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

Resident Engineer, T-Square Apartment Building Project, Gulberg-III, Lahore

nil

SOM Lab 4191(Page-

Ref: 1/1)

Dated: 13-04-2021 **Dated:** 13-04-2021

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			_	
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	2.504	8	0.968	0.79	0.736	23.45	36.34	65460	70260	101450	108900	1.20	8.0	15.0	
2	2.515	8	0.970	0.79	0.739	23.47	36.06	65510	70030	100660	107600	1.00	8.0	12.5	
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BEND TEST:

Client Reference:

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

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

NESPAK, (Pvt) Ltd. Lahore

Client Reference:

SOM Lab 4192(Page-

3976/13/MHK/01/236 **Ref**: 1/3)

Dated: 05-04-2021 **Dated:** 13-04-2021

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

	Dia. Area		rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			С			
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	0.683	4	0.506	0.20	0.201	7.34	9.19	80940	80530	101390	100890	1.10	8.0	13.8	
2	0.685	4	0.506	0.20	0.201	7.31	9.17	80600	80200	101170	100670	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

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

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

NESPAK, (Pvt) Ltd. Lahore

SOM Lab 4192(Page-

Client Reference: <u>3976/13/MHK/01/237</u> Ref: 2/3)

Dated: 05-04-2021 **Dated:** 13-04-2021

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

		Dia. Area		Yield	Ultimate	Yield	Stress	Ult. S	Stress			L			
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	1.507	6	0.751	0.44	0.443	14.63	19.03	73320	72830	95400	94750	1.30	8.0	16.3	
2	1.507	6	0.751	0.44	0.443	15.87	20.20	79560	79020	101270	100590	1.20	8.0	15.0	
3	1.515	6	0.753	0.44	0.445	15.62	19.57	78280	77400	98100	97000	1.00	8.0	12.5	
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BEND TEST:

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

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

NESPAK, (Pvt) Ltd. Lahore

SOM Lab 4192(Page-

Client Reference: <u>3976/13/MHK/01/238</u> Ref: 3/3)

Dated: 05-04-2021 **Dated:** 13-04-2021

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

		D	ia.	Α	rea	Yield Ultimate Yield 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	2.664	8	0.998	0.79	0.783	26.37	33.25	73620	74280	92830	93660	1.70	8.0	21.3	
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BEND TEST:

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

Major General Farhan Akhtar (R) Test Performed By: Dr. /Engr. S. Asad Ali Gillani

Plot No. 209, Sector c, Phase 8 CWB, DHA Lahore

SOM Lab 4195 (Page-

Client Reference: Nil Ref: 1/1)

Dated: 13-04-2021 **Dated:** 13-04-2021

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			С	
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	2.664	8	0.998	0.79	0.783	28.34	35.80	79120	79820	99950	100840	1.30	8.0	16.3	
2	2.669	8	0.999	0.79	0.784	28.44	35.83	79400	80010	100030	100800	1.40	8.0	17.5	
3	1.495	6	0.748	0.44	0.439	15.92	20.36	79810	79990	102040	102270	1.40	8.0	17.5	
4	1.500	6	0.749	0.44	0.441	15.92	20.36	79810	79630	102040	101810	1.40	8.0	17.5	
5	0.659	4	0.497	0.20	0.194	7.31	9.04	80600	83090	99710	102790	1.20	8.0	15.0	
6	0.652	4	0.494	0.20	0.192	7.03	8.94	77560	80800	98580	102690	1.10	8.0	13.8	
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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 Nine Samples
		Received and Tested