

Mustafa Ali

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

Manager Coordination, IZHAR Construction (Pvt) Ltd. Lahore

Client Reference: ICPL/CONST- HNMPL/19/02

Dated: 10-01-2019

SOM Lab Ref: CED/SOM/111(Page-1/1)

Dated: 11-01-2019

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	2.438	20	19.90	314	311	174.62	222.70	556	562	709	717	25.0	200	12.5	
2	0.241	20	6.25	314	31	171.68	219.70	546	5603	699	7170	27.5	200	13.8	
3	1.518	16	15.69	201	193	105.95	129.50	527	548	644	670	30.0	200	15.0	
4	1.516	16	15.68	201	193	107.91	130.50	537	559	649	676	27.5	200	13.8	
5	0.874	12	11.91	113	111	61.80	80.44	546	555	711	723	25.0	200	12.5	
6	0.896	12	12.06	113	114	62.78	81.42	555	550	720	714	25.0	200	12.5	
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BEND TEST:

20mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
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

Muhammad Abdullah

Test Performed By:

Dr. /Engr.

M Rizwan Riaz

Inspector of Works, Track Rehabilitation (LON-KPR) Pakistan Railways, Khanpur

Client Reference: IOW/TR (KPR-LON)/SDE/BWPR

SOM Lab

Ref:

109 (Page-1/1)

Dated: 09-01-2019

Dated:

11-01-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	2.649	8	0.995	0.79	0.778	26.20	33.90	73150	74270	94650	96110	1.60	8.0	20.0	
2	2.654	8	0.997	0.79	0.780	26.50	34.00	73980	74930	94910	96130	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

Shahid Mahmood
Sr. Manager Civil, Treet Corporation Ltd. Lahore

Test Performed By: Dr. /Engr. Qasim Khan

Client Reference: nil

SOM Lab

Ref: 110(Page-1/1)

Dated: 09-01-2019

Dated: 11-01-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	1.520	6	0.754	0.44	0.447	15.07	19.37	75520	74340	97110	95590	1.40	8.0	17.5	
2	1.499	6	0.749	0.44	0.441	16.73	20.68	83850	83660	103650	103410	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

Engr Nadeem Mahmood
Civil & Urban Engineers, Lahore

Test Performed By: Dr. /Engr. Irfan UI Hassan

Client Reference: nil

SOM Lab

Ref: 112 (Page-1/1)

Dated: 10-01-2019

Dated: 11-01-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	26.80	35.00	74820	76170	97710	99480	1.60	8.0	20.0	
2	1.464	6	0.740	0.44	0.430	13.50	18.90	67670	69240	94730	96930	1.50	8.0	18.8	
3	0.666	4	0.500	0.20	0.196	6.20	8.30	68370	69770	91520	93390	1.40	8.0	17.5	
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BEND TEST:

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

Khalid Mahmood
Assistant Executive Engineer-III, Pakistan Railways, Lahore

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: SW-2/IOW-II/LHR/2018

SOM Lab

Ref: 113 (Page-1/1)

Dated: 10-01-2019

Dated: 11-01-2019

Test: Tension Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	0.662	4	0.498	0.20	0.195	6.10	8.80	67270	68990	97040	99530	1.20	8.0	15.0	
2	0.661	4	0.497	0.20	0.194	5.90	8.60	65060	67080	94840	97770	1.20	8.0	15.0	
3	0.670	4	0.501	0.20	0.197	5.90	8.60	65060	66050	94840	96280	1.10	8.0	13.8	
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BEND TEST:

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

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

Shahzad Mirza

Test Performed By: Dr. /Engr.

UMBREEN US
SAHIR

Resident Engineer, NESPAK (Pvt) Ltd. Development of Kartarpur Corridor.

Client Reference: 3444/DKC/St. Test/SM/05

SOM Lab

Ref: 114 (Page-1/1)

Dated: 10-01-2019

Dated: 11-01-2019

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

Sample Type:

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	0.586	4	0.468	0.20	0.172	6.20	8.10	68370	79500	89320	103860	1.00	8.0	12.5	C-4689
2	0.597	4	0.472	0.20	0.175	5.80	7.59	63960	73100	83750	95710	1.00	8.0	12.5	C-4689
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BEND TEST:

# 4	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