Jamal Abdul Nasir
Senior Resident Engineer, ACES - DHA, Multan

Test Performed By: **Dr. /Engr.** Nauman Khurram

Client Reference: ACES/SEC-A/LAB/006 **Dated:** 22-01-2021
SOM Lab Ref: CED/SOM/3704 (Page-1/1) **Dated:** 25-01-2021
Test: Tension Test Bend Test **Test Specification:** ASTM-A 615
Sample Type: Deformed Bar(Zia Steel) **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	1.030	12	12.92	113	131	59.70	90.50	528	456	800	691	25.0	200	12.5	
2	1.010	12	12.80	113	129	57.70	89.00	510	449	787	692	22.5	200	11.3	
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BEND TEST:

12mm	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

Abdul Ghafar
Project Manager Liberty Builders, Lahore

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

Client Reference: ST/UET/ 20210125-33
Dated: 25-01-2021

SOM Lab Ref: 3705(Page-2/2)
Dated: 25-01-2021

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar(Batala Premium)

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	2.609	8	0.988	0.79	0.767	24.08	35.24	67220	69240	98380	101330	1.20	8.0	15.0	
2	2.640	8	0.994	0.79	0.776	24.10	35.24	67280	68490	98380	100160	1.30	8.0	16.3	
3	2.637	8	0.993	0.79	0.775	23.72	34.91	66220	67510	97470	99360	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

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

Abdul Ghafar
Project Manager Liberty Builders, Lahore

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

Client Reference: ST/UET/ 20210125-34
Dated: 258-01-2021

SOM Lab Ref: 3705(Page-1/2)
Dated: 25-01-2021

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar(Batala Premium)

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	2.631	8	0.992	0.79	0.773	22.85	34.32	63810	65210	95820	97930	1.20	8.0	15.0	
2	2.637	8	0.993	0.79	0.775	23.34	34.35	65170	66430	95900	97760	1.10	8.0	13.8	
3	2.630	8	0.992	0.79	0.773	22.91	34.00	63950	65350	94910	97000	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

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

Material Engineer,
Gatwala Commercual HUB, Faisalabad

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

Client Reference: GCH/2020/ME/01
Dated: 25-01-2021

SOM Lab Ref: 3712(Page-1/1)
Dated: 25-01-2021

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Tor Steel

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	0.649	4	0.493	0.20	0.191	6.63	9.30	73070	76510	102520	107350	1.10	8.0	13.8	
2	0.654	4	0.494	0.20	0.192	6.54	9.09	72170	75180	100270	104450	1.20	8.0	15.0	
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Witnessed By: Kashif, Material Engineer

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