Sub Divisional Officer

Test Performed By:

Dr. /Engr.

M Irfan ul
Hassan

Rukanpur Canal Sub Division, Rukanpur

**SOM Lab** 

Client Reference: <u>218/</u> Ref: 1053 (Page-1/1)
Dated: 02-06-2019 Dated: 05-07-2019

Deformed

Gauge Length: 8 inch Sample Type: Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		_	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 <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	5.96	8.61	65760	66760	94990	96430	1.00	8.0	12.5	
2	0.668	4	0.500	0.20	0.196	5.02	7.24	55310	56440	79810	81440	1.00	8.0	12.5	
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### **BEND TEST:**

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

Test Performed By: Dr. /Engr. Hassan

Chief Executive, K S & Associates, Lahore

Archt. Kalim A. Siddiqui

**SOM Lab** 

Client Reference: KSA/MCB-MZFG/18/JU-21 Ref: 1054(Page-1/1)

Dated: 27-06-2019 Dated: 05-07-2019

**Deformed** 

Gauge Length: 8 inch Sample Type: Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		_	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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.587	8	0.984	0.79	0.760	26.83	33.15	74900	77860	92550	96200	1.50	8.0	18.8	
2	1.516	6	0.754	0.44	0.446	15.49	21.15	77670	76620	106020	104600	1.40	8.0	17.5	
3	0.593	4	0.471	0.20	0.174	6.03	7.70	66550	76490	84870	97550	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	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

Maj. ® Muhammad Mubashar Test Performed By: Dr. /Engr. Amna Rajput

Project Engineer, Deevar Developer Pvt Ltd. Lahore

**SOM Lab** 

Client Reference: ZD/ZO/L/005 Ref: 1055(Page-1/1)

Dated: 04-07-2019 Dated: 05-07-2019

**Deformed** 

Gauge Length: 8 inch Sample Type: Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			ح	
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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.494	6	0.748	0.44	0.439	13.12	19.67	65760	65910	98610	98840	1.40	8.0	17.5	
2	1.499	6	0.749	0.44	0.441	13.07	19.69	65510	65360	98720	98490	1.30	8.0	16.3	
3	0.673	4	0.502	0.20	0.198	4.96	7.34	54750	55300	80940	81750	1.60	8.0	20.0	
4	0.656	4	0.496	0.20	0.193	5.32	7.61	58680	60810	83970	87020	1.40	8.0	17.5	
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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 Six Samples
		Received and Tested

Resident Engineer Test Performed By: Dr. /Engr. Hassan

NESPAK (Pvt) Ltd. Lahore

**SOM Lab** 

Client Reference: 4024/NESPAK/TEST/03 Ref: 1056(Page-1/1)

Dated: 03-07-2019 Dated: 05-07-2019

Gauge Length: 8 inch Sample Type: Deformed Bar( Saeed Kasur Steel)

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		_	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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.661	4	0.497	0.20	0.194	6.12	9.55	67450	69530	105330	108590	1.10	8.0	13.8	
2	0.645	4	0.492	0.20	0.190	6.01	9.48	66320	69810	104540	110040	1.00	8.0	12.5	
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# **BEND TEST:**

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

M Irfan UI

Furqan Ali Malik **Test Performed By:** Dr. /Engr. Hassan

Chief Resident Engineer, Package -I, NESPAK, (Pvt) Ltd. Lahore

**SOM Lab** 

**ASTM-A-615** 

**Client Reference:** 4042/13/FAM/Steel-039 Ref: 1057(Page-1/1) 05-07-2019 Dated:

**Test Specification:** 

04-07-2019 Dated:

**Tension Test & Bend Test** 

Sample Type: Gauge Length: **Deformed Bar (Amreli Steel)** 8 inch

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress		_	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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.507	6	0.751	0.44	0.443	16.97	21.71	85070	84500	108830	108100	1.10	8.0	13.8	
2	1.512	6	0.752	0.44	0.444	16.62	21.43	83290	82540	107400	106430	1.10	8.0	13.8	
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# **BEND TEST:**

Test:

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