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

Deputy Director (Q.C.D), WASA, LDA, Lahore

05-12-2019

Client Reference:

Dated:

SOM Lab 1858 (Page-

QCD/ 1637 - 38 **Ref:** 1/1)

Dated: 09-12-2019

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

Guage Length: 8 inch Sample Type: Deformed Bar

		D	Dia. Area Yield Ultimate Yield Stress		Stress	Ult. S	Stress			П					
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	0.673	4	0.502	0.20	0.198	6.83	11.52	75320	76080	127020	128310	0.30	8.0	3.8	
2	0.670	4	0.501	0.20	0.197	7.03	11.72	77560	78750	129270	131240	0.40	8.0	5.0	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-		-	-	-	-	-	-	
-	-	-	-	-	1	1	1		-	-	-	1	-	-	
-	-	-	-	-	-	1	-		-	-	-	1	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	

BEND TEST:

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

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

Paper Mill Khoree Sadhoki

SOM Lab

 Client Reference:
 Nil
 Ref:
 1859(Page-1/2)

 Dated:
 09-12-2019
 Dated:
 09-12-2019

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	stress			П	
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	2.668	8	0.999	0.79	0.784	27.47	35.17	76700	77280	98180	98930	1.20	8.0	15.0	
2	2.679	8	1.001	0.79	0.787	27.37	35.17	76410	76700	98180	98560	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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

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

Paper Mill Khoree Sadhoki

SOM Lab

 Client Reference:
 Nil
 Ref:
 1859(Page-2/2)

 Dated:
 09-12-2019
 Dated:
 09-12-2019

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

Gauge Length: 8 inch Sample Type: Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S			'n		
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	2.626	8	0.991	0.79	0.772	26.25	34.32	73280	74990	95820	98050	1.30	8.0	16.3	
2	2.629	8	0.992	0.79	0.773	28.19	35.95	78690	80420	100370	102580	1.00	8.0	12.5	
3	1.519	6	0.754	0.44	0.446	18.22	21.73	91310	90080	108940	107470	1.20	8.0	15.0	
4	1.471	6	0.742	0.44	0.432	15.09	18.88	75620	77020	94630	96380	1.00	8.0	12.5	
5	0.673	4	0.502	0.20	0.198	5.61	8.56	61830	62450	94420	95380	1.30	8.0	16.3	
6	0.676	4	0.503	0.20	0.199	6.42	9.35	70820	71180	103080	103600	1.30	8.0	16.3	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	1	1	-	1	1	-	-	1	-	-	1	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	

BEND TEST:

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

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

Highways Sub Division Kamoke

SOM Lab

 Client Reference:
 102/K
 Ref:
 1863 (Page-1/1)

 Dated:
 02-12-2019
 Dated:
 09-12-2019

Test:Tension Test Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α			Yield Ultimate		Stress	Ult. Stress				Ē	
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	1.471	6	0.742	0.44	0.432	10.91	16.51	54670	55690	82780	84310	1.30	8.0	16.3	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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

Sub Divisional Officer

Test Performed By:

Dr. /Engr.

S. Asad Ali

Gillani

Highways Sub Division No II, Gujranwala

SOM Lab

Client Reference: 315-16.G-II Ref: 1864 (Page-1/1)

Dated: 20-11-2019 **Dated:** 09-12-2019

Test:Tension Test Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			u	
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	2.346	8	0.937	0.79	0.689	14.55	22.88	40610	46570	63890	73260	1.30	8.0	16.3	
2	1.439	6	0.734	0.44	0.423	15.11	20.56	75720	78770	103060	107200	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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