:

D Shakles

Load Test:

S		Samp	le Size	Maximum			
No	Sample Type	Pin Dia D-Shakle (mm)		Test Load	Remarks		
				(Tons)			
1	D – Shakle (Assembly)	25.3	27.0	9.17	No Sign of failure were observed at		

					maximum test load
2	D – Shakle (Assembly)	16	16	5.10	No Sign of failure were observed at maximum test load

	Note:- Only Two Sample Received and Tested
Note: Please always confirm the results of above report on web www.uet-civi	l.edu.pk

Rasheed & Sons,

Lahore

Client Reference: 408/241/E/Lab/423A-1/637 Dated 23-01-2019 SOM Laboratory Reference: CED/SOM/238(Page-1/1) Dated 04-02-2019

Test: Stiffness Test, Tensile Test & Hoop Tensile Test

Sample Type: Fiberglass Stainer Pipe