

Rana Waqar Ahmed
 general Manager Plant, Shangrila (Pvt) Ltd. Karachi

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

Dated: 10-08-2020

SOM Lab Ref: CED/SOM/2815(Page-1/1)

Dated: 10-08-2020

Test: Tension & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Steel 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	3.881	25	25.08	491	494	289.50	396.20	590	587	807	803	27.5	200	13.8	
2	3.920	25	25.22	491	499	261.70	355.20	533	525	724	712	27.5	200	13.8	
3	2.267	20	19.18	314	289	153.20	213.70	488	531	680	740	27.5	200	13.8	
4	2.246	20	19.09	314	286	151.70	213.50	483	531	680	747	27.5	200	13.8	
5	1.057	12	13.09	113	135	60.70	82.70	537	451	731	615	35.0	200	17.5	
6	1.020	12	12.86	113	130	66.00	87.70	584	509	775	676	32.5	200	16.3	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:- Only Nine Samples Received and Tested
20mm	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 Essa
Chief financial Officer Markhore Developers (Pvt) Ltd.

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: Nil

SOM Lab

Ref: 2811(Page-1/1)

Dated: 10-08-2020

Dated: 10-08-2020

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	2.690	8	1.004	0.79	0.791	24.99	33.49	69780	69690	93490	93370	1.20	8.0	15.0	
2	2.675	8	1.000	0.79	0.786	26.63	37.00	74330	74710	103300	103830	1.20	8.0	15.0	
3	1.507	6	0.751	0.44	0.443	14.34	19.44	71890	71410	97440	96780	1.20	8.0	15.0	
4	1.560	6	0.764	0.44	0.458	15.62	20.97	78280	75200	105100	100970	1.20	8.0	15.0	
5	0.644	4	0.491	0.20	0.189	6.27	7.49	69130	73160	82620	87430	0.90	8.0	11.3	
6	0.631	4	0.485	0.20	0.185	6.32	7.51	69700	75350	82850	89560	1.00	8.0	12.5	
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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	

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