

Test Performed by: Dr. M. Irfan Ul Hassan

Engr. Assad Hussain Jatoi
Resident Engineer (NESPAK)
Dualization & Improvement of Old Bannu Road / Khurram to Krappa Road Project (P-02),
Islamabad

Reference No.: OBR/KKP-02/RE/AHJ/641

Dated: 01-09-2021

SOM Lab Ref: CED/SOM/4927(Page-1/1)

Dated: 03-09-2021

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

(Before aging and after aging @ 100° C,

Sample Type: Elastomeric Bearing Pad

Description	Unit	Before Aging	After aging @100°C.	Standard ASTM
Tensile Strength	Kgs/cm	264.37	245.48	D-412
Elongation at Break	%	540.0	520.0	D-412
Hardness (Shore A)	Point	60.17	64.33	D-2240

TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	12.5 x 2.7	0.18	66.6

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	2.70	2.65	1.851

Test Performed by: Dr. M. Irfan Ul Hassan

Javid Hussain
Resident Engineer,
NESPAK (Pvt) Ltd. Islamabad
M/s KNK-JV

Reference No.:4035/103/JH/310

Dated: 01-09-2021

SOM Lab Ref: CED/SOM/4928(Page-1/2)

Dated: 03-09-2021

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

Sample Type: Elastomeric Expansion Joint (Brand "Longman")

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Elongation at Break(%)
1	6.0 x 3.0	0.32	17.78	490.0

TEAR STRENGTH (AS PER ASTM-D-624)

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	12.5 x 3.0	0.17	56.6

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.00	2.95	1.666

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

S. No	Sample Type	Hardness (Shore A)
1	Expansion Joint	50.16

Trade Tect International (pvt) L
Lahore

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

Client Reference: Nil

SOM Lab Ref: 4922(Page-1/1)

Dated: 03-09-2021

Dated: 03-09-2021

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar(Mughal Steel 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	1.485	6	0.745	0.44	0.436	18.14	23.19	90950	91780	116240	117310	1.10	8.0	13.8	
2	0.614	4	0.479	0.20	0.180	6.37	8.05	70260	78060	88800	98670	1.20	8.0	15.0	
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Witnessed By: Zohaib Ali, Sub Engineer, NESPAK

BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Four 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

Project Manager
Q-Links Property Management Pvt. Ltd

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

Client Reference: QL-BO-BH2-2021-062

SOM Lab Ref: 4923(Page-1/1)

Dated: 03-09-2021

Dated: 03-09-2021

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	0.670	4	0.501	0.20	0.197	7.08	9.04	78130	79320	99710	101230	1.20	8.0	15.0	
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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

Fauji Fresh n Freez Ltd. Sahiw:

Test Performed By:

Dr. /Engr. S Asad Ali Gillani

Project: Construction of 60 CUM/HR capacity Waste Water Treatment Plant.

Client Reference: ECC/UET/FFFL-SWL/2021/27

SOM Lab Ref: 4924(Page-1/1)

Dated: 03-09-2021

Dated: 03-09-2021

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	1.492	6	0.747	0.44	0.438	15.19	19.75	76130	76480	98970	99420	1.60	8.0	20.0	
2	1.500	6	0.749	0.44	0.441	15.24	19.78	76390	76220	99130	98900	1.50	8.0	18.8	
3	0.678	4	0.503	0.20	0.199	5.91	8.87	65200	65530	97800	98290	1.30	8.0	16.3	
4	0.685	4	0.506	0.20	0.201	6.63	9.12	73070	72700	100610	100110	1.40	8.0	17.5	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack	Note:- 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

Muhammad Shahbaz
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/0119

SOM Lab Ref: 4925(Page-1/2)

Dated: 02-09-2021

Dated: 03-09-2021

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	2.668	8	0.999	0.79	0.784	24.52	36.67	68440	68970	102360	103150	1.20	8.0	15.0	
2	2.672	8	1.000	0.79	0.785	24.62	36.80	68730	69170	102730	103390	1.40	8.0	17.5	
3	2.665	8	0.998	0.79	0.783	23.98	36.36	66940	67530	101510	102420	1.50	8.0	18.8	
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Witnessed By: Rafi Ullah(IHPL) & Ali Hasnain Khan, Jr. Planing Engineer, Kingcrete Builders.

BEND TEST:

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

Muhammad Shahbaz
Imperium Hospitality (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: IHPL/Steel/0118

SOM Lab Ref: 4925(Page-2/2)

Dated: 02-09-2021

Dated: 03-09-2021

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

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 ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.651	4	0.493	0.20	0.191	6.52	8.79	71940	75330	96900	101460	1.00	8.0	12.5	
2	0.653	4	0.494	0.20	0.192	6.34	8.79	69920	72830	96900	100930	1.00	8.0	12.5	
3	0.645	4	0.492	0.20	0.190	6.03	8.53	66550	70050	94090	99040	0.90	8.0	11.3	
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Witnessed By: Rafi Ullah(IHPL) & Ali Hasnain Khan, Jr. Planing Engineer, Kingcrete Builders.

BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Five 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

Muhammad Saleem
GM, Professional Construction Services (Pvt) Ltd. Lahore

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

Client Reference: PCS/21/Eng-94-B

SOM Lab Ref: 4926(Page-1/2)

Dated: 03-09-2021

Dated: 03-09-2021

Test: Tension 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	0.670	4	0.501	0.20	0.197	7.65	10.37	84310	85590	114320	116060	1.10	8.0	13.8	
2	0.673	4	0.502	0.20	0.198	7.75	10.40	85430	86300	114660	115820	1.00	8.0	12.5	
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BEND TEST:

--	No Bend test performed	Note:- Only Two Samples Received and Tested

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

Muhammad Saleem
GM, Professional Construction Services (Pvt) Ltd. Lahore

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

Client Reference: PCS/21/Eng-94-C

SOM Lab Ref: 4926(Page-2/2)

Dated: 03-09-2021

Dated: 03-09-2021

Test: Tension 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	2.642	8	0.994	0.79	0.776	27.19	34.78	75900	77270	97100	98850	1.30	8.0	16.3	
2	2.634	8	0.993	0.79	0.774	25.72	33.64	71800	73290	93910	95850	1.20	8.0	15.0	
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BEND TEST:

--	No Bend test performed	Note:- Only Two Samples Received and Tested

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

maryam Adnan
Executive Engineer, 5th Buildings Division, Lahore

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

Client Reference: 3064-

SOM Lab Ref: 4929(Page-1/1)

Dated: 25-08-2021

Dated: 03-09-2021

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	2.675	8	1.000	0.79	0.786	22.96	32.08	64090	64420	89560	90010	1.30	8.0	16.3	
2	2.669	8	0.999	0.79	0.784	24.92	33.66	69580	70110	93970	94690	1.40	8.0	17.5	
3	1.508	6	0.751	0.44	0.443	14.07	19.57	70510	70040	98100	97440	1.30	8.0	16.3	
4	1.506	6	0.751	0.44	0.443	13.12	18.55	65760	65320	92990	92360	1.20	8.0	15.0	
5	0.673	4	0.502	0.20	0.198	6.01	8.33	66320	66990	91840	92770	1.30	8.0	16.3	
6	0.672	4	0.501	0.20	0.197	6.03	8.87	66550	67560	97800	99290	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine 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