

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

Test Performed By: Dr. /Engr. Nauman Khurram

Client Reference: ACES/SEC-A/LAB/004  
SOM Lab Ref: CED/SOM/3354 (Page-1/1)  
Test: Tension Test Bend Test  
Sample Type: Deformed Bar(Zia Steel)

Dated: 30-11-2020  
Dated: 2-12-2020  
Test Specification: ASTM-A 615  
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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.979	12	12.62	113	125	56.00	86.70	495	448	767	694	22.5	200	11.3	
2	0.984	12	12.63	113	125	54.00	85.20	477	432	753	681	27.5	200	13.8	
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**BEND TEST:**

12mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Three Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Waris Jan  
Sr. Engineer (Welding & NDT) EKL (Pvt) Ltd. Lahore

Test Performed By: Dr. /Engr.

M. Irfan UI Hassan

Client Reference: Nil

Dated: 101-12-2020

Test: Tension Test & Bend Test

Test Specification:

SOM Lab

Ref: 3357(Page-1/1)

Dated: 02-12-2020

ASTM-A-615

Deformed

Bar

Gauge Length: 8 inch

Sample Type:

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.649	4	0.493	0.20	0.191	5.15	8.12	56770	59440	89590	93810	1.20	8.0	15.0	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-  Only Two Samples Received and Tested</b>

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Ameer Hamza  
Lahore

Test Performed By:

Dr. /Engr.

S. Asad Ali  
Gillani

Client Reference: Nil

Dated: 02-12-2020

Test: Tension Test & Bend Test

Test Specification:

SOM Lab

Ref:

3355(Page-1/1)

Dated:

02-12-2020

ASTM-A-615

Deformed

Bar

Gauge Length: 8 inch

Sample Type:

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.503	6	0.750	0.44	0.442	16.06	20.18	80480	80110	101170	100710	1.30	8.0	16.3	
2	0.624	4	0.483	0.20	0.183	5.98	7.85	65990	72120	86560	94600	1.00	8.0	12.5	
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**BEND TEST:**

# 6	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  <b>Only Four Samples Received and Tested</b>
# 4	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](http://www.uet-civil.edu.pk)

Ass. Project Director  
North Region, PMU-SBP Govt of Punjab, Sports Board Punjab

Test Performed By: Dr. /Engr. M. Irfan UI hassan

Client Reference: APD/PMU/SBP/RWP/20/928

SOM Lab  
Ref: 3359(Page-1/1)

Dated: 30-11-2020

Dated: 02-12-2020

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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.637	4	0.488	0.20	0.187	5.91	9.68	65200	69730	106790	114210	1.20	8.0	15.0	
2	0.636	4	0.488	0.20	0.187	5.86	9.50	64640	69130	104770	112050	1.00	8.0	12.5	
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**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)