

Diamond Metals  
Karachi.

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

SOM Lab Ref:

1909 (Page-

1/1)

Dated: 10-03-2023

Dated:

13-03-2023

Test: Tension Test

Test Specification:

ASTM-A-615

Guage Length: 200 mm

Sample Type:

MS Def Bar (I-Con 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.453	20	19.93	314	312	158.20	244.70	504	508	779	785	35.0	200	17.5	
2	2.432	20	19.86	314	310	158.70	244.20	505	513	778	789	30.0	200	15.0	
3	0.994	12	12.70	113	127	53.50	82.50	473	423	730	652	30.0	200	15.0	
4	1.002	12	12.75	113	128	54.20	82.20	480	425	727	644	25.0	200	12.5	
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**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
12mm	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](http://www.uet-civil.edu.pk)

Nadeem Akhtar CEO  
N.A. Associates, Pakistan Spring Unit-4, Sheikhpura

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

Client Reference: NA-275-St-01-23  
Dated: 09-03-2023  
Test: Tension Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 1889 (Page-1/1)  
Dated: 09-03-2023  
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.651	8	0.996	0.79	0.779	18.27	30.09	51000	51720	84010	85200	1.50	8.0	18.8	
2	2.644	8	0.995	0.79	0.777	18.60	29.61	51940	52810	82670	84060	1.50	8.0	18.8	
3	1.431	6	0.732	0.44	0.421	10.88	17.53	54520	56980	87880	91850	1.50	8.0	18.8	
4	1.454	6	0.737	0.44	0.427	14.34	18.42	71890	74080	92330	95140	1.50	8.0	18.8	
5	0.673	4	0.502	0.20	0.198	4.64	6.83	51150	51670	75320	76080	1.40	8.0	17.5	
6	0.667	4	0.500	0.20	0.196	5.74	7.10	63290	64580	78350	79950	1.30	8.0	16.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Nadeem Akhtar CEO  
N.A. Associates, Pakistan Spring Unit-4, Sheikhpura

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

Client Reference: NA-275-St-02-23

SOM Lab

Ref: 1890 (Page-1/1)

Dated: 09-03-2023

Dated: 09-03-2023

Test: Tension Test

Test Specification: BS-4461

Gauge Length: 8 inch

Sample Type: Tor 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.460	6	0.739	0.44	0.429	10.30	13.86	51610	52930	69490	71270	0.80	4.0	20.0	
2	1.467	6	0.741	0.44	0.431	10.60	13.63	53140	54250	68320	69740	0.90	4.0	22.5	
3	0.640	4	0.489	0.20	0.188	6.63	8.48	73070	77730	93530	99490	0.60	2.5	24.0	
4	0.643	4	0.491	0.20	0.189	6.60	8.48	72730	76960	93530	98970	0.50	2.5	20.0	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Four Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M/S Pioneerv Construction & Fabrication Co.

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

Development Work of Roads, Water Supply and Sewerage in Eden abad Housing Society 1-A&B

Client Reference: Nil

SOM Lab

Ref: 1893 (Page-1/1)

Dated: 09-03-2023

Dated: 09-03-2023

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
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)			
	lb/ft	#	in	in <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%
1	0.669	4	0.501	0.20	0.197	6.47	8.07	71380	72470	89030	90390	1.10	8.0	13.8
2	0.669	4	0.501	0.20	0.197	6.32	7.97	69700	70760	87910	89240	1.10	8.0	13.8
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr Syed M Sajjad Hashmi  
(Head QA/QC Vision Developers (Pvt) Ltd.)

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

Client Reference: 13  
Dated: 09-03-2023  
Test: Tension Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 1898 (Page-1/1)  
Dated: 09-03-2023  
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.447	6	0.736	0.44	0.425	14.50	18.62	72660	75220	93350	96650	1.30	8.0	16.3	
2	0.672	4	0.501	0.20	0.197	5.66	7.10	62390	63340	78350	79540	1.30	8.0	16.3	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M/S New Syed Pharma  
Muridke

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

Client Reference: Nil

SOM Lab

Ref: 1899 (Page-1/1)

Dated: 09-03-2023

Dated: 09-03-2023

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.672	4	0.501	0.20	0.197	5.63	8.56	62050	63000	94420	95860	1.60	8.0	20.0	
2	0.678	4	0.503	0.20	0.199	5.68	8.58	62610	62930	94650	95130	1.70	8.0	21.3	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

M/S ENAARA  
Lahore

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

Client Reference: Nil  
Dated: 10-03-2023  
Test: Tension Test & Bend Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 1900 (Page-1/1)  
Dated: 10-03-2023  
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.666	8	0.998	0.79	0.783	24.99	35.83	69780	70400	100030	100930	1.50	8.0	18.8	
2	2.641	8	0.994	0.79	0.776	24.38	34.81	68070	69300	97190	98940	1.50	8.0	18.8	
3	0.672	4	0.501	0.20	0.197	7.39	9.40	81500	82740	103640	105220	1.20	8.0	15.0	
4	0.672	4	0.501	0.20	0.197	7.36	9.38	81160	82400	103420	104990	1.20	8.0	15.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve 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](http://www.uet-civil.edu.pk)

M. Ayyub

**Test Performed By:**

**Dr. /Engr.**

Wasim Abbas

PM Ittefaq Construction Associates Lahore.(Syed Maududi islamic Center Lytton Rd Lhr)

**Client Reference:** ICA/SMIC/03

**SOM Lab**

**Ref:**

1901 (Page-1/1)

**Dated:** 10-03-2023

**Dated:**

10-03-2023

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.626	8	0.991	0.79	0.772	23.96	33.94	66880	68440	94770	96980	1.40	8.0	17.5	
2	1.495	6	0.748	0.44	0.439	12.08	19.34	60550	60690	96930	97150	1.30	8.0	16.3	
3	0.666	4	0.500	0.20	0.196	5.61	9.14	61830	63090	100830	102890	1.20	8.0	15.0	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six 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](http://www.uet-civil.edu.pk)



Hassan Associates  
Engg & Contractors Lahore.(Nishat Chunian Ltd.Raiwind)

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: H.S/E.T.P-2/N.L.C/03/2023

SOM Lab

Ref: 1902 (Page-1/1)

Dated: 10-03-2023

Dated: 10-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Sheikhoo 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.649	8	0.995	0.79	0.778	26.96	34.86	75270	76430	97330	98830	1.30	8.0	16.3	
2	1.493	6	0.748	0.44	0.439	14.60	18.76	73170	73340	94020	94230	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Four Samples Received and Tested
# 6	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](http://www.uet-civil.edu.pk)

Muhammad Awais,RE

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

Nespak,Gujranwala.(GEPCO Employees Housing Foundation GEHF Town Phase-1 Gujranwala)

Client Reference: P4265/23/MA/186

SOM Lab

Ref: 1903 (Page-1/1)

Dated: 09-03-2023

Dated: 10-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Farooq Supreme)

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.437	6	0.733	0.44	0.422	12.08	19.72	60550	63130	98870	103090	1.30	8.0	16.3	
2	1.443	6	0.735	0.44	0.424	12.49	20.41	62590	64960	102290	106150	1.20	8.0	15.0	
3	1.480	6	0.744	0.44	0.435	13.27	21.00	66530	67290	105260	106470	1.30	8.0	16.3	
4	1.469	6	0.742	0.44	0.432	12.97	20.51	65000	66200	102800	104710	1.30	8.0	16.3	
5	0.672	4	0.501	0.20	0.197	5.52	8.23	60930	61860	90720	92100	1.20	8.0	15.0	
6	0.669	4	0.501	0.20	0.197	5.52	8.21	60930	61860	90490	91870	1.10	8.0	13.8	
7	0.673	4	0.502	0.20	0.198	5.58	8.36	61490	62110	92180	93110	1.10	8.0	13.8	
8	0.664	4	0.498	0.20	0.195	6.09	9.68	67110	68830	106790	109530	1.20	8.0	15.0	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
# 6	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: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Khurram Tariq,RE

Test Performed By: Dr. /Engr. Wasim Abbas

Nespaq.(Dualization Od Rd From mandibauddin City to Srailamgir Canal Pul Main GT Rd Sec-04)

Client Reference: 4376-D/103/KT/02/141

SOM Lab

Ref: 1906 (Page-1/1)

Dated: 01-03-2023

Dated: 10-03-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Capital Steel Isb)

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.543	6	0.759	0.44	0.453	13.73	20.85	68830	66850	104490	101490	1.00	8.0	12.5	
2	1.529	6	0.756	0.44	0.449	13.66	21.22	68470	67100	106380	104250	1.10	8.0	13.8	
3	0.672	4	0.501	0.20	0.197	6.19	10.35	68230	69270	114100	115830	1.00	8.0	12.5	
4	0.672	4	0.501	0.20	0.197	6.22	10.35	68570	69620	114100	115830	0.90	8.0	11.3	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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](http://www.uet-civil.edu.pk)

Zahid Mughal  
C/O M/S Amanah Noor Residence Wapda Town, Lahore.

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

**Client Reference:** Nil

**SOM Lab**

**Ref:** 1907 (Page-1/1)

**Dated:** 10-03-2023

**Dated:** 10-03-2023

**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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.720	8	1.009	0.79	0.799	27.78	35.73	77550	76680	99750	98620	1.50	8.0	18.8	
2	1.497	6	0.748	0.44	0.440	15.04	21.51	75370	75370	107810	107810	1.40	8.0	17.5	
3	0.669	4	0.501	0.20	0.197	6.68	8.84	73630	74750	97460	98940	1.10	8.0	13.8	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six 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](http://www.uet-civil.edu.pk)

Premier Developer &amp; Builders

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

Procurement Manager .(Lyallpur Galleria-II Near Four Season Colony Samundri Road,FSD)

Client Reference: LG-II/043

SOM Lab

Ref: 1910 (Page-1/1)

Dated: 08-03-2023

Dated: 10-03-2023

Test: Tension Test &amp; Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Batala 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.667	8	0.999	0.79	0.784	24.46	33.10	68300	68820	92400	93110	1.40	8.0	17.5	
2	1.472	6	0.743	0.44	0.433	12.56	18.78	62950	63970	94120	95640	1.20	8.0	15.0	
3	0.675	4	0.502	0.20	0.198	5.63	7.87	62050	62680	86780	87660	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six 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](http://www.uet-civil.edu.pk)

Test Performed by: Dr. S. Asad Ali Gillani

ESS. I. AAR Consultant  
 Resident Engineer.  
 (Construction of Flyover at Railway Track Khan Pur Distt Rahim Yar Khan)

**Reference No.:** RE/ADP/R.Y.K/3818  
**SOM Lab Ref:** CED/SOM/1904(Page-1/1)

Dated: 02-03-2023  
 Dated: 10-03-2023

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

**Sample Type:** Elastomeric Bearing Pad (Neoprene)

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	4.5 x 1.8	0.42	51.85	528.73	200.0
2	5.0 x 1.8	0.22	24.44	249.25	200.0

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	14.1 x 1.8	0.20	111.11
2	15.2 x 1.8	0.30	166.6

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.0	2.93	2.33

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

S. No	Sample Type	Hardness (Shore A)
1	Elastomeric Bearing Pad	61.1 av

**Test Performed by:** Dr. S. Asad Ali Gillani

Rashed Mehmood  
CRE Zeeruk International (Pvt) Ltd.  
(Construction of Sialkot Kharian Motorway Project-SKM)

**Reference No.:** SKMP/CRE/2023/0086  
**SOM Lab Ref:** CED/SOM/1908(Page-1/2)

Dated: 07-03-2023  
Dated: 10-03-2023

**Test:** Tensile Test, Elongation at Break, Tear Test, & Hardness Test

**Sample Type:** Expansion Joint (Rubber) (Supplied By FFY)

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	7.3 x 3.0	0.28	12.78	130.37	530.0
2	6.6 x 3.1	0.26	12.70	129.58	400.0

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	6.8 x 3.1	0.12	38.70
2	6.8 x 3.1	0.10	32.25

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

S. No	Sample Type	Hardness (Shore A)
1	Expansion Joint (Rubber)	57.0 avg

**Test Performed by:** Dr. S. Asad Ali Gillani

Rashed Mehmood  
CRE Zeeruk International (Pvt) Ltd.  
(Construction of Sialkot Kharian Motorway Project-SKM)

**Reference No.:** SKMP/CRE/2023/0087

Dated: 07-03-2023

**SOM Lab Ref:** CED/SOM/1908(Page-2/2)

Dated: 10-03-2023

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

**Sample Type:** Elastomeric Bearing Pad (Supplied by FFY)

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	5.0 x 2.3	0.50	43.47	443.34	580.0
2	5.5 x 2.3	0.35	27.66	282.13	460.0

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	15.4 x 2.3	0.27	117.39
2	15.4 x 2.3	0.30	130.45

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.0	2.92	2.63

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

S. No	Sample Type	Hardness (Shore A)
1	Elastomeric Bearing Pad	60.6 av



