

Engr. Muhammad Kaleem Sheikh  
Chief Resident Engineer, M-3 IC Industrial City, Faisalabad

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

**Client Reference:** CRE/M3IC/FIC-44/Lab/635

**SOM Lab**

**Ref:** 2954 (Page-1/1)

**Dated:** 09-09-2020

**Dated:** 15-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar( AFCCO 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.665	4	0.498	0.20	0.195	6.07	8.33	66890	68600	91840	94190	1.70	8.0	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

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

Engr. Muhammad Kaleem Sheikh  
Chief Resident Engineer, M-3 IC Industrial City, Faisalabad

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

**Client Reference:** CRE/M3IC/FIC-44/Lab/635

**SOM Lab**

**Ref:** 2954 (Page-1/1)

**Dated:** 09-09-2020

**Dated:** 15-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar( AFCCO 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.665	4	0.498	0.20	0.195	6.07	8.33	66890	68600	91840	94190	1.70	8.0	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

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

Engr Imran Zahid  
A. Senior Engineer University of Education, Lahore

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

**Client Reference:** UE/Engg/UE/20/244

**SOM Lab**

**Ref:** 2955(Page-1/2)

**Dated:** 08-06-2020

**Dated:** 15-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar(AF 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.581	8	0.982	0.79	0.758	23.01	33.81	64230	66940	94400	98380	1.40	8.0	17.5	
2	2.636	8	0.993	0.79	0.775	25.84	37.07	72140	73540	103500	105510	1.20	8.0	15.0	
3	1.498	6	0.748	0.44	0.440	14.83	20.95	74350	74350	105000	105000	1.20	8.0	15.0	
4	1.502	6	0.749	0.44	0.441	14.85	21.15	74450	74280	106020	105780	1.30	8.0	16.3	
5	0.657	4	0.496	0.20	0.193	7.56	9.43	83410	86430	103980	107750	1.00	8.0	12.5	
6	0.662	4	0.498	0.20	0.195	7.51	9.43	82850	84970	103980	106650	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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	

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

Engr Imran Zahid  
A. Senior Engineer University of Education, Lahore

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

**Client Reference:** UE/Engg/UE-20/144

**SOM Lab**

**Ref:** 2955(Page-2/2)

**Dated:** 08-06-2020

**Dated:** 15-09-2020

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar(AF 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 <sup>2</sup>	in <sup>2</sup>	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.585	8	0.984	0.79	0.760	23.01	34.40	64230	66770	96050	99840	1.30	8.0	16.3	
2	2.605	8	0.988	0.79	0.766	23.80	34.76	66450	68530	97040	100080	1.40	8.0	17.5	
3	1.496	6	0.748	0.44	0.440	12.81	19.95	64230	64230	99990	99990	1.30	8.0	16.3	
4	1.508	6	0.751	0.44	0.443	13.00	20.05	65150	64710	100500	99820	1.30	8.0	16.3	
5	0.647	4	0.492	0.20	0.190	7.77	9.55	85660	90170	105330	110870	1.10	8.0	13.8	
6	0.674	4	0.502	0.20	0.198	7.95	9.81	87680	88570	108140	109230	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  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	

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

Engr. Riaz Ahmad  
Project Director, PEC Regional Office Building Lahore

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

**Client Reference:** PEC/LHR/NLCTD/Steel/2020/88

**SOM Lab**

**Ref:** 2956(Page-1/1)

**Dated:** 14-09-2020

**Dated:** 15-09-2020

**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	2.608	8	0.988	0.79	0.766	31.47	38.04	87850	90600	106210	109530	1.10	8.0	13.8	
2	2.597	8	0.986	0.79	0.763	29.43	36.65	82160	85070	102310	105930	1.10	8.0	13.8	
3	2.622	8	0.991	0.79	0.771	28.26	35.27	78890	80830	98470	100890	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Five Samples Received and Tested
# 8	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)

Engr. Riaz Ahmad  
Project Director, PEC Regional Office Building Lahore

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

**Client Reference:** PEC/LHR/NLCTD/Steel/2020/88

**SOM Lab**

**Ref:** 2956(Page-1/1)

**Dated:** 14-09-2020

**Dated:** 15-09-2020

**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	2.608	8	0.988	0.79	0.766	31.47	38.04	87850	90600	106210	109530	1.10	8.0	13.8	
2	2.597	8	0.986	0.79	0.763	29.43	36.65	82160	85070	102310	105930	1.10	8.0	13.8	
3	2.622	8	0.991	0.79	0.771	28.26	35.27	78890	80830	98470	100890	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Five Samples Received and Tested
# 8	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)