

Khalid Pervaiz

**Test Performed By:** Dr. /Engr. Wasim Abbas

Moaz Steel.(DESCON Engineering Ltd,K-IV Pumping Station Based in Makli,Thatta Sindh Pakistan)

**Client Reference:** MZ/JV-DES/K4-PS/UET/003

**Dated:** 12-12-2023

**SOM Lab Ref:** CED/SOM/3344(Page-1/1)

**Dated:** 12-12-2023

**Test:** Tension Test

**Test Specification:** ASTM-F-1554

**Sample Type:** Anchor- Bolt (Round 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 <sup>2</sup>	mm <sup>2</sup>	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.873	25	25.05	491	493	250.20	500.30	510	508	1019	1015	25.0	200	12.5	
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**BEND TEST:**

--	No Bend test performed	<b>Note:-</b>  Only One Sample 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)

Asif Pervaiz Butt  
RE Ritz Developers Pvt. Ltd.Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

Dated: 12-12-2023

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3337 (Page-1/1)

Dated: 12-12-2023

ASTM-A-615

Deformed Bar (Moiz 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	0.658	4	0.496	0.20	0.193	6.24	8.61	68800	71290	94990	98430	1.00	8.0	12.5	
2	0.660	4	0.497	0.20	0.194	6.24	8.58	68800	70920	94650	97580	1.30	8.0	16.3	
3	0.663	4	0.498	0.20	0.195	6.27	8.66	69130	70910	95550	98000	1.20	8.0	15.0	
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Four 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)

Asif Pervaiz Butt  
RE Ritz Developers Pvt. Ltd.Lahore

Test Performed By: Dr. /Engr. Wasim Abbas

Client Reference: Nil

Dated: 11-12-2023

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 3338 (Page-1/1)

Dated: 12-12-2023

ASTM-A-615

Deformed Bar (Moiz 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	2.651	8	0.996	0.79	0.779	24.38	34.37	68070	69030	95960	97320	1.50	8.0	18.8	
2	2.687	8	1.003	0.79	0.790	24.36	34.42	68020	68020	96100	96100	1.30	8.0	16.3	
3	2.690	8	1.004	0.79	0.791	24.03	34.76	67080	66990	97040	96920	1.00	8.0	12.5	
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**BEND TEST:**

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

M/S Vertical Heights  
Lahore.(Const. Of Vertical Height 68-B Gulberg-III Lahore)

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

Client Reference: Nil

SOM Lab

Ref: 3339 (Page-1/1)

Dated: 12-12-2023

Dated: 12-12-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Ak Supreme)

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	2.609	8	0.988	0.79	0.767	22.58	36.55	63040	64930	102050	105110	1.10	8.0	13.8	
2	2.583	8	0.983	0.79	0.759	21.87	37.10	61040	63540	103590	107820	1.40	8.0	17.5	
3	1.495	6	0.748	0.44	0.439	13.27	20.85	66530	66680	104490	104730	1.30	8.0	16.3	
4	1.467	6	0.741	0.44	0.431	12.81	20.41	64230	65570	102290	104430	1.30	8.0	16.3	
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six Samples Received and Tested
# 6	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)

Muhammad Hussain

Test Performed By: Dr. /Engr. Wasim Abbas

M/S Hussain Contractor Dhanawali Sambrial Sialkot.(Coffee Point Sialkot Airport)

Client Reference: Nil

SOM Lab

Ref: 3340 (Page-1/1)

Dated: 12-12-2023

Dated: 12-12-2023

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	1.504	6	0.750	0.44	0.442	14.50	19.16	72660	72330	96060	95630	1.50	8.0	18.8	
2	1.507	6	0.751	0.44	0.443	14.65	19.16	73430	72930	96060	95410	1.40	8.0	17.5	
3	0.668	4	0.500	0.20	0.196	6.75	8.89	74420	75940	98020	100020	1.10	8.0	13.8	
4	0.670	4	0.501	0.20	0.197	6.80	8.99	74980	76120	99150	100660	1.10	8.0	13.8	
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**BEND TEST:**

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

Mirza Muhammad Shahzad,RE

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

Nespak Lahore.(Const Of Multi-Level Grade Separation Flyover at Shahdra Morr Lahore)

Client Reference: 4537/03/MSA/09/164

SOM Lab

Ref: 3341 (Page-1/2)

Dated: 06-12-2023

Dated: 12-12-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Aziz 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	0.663	4	0.498	0.20	0.195	6.07	9.28	66890	68600	102290	104920	1.10	8.0	13.8	H# 190
2	0.663	4	0.498	0.20	0.195	6.14	9.23	67670	69410	101730	104340	1.00	8.0	12.5	H# 193
3	0.674	4	0.502	0.20	0.198	6.17	9.43	68010	68700	103980	105030	1.10	8.0	13.8	H# 194
4	0.675	4	0.502	0.20	0.198	6.14	9.35	67670	68360	103080	104120	1.00	8.0	12.5	H# 516
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**BEND TEST:**

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

Mirza Muhammad Shahzad,RE

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

Nespak Lahore.(Const Of Multi-Level Grade Separation Flyover at Shahdra Morr Lahore)

Client Reference: 4537/03/MSA/09/161

SOM Lab

Ref: 3341 (Page-2/2)

Dated: 04-12-2023

Dated: 12-12-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Aziz 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	2.658	8	0.997	0.79	0.781	22.24	34.30	62100	62810	95760	96870	1.50	8.0	18.8	H # 184
2	2.659	8	0.997	0.79	0.781	23.72	39.14	66220	66990	109280	110540	1.40	8.0	17.5	H # 691
3	0.662	4	0.498	0.20	0.195	5.50	8.41	60700	62260	92740	95120	1.00	8.0	12.5	H # 06
4	0.664	4	0.498	0.20	0.195	5.45	8.39	60140	61680	92510	94890	1.00	8.0	12.5	H # 07
5	0.671	4	0.501	0.20	0.197	5.71	8.63	62950	63910	95210	96660	1.20	8.0	15.0	H # 508
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**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Ten Samples Received and Tested
# 8	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	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. Haseeb Afzal  
Project Manager HMB Developers Pvt Ltd.(Commercial Tower, FTC Lahore)

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

**Client Reference:** HMBDPL/S.O/12/23/77(LHR)

**SOM Lab**

**Ref:** 3342 (Page-1/1)

**Dated:** 12-12-2023

**Dated:** 12-12-2023

**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	0.666	4	0.500	0.20	0.196	6.75	8.82	74420	75940	97230	99220	1.30	8.0	16.3	DC # 708
2	0.655	4	0.494	0.20	0.192	6.34	8.66	69920	72830	95550	99530	1.20	8.0	15.0	DC # 708
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**BEND TEST:**

# 4	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Three 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. Haseeb Afzal  
Project Manager HMB Developers Pvt Ltd.(Commercial Tower, FTC Lahore)

**Test Performed By:** Dr. /Engr. Wasim Abbas

**Client Reference:** HMBDPL/S.O/12/23/78(LHR)

**SOM Lab**

**Ref:** 3343 (Page-1/1)

**Dated:** 12-12-2023

**Dated:** 12-12-2023

**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	2.620	8	0.990	0.79	0.770	29.66	37.05	82810	84970	103450	106130	1.30	8.0	16.3	DC #723
2	2.647	8	0.995	0.79	0.778	28.51	35.98	79600	80830	100460	102010	1.30	8.0	16.3	DC #723
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**BEND TEST:**

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

**Test Performed by:** Dr. Wasim Abbas

Engr. Zaheer Ud Din Babar,  
Dy.General Manager (Works)  
Habib Rafiq Engineering (Pvt.) Ltd,Lahore  
(Construction of Sky Gardens Tower, Lahore.)

**Client Reference No.:** HRLE/SKG/2023/146/BH

Dated: 11-12-2023

**SOM Lab Ref:** CED/SOM/3332-3345(Page-1/1)

Dated: 12-12-2023

**Test:** Tensile Test

**Sample Type:** M.S Deformed Steel bar with Coupler (Bismillah Engineering)

### Tension Test Results

Sr. No.	Bar Size	Area	Yield Load	Ultimate Load	Yield stress	Ultimate stress	Reduced Diameter	% Reduction Area	Remarks
	(mm)	(mm <sup>2</sup> )	kN	kN	(Mpa)	(Mpa)	(mm)		
1	25	490.63	-	373.5	-	761.3	22.0	22.5	Steel Bar Breaks at this Load
2	22	379.94	177.2	257.0	466.4	676.4	17.4	37.4	Steel Bar Breaks at this Load

Witnessed By: M Irfan (HRL, QC Eng), M. Asghar

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

