

Engr. Sajid Munir Sulehri

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

PM Barqaab Consulting Services.(132/11.5Kv (GIS) MOC Grid Station, Sector A, Ph-VI, DHA LHR)

**Client Reference:** BQB/DHA-MOC/PM/008

**Dated:** 30-11-2021

**SOM Lab Ref:** CED/SOM/5432(Page-1/1)

**Dated:** 07-12-2021

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-F 1554

**Sample Type:** Anchor Bolt (M-22)

**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	3.033	22	22.17	380	386	230.00	263.20	605	596	692	682	20.0	200	10.0	
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**Witnessed By:** Yasir Ashfaq (Site Engr. Barqaab Consultant)

**BEND TEST:**

22mm	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)

Sub Divisional officer,

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

Building Sub Div.Kasur.(Const.of 2No Additional class Rooms in Govt.Boys HS School Bamba kalan)

**Client Reference:** 447/K

**SOM Lab**

**Ref:** 5424(Page-1/1)

**Dated:** 20-11-2021

**Dated:** 07-12-2021

**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	1.520	6	0.754	0.44	0.447	12.69	18.50	63620	62620	92740	91290	1.10	8.0	13.8	
2	1.530	6	0.757	0.44	0.450	12.86	19.22	64480	63050	96320	94170	1.40	8.0	17.5	
3	0.656	4	0.496	0.20	0.193	5.58	8.51	61490	63720	93860	97270	1.30	8.0	16.3	
4	0.653	4	0.494	0.20	0.192	5.47	8.41	60370	62880	92740	96600	1.40	8.0	17.5	
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**BEND TEST:**

--	No Bend test performed	<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)

Sub Divisional officer,

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

Building Sub-Division Pattoki.(Const. of 2-No Additional class Room at Govt. Primary School BSKS)

**Client Reference:** 680/P

**SOM Lab**

**Ref:** 5425(Page-1/1)

**Dated:** 18-09-2021

**Dated:** 07-12-2021

**Test:** Tension Test & Bend Test

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

ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

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	1.469	6	0.742	0.44	0.432	10.32	14.93	51710	52670	74860	76240	1.70	8.0	21.3	
2	1.471	6	0.742	0.44	0.432	12.90	20.51	64640	65830	102800	104710	1.40	8.0	17.5	
3	0.652	4	0.494	0.20	0.192	5.56	8.43	61270	63820	92960	96840	1.50	8.0	18.8	
4	0.651	4	0.493	0.20	0.191	5.47	8.41	60370	63210	92740	97110	1.60	8.0	20.0	
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**BEND TEST:**

--	No Bend test performed	<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)

Sub Divisional officer,

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

**Client Reference:** 841/78W**Dated:** 20-11-2021**Test:** Tension Test & Bend Test**Gauge Length:** 8 inch**SOM Lab****Ref:** 5426(Page-1/1)**Dated:** 07-12-2021**Test Specification:** ASTM-A-615**Sample Type:** Deformed Bar (Kamran 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	2.678	8	1.001	0.79	0.787	25.79	34.56	72000	72280	96470	96840	1.60	8.0	20.0	
2	2.680	8	1.002	0.79	0.788	25.76	34.48	71920	72100	96250	96490	1.60	8.0	20.0	
3	1.508	6	0.751	0.44	0.443	15.39	20.18	77160	76630	101170	100480	1.30	8.0	16.3	
4	1.496	6	0.748	0.44	0.440	156.47	20.31	784280	784280	101780	101780	1.30	8.0	16.3	
5	0.643	4	0.491	0.20	0.189	6.24	8.12	68800	72800	89590	94810	1.20	8.0	15.0	
6	0.650	4	0.493	0.20	0.191	6.44	8.31	71040	74390	91610	95930	1.20	8.0	15.0	
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**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. Muddasir Tahir

CM Zameen Aurum,(Construction Of Zameen Aurum at Plot No.15 Block L,Gulberg-III Lahore)

**Test Performed By:****Dr. /Engr. Asad Ghalani**

Client Reference: ZD/ZA/STR017

Dated: 07-12-2021

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 5427(Page-1/1)

Dated: 07-12-2021

Test Specification: ASTM-A-615

Sample Type: Deformed Bar (Afaq 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	0.624	4	0.483	0.20	0.183	5.50	8.02	60700	66340	88470	96690	1.20	8.0	15.0	
2	0.656	4	0.496	0.20	0.193	6.09	8.77	67110	69540	96670	100180	1.10	8.0	13.8	
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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)

Bismillah Developers  
Bismillah Housing Scheme I G.T Rd Lahore.(AL-Raziq Garden)

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

Client Reference: Nil

SOM Lab 5428(Page-1/1)

**Dated:** 06-12-2021  
**Test:** Tension Test & Bend Test  
**Gauge Length:** 8 inch

**Ref:**  
**Dated:** 07-12-2021  
**Test Specification:** ASTM-A-615  
**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	2.630	8	0.992	0.79	0.773	23.11	32.67	64520	65940	91210	93210	1.40	8.0	17.5	
2	2.637	8	0.993	0.79	0.775	23.47	32.77	65510	66780	91490	93260	1.50	8.0	18.8	
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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)

Engr. Hasan Nawaz  
 CM Zameen Quadrangle.(Const. Of Zameen Quadrangle at Plot No.49,Gulberg-V Lahore)

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

**Client Reference:** ZD/ZQ/GSW/001

**SOM Lab**

**Ref:** 5429(Page-1/1)

Dated: 07-12-2021

Dated: 07-12-2021

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	2.680	8	1.002	0.79	0.788	24.03	33.54	67080	67250	93630	93870	1.30	8.0	16.3	Kamran
2	2.670	8	1.000	0.79	0.785	24.67	34.17	68870	69310	95390	96000	1.40	8.0	17.5	Kamran
3	2.666	8	0.998	0.79	0.783	24.01	34.17	67020	67620	95390	96250	1.30	8.0	16.3	Kamran
4	2.603	8	0.987	0.79	0.765	23.96	33.33	66880	69060	93060	96100	1.20	8.0	15.0	Kamran
5	2.446	8	0.957	0.79	0.719	25.56	35.17	71350	78390	98180	107880	1.30	8.0	16.3	Pak
6	2.573	8	0.981	0.79	0.756	27.32	34.35	76270	79700	95900	100220	1.50	8.0	18.8	Pak
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**BEND TEST:**

#8 Kamran	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
#8 Kamran	Sample bend through 180 degrees Satisfactorily without any crack	
# 8 Pak	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. M Younas

Test Performed By:

Dr. /Engr. S Asad Gillani

RE Nespak QABP,SKP.(Infrastructure Devl.Of Quaid-E-Azam Business Park On Motorway M-2)

SOM Lab

Client Reference: 4163/11/MY/01/86

Ref:

5433(Page-1/1)

Dated: 06-12-2021

Dated:

07-12-2021

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

**Test Specification:** ASTM-A-615  
**Sample Type:** Deformed Bar (Faizan 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	1.469	6	0.742	0.44	0.432	14.68	19.98	73580	74940	100150	102000	1.30	8.0	16.3	
2	1.466	6	0.741	0.44	0.431	14.70	19.80	73680	75220	99230	101300	1.20	8.0	15.0	
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**BEND TEST:**

# 6	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. S. Asad Ali Gillani

Assistant Director (South)  
 Govt. Of KPK Highways Authority, Kohat.  
 (M/S Z.S Construction)

Project: F/S Design and Reconstruction of Bridges, Sub-Head: Packages-I, Construction  
 Of Arsala Bridge on Issa Khel Mianwali Rd. Distt.Lakki.



**Reference No.:** 1311/AB/PKHA

**Dated:** 04-11-2021

**SOM Lab Ref:** CED/SOM/5430(Page-1/1)

**Dated:** 07-12-2021

**Test:** Tensile Test, Elongation at Break, Tear Test, Hardness Test & Comp Set Test

**Sample Type:** Elastomeric Bearing Pad

**TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	10.0 x 3.0	0.65	21.66	220.87	480.0

**TEAR STRENGTH (AS PER ASTM-D-624)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	22.0 x 3.0	0.40	133.33

**- COMPRESSION SET TEST (AS PER ASTM-D-395)**

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.0	2.95	1.66

**- HARDNESS TEST (AS PER ASTM-D-2240)**

S. No	Sample Type	Hardness (Shore A)
1	Elastomeric Bearing Pad	61.83

**Test Performed by:** Dr. S. Asad Ali Gillani

Engr.Syed Taufeeq Ahmad  
Resident Engineer CEC-H&B(JV).  
Mingora Distt.Swat.

Project: Construction Supervision Of "F/S Design and Construction of 02 No Flyover On Mingora-Kanju Rd SH:Mingora Bypass and Kanju Chowk, Distt.Swat, SH:Flyover at Mingora Bypass Rd.(Phase-I).

**Reference No.:** CEC-H&B/PKHA/RE/SWT/198.Steel

Dated: 05-11-2021

**SOM Lab Ref:** CED/SOM/5431(Page-1/1)

Dated: 07-12-2021

**Test:** Tensile Test, Elongation at Break, Tear Test, Hardness Test & Comp. Set Test

**Sample Type:** PVC Water Stopper

**TENSILE STRENGTH AND ELONGATION TEST. (AS PER ASTM-D-412)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tensile Strength (Mpa)	Tensile Strength (kg/cm <sup>2</sup> )	Elongation at Break(%)
1	17.0 x 3.0	0.20	3.92	39.97	140.0

**TEAR STRENGTH (AS PER ASTM-D-624)**

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	17.0 x 3.0	0.15	50.0

**- COMPRESSION SET TEST (AS PER ASTM-D-395)**

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	3.0	2.95	1.66

**- HARDNESS TEST (AS PER ASTM-D-2240)**

S. No	Sample Type	Hardness (Shore A)
1	PVC Water Stopper	79.0

**Test Performed by:** .S. Asad Ali Gillani

Engr. Sajid Munir Sulehri

PM Barqaab Consulting Services

Project: Design, Manufacture, Supply, Erection, Testing & Commissioning Of 132/11.5Kv  
(GIS) MOC Grid Station, Sector A, Phase VI, DHA Lahore)

**Client Reference No.:** BQB/DHA-MOC/PM/008

Dated: 30-11-2021

**SOM Lab Ref:** CED/SOM/5432 (Page 1/1)

Dated: 07-12-2021

**Test Type:** Hardness Test & Proof Load Test

**Sample Type:** Anchor Bolt (M-22)

**Hardness Test Details:**

**Machine used:** Avery Rockwell Hardness Testing Machine

(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B )

**Hardness Test Results**

Sample No.	Sample Type	Hardness
1	Anchor Bolt (M-22)	HR – 88.16 – B

**Proof Load (Anchor Bolt)**

Sr No.	Sample Type	Specified Proof Load ( given by client) (kN)	Operational condition of net Bolt Assembly
1	Anchor Bolt (M-22)	214.0	Sample remains Satisfied at this proof Load

**Witnessed By:** Yasir Ashfaq (Site Engr. Barqaab Consultant)

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

Test Performed by: .S. Asad Ali Gillani

Engr. Sajid Munir Sulehri

PM Barqaab Consulting Services

Project: Design,Manufacture,Supply,Erection,Testing & Commissioning Of 132/11.5Kv  
(GIS) MOC Grid Station, Sector A, Phase VI,DHA Lahore)

Client Reference No.: BQB/DHA-MOC/PM/008

Dated: 30-11-2021

SOM Lab Ref: CED/SOM/5432 (Page 1/1)

Dated: 07-12-2021

Test Type: Tension & Bend Test

Sample Type: Anchor Bolt (M-22)

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate. Stress	Remarks
	Original Diameter	Tested Diameter						
	mm	mm						
1	22	22.17	386	230.0	263.20	596	682	
-	-	-	-	-	-	-	-	-

**BEND TEST:**

22mm Sample bend through 180 degrees Satisfactorily without any crack

**Note:-**

Only Two Samples  
Received and Tested

**Witnessed By:** Yasir Ashfaq (Site Engr. Barqaab Consultant)

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

