

M. Imran  
 Manager Procurement, Everfresh Forms (Pvt.) Ltd. Lahore.

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

**Client Reference:** Nil

**Dated:** 14-04-2022

**SOM Lab Ref:** CED/SOM/195(Page-2/2)

**Dated:** 19-04-2022

**Test:** Tension Test

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

**Sample Type:** Anchor Bolt

**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	4.050	25	25.63	491	516	176.20	256.50	359	342	523	498	42.5	200	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**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)

Saleem Tahir  
PM ICPL (OMBRé' Holding Pvt Ltd Raiwind,Lahore)

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

**Client Reference:** OMBRe'/Ittefaq/Steel/005

**Dated:** 19-04-2022

**SOM Lab Ref:** CED/SOM/200 (Page-1/1)

**Dated:** 19-04-2022

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A 615

**Sample Type:** M S Deformed Bar (Ittefaq 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	3.828	25	24.93	491	488	264.50	332.70	539	543	678	682	25.0	200	12.5	
2	3.834	25	24.94	491	488	263.70	334.00	537	540	680	684	25.0	200	12.5	
3	2.418	20	19.80	314	308	171.70	214.70	547	558	683	698	30.0	200	15.0	
4	2.416	20	19.80	314	308	169.70	213.20	540	552	679	693	27.5	200	13.8	
5	1.561	16	15.91	201	199	118.50	148.20	589	597	737	746	27.5	200	13.8	
6	1.559	16	15.90	201	199	110.70	141.50	551	558	704	713	25.0	200	12.5	
7	0.881	12	11.96	113	112	54.70	80.70	484	488	714	719	25.0	200	12.5	
8	0.881	12	11.96	113	112	54.50	82.00	482	486	725	731	27.5	200	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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)

Khalid Bashir

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Ittfaq Building Solution (Pvt.)Ltd.(Nisar Spining Mill Raiwind,LHR)

Client Reference: IBS/NSM/ST 01

Dated: 19-04-2022

SOM Lab Ref: CED/SOM/203(Page-1/2)

Dated: 19-04-2022

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

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	2.251	20	19.12	314	287	156.20	188.20	497	545	599	656	35.0	200	17.5	
2	2.252	20	19.11	314	287	149.50	180.20	476	522	574	629	35.0	200	17.5	
3	1.528	16	15.75	201	195	92.00	117.70	458	473	585	605	37.5	200	18.8	
4	1.528	16	15.75	201	195	91.50	122.00	455	470	607	627	32.5	200	16.3	
5	0.987	12	12.65	113	126	74.00	92.00	654	589	813	732	32.5	200	16.3	
6	0.997	12	12.72	113	127	72.50	90.00	641	571	796	709	30.0	200	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

20mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Nine Samples Received and Tested
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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)

Khalid Bashir

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Ittfaq Building Solution (Pvt.)Ltd.(Nisar Spining Mill Raiwind,LHR)

Client Reference: IBS/NSM/ST 02

Dated: 19-04-2022

SOM Lab Ref: CED/SOM/203(Page-2/2)

Dated: 19-04-2022

Test: Tension Test & Bend Test

Test Specification: ASTM-A 615

Sample Type: Deformed Bar

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	3.813	25	24.88	491	486	251.50	358.00	512	518	729	737	35.0	200	17.5	
2	3.792	25	24.80	491	483	249.50	352.00	508	517	717	729	35.0	200	17.5	
3	2.256	20	19.13	314	287	166.00	212.00	528	578	675	738	25.0	200	12.5	
4	2.258	20	19.14	314	288	174.00	215.50	554	605	686	750	27.5	200	13.8	
5	1.507	16	15.64	201	192	92.00	116.20	458	480	578	606	37.5	200	18.8	
6	1.512	16	15.66	201	193	91.70	118.20	456	477	588	614	35.0	200	17.5	
7	0.976	12	12.58	113	124	73.00	92.50	645	588	818	745	27.5	200	13.8	
8	0.976	12	12.58	113	124	62.20	77.70	550	501	687	626	25.0	200	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

25mm	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
20mm	Sample bend through 180 degrees Satisfactorily without any crack	
16mm	Sample bend through 180 degrees Satisfactorily without any crack	
12mm	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)

Executive Engineer,

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

Highway Div Gujrat.(Dualization Of Rd GT Rd To Gujrat Dinga Rd I/C Gujrat Flyover L= 31KMS)

Client Reference: 913/MCB

SOM Lab

Ref: 196 (Page-1/1)

Dated: 06-04-2022

Dated: 19-04-2022

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	2.639	8	0.994	0.79	0.776	26.81	35.02	74850	76200	97750	99520	1.20	8.0	15.0	
2	2.637	8	0.993	0.79	0.775	26.57	34.78	74190	75630	97100	98980	1.30	8.0	16.3	
3	1.478	6	0.743	0.44	0.434	15.49	20.15	77670	78740	101020	102410	1.30	8.0	16.3	
4	1.503	6	0.750	0.44	0.442	15.49	20.29	77670	77310	101680	101220	1.40	8.0	17.5	
5	0.853	5	0.565	0.31	0.251	10.14	12.92	72160	89120	91890	113480	1.10	8.0	13.8	
6	0.892	5	0.578	0.31	0.262	10.06	13.20	71580	84690	93920	111120	1.30	8.0	16.3	
7	0.647	4	0.492	0.20	0.190	6.42	8.66	70820	74550	95550	100580	1.30	8.0	16.3	
8	0.643	4	0.491	0.20	0.189	6.52	8.79	71940	76130	96900	102540	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Twelve Samples Received and Tested
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 5	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)

Li Shi Test Performed By: Dr. /Engr. S Asad Gillani  
 Manager Sinohydro Corporation.( 220Kv Transmission Lines Associated With Lhr North Substation)

Client Reference: ADB-301B/2018/476

Dated: 15-04-2022

Test: Tension Test & Bend Test

Gauge Length: 8 inch

Test Specification:

Sample Type:

SOM Lab

Ref: 198 (Page-1/1)

Dated: 19-04-2022

ASTM-A-615

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	2.636	8	0.993	0.79	0.775	24.79	35.90	69210	70550	100230	102170	1.20	8.0	15.0	
2	2.646	8	0.995	0.79	0.778	25.08	35.75	70010	71090	99800	101340	1.30	8.0	16.3	
3	2.637	8	0.993	0.79	0.775	24.87	35.83	69440	70780	100030	101970	1.20	8.0	15.0	
4	2.644	8	0.995	0.79	0.777	25.20	35.95	70350	71530	100370	102050	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Witnessed By: Asad Nawab, Sr.Engr.( Barqaab)

**BEND TEST:**

# 8	Sample bend through 180 degrees Satisfactorily without any crack	<b>Note:-</b>  Only Six 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. Naveed Sadiq

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

RE Orbit Developers.Lahore.(The Springs Gulberg Lahore)

Client Reference: Nil

Dated: 19-04-2022

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 199 (Page-1/1)

Dated: 19-04-2022

ASTM-A-615

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	2.717	8	1.008	0.79	0.798	24.41	35.49	68160	67480	99090	98100	1.50	8.0	18.8	
2	2.719	8	1.009	0.79	0.799	24.46	35.55	68300	67530	99230	98120	1.40	8.0	17.5	
3	1.504	6	0.750	0.44	0.442	14.29	19.75	71640	71310	98970	98520	1.40	8.0	17.5	
4	1.498	6	0.748	0.44	0.440	14.39	19.88	72150	72150	99640	99640	1.50	8.0	18.8	
5	0.655	4	0.494	0.20	0.192	6.27	8.97	69130	72010	98920	103040	1.20	8.0	15.0	
6	0.662	4	0.498	0.20	0.195	6.57	9.23	72510	74360	101730	104340	1.10	8.0	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**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)

Sub Divisional officer,

BSD Shujabad.(Up-Gradation Of 09 Civil Veterinary Hospitals At Div Level In Punjab (Multan))

Test Performed By:

Dr. /Engr. Asad Ali Gillani

Client Reference: 542/Shujabad

Dated: 12-01-2022

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 201 (Page-1/1)

Dated: 19-04-2022

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	1.506	6	0.751	0.44	0.443	16.72	20.56	83800	83230	103060	102360	1.20	8.0	15.0	
2	0.666	4	0.500	0.20	0.196	6.09	8.10	67110	68480	89370	91190	1.40	8.0	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BEND TEST:**

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

Canal Valley  
Lahore.(Const Of O.W.T At Canal Valley Ph-2)

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



Client Reference: Nil

Dated: 19-04-2022

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 202 (Page-1/1)

Dated: 19-04-2022

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	2.680	8	1.002	0.79	0.788	29.15	36.60	81390	81600	102170	102420	1.00	8.0	12.5	
2	2.697	8	1.005	0.79	0.793	29.77	37.13	83100	82780	103640	103250	1.10	8.0	13.8	
3	1.468	6	0.741	0.44	0.431	16.62	20.05	83290	85030	100500	102600	1.00	8.0	12.5	
4	1.481	6	0.744	0.44	0.435	16.28	20.18	81600	82540	101170	102330	1.00	8.0	12.5	
5	0.676	4	0.503	0.20	0.199	6.12	9.04	67450	67790	99710	100210	1.40	8.0	17.5	
6	0.677	4	0.503	0.20	0.199	6.16	9.07	67900	68240	100050	100550	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**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)

Manohar Lal

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

RE Nespak,Lahore(Dualization of Rd From Grw to M-2 Interchange at Kot Sarwar Via Hafizabad)

Client Reference: SA-466F/103/GH/ML/Lab/25

SOM Lab 204 (Page-1/1)

**Dated:** 12-04-2022

**Ref:**

**Dated:**

19-04-2022

**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	1.501	6	0.749	0.44	0.441	14.63	20.08	73320	73160	100660	100430	1.40	8.0	17.5	
2	1.500	6	0.749	0.44	0.441	15.16	20.20	75980	75810	101270	101040	1.30	8.0	16.3	
3	0.679	4	0.505	0.20	0.200	6.95	9.02	76660	76660	99480	99480	1.10	8.0	13.8	
4	0.672	4	0.501	0.20	0.197	5.98	8.56	65990	66990	94420	95860	1.00	8.0	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**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)

Sub Divisional officer,

**Test Performed By:**

Dr. /Engr.

Asad Ali Gillani

BSD NNB.(Const. For The Project GS. No. 254 For The Year 2021-22 (Group-1))

**SOM Lab**

**Client Reference:** 1049/SDO/BSD/NNB

**Ref:**

205 (Page-1/1)

**Dated:** 09-04-2022

**Dated:** 19-04-2022

**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	2.670	8	1.000	0.79	0.785	24.31	32.77	67870	68310	91490	92080	1.50	8.0	18.8	
2	1.528	6	0.756	0.44	0.449	12.25	18.65	61420	60190	93510	91630	1.50	8.0	18.8	
3	0.688	4	0.507	0.20	0.202	6.01	8.58	66320	65670	94650	93710	1.50	8.0	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**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	
# 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)

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

M. Imran  
Manager Procurement  
Everfresh Form (Pvy) Ltd. Lahore.

**Client Reference No.:** Nil

Dated: 14-04-2022

**SOM Lab Ref:** CED/SOM/195 (Page-1/2)

Dated: 19-04-2022

**Test Type:** Slippage & Hardness Test

**Sample Type:** J-Bolts

### Slippage Test Results

Sample No.	Sample Type	Diameter of Bolt (mm)	Maximum Load Applied (kN)	Remarks
1	J- Bolt	25.0	168.2	Thread failure occurs at this load

### 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	J-Bolt (M-25)	HR – 73.5 – B

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

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

Dy. Director Roads-II,  
Capital development Authority (Roads Division-II)  
Islamabad.

Project: Construction Of Khayaban-E-Margalla From G.T-Road To Sector D-12 – Balance work  
(Pkg-I) Islamabad.

**Reference No.:** CDA/DD(RD-II)/2022/124

Dated: 14-04-2022

**SOM Lab Ref:** CED/SOM/197(Page-1/1)

Dated: 19-04-2022

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

**Sample Type:** Elastomeric Bearing Pad (ATCPAD France)

**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	7.5 x 2.2	0.41	24.84	253.29	540.0
2	5.6 x 2.2	0.40	32.46	330.99	500.0

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

S. No	Sample Size (mm)	Ultimate Load (kN)	Tear Strength (N/mm)
1	12.4 x 2.2	0.22	100.0
2	14.0 x 2.3	0.26	113.0

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

S. No.	Thickness of Sample (mm)	Final Thickness (mm)	Compression set (%)
1	2.20	2.10	4.5

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

S. No	Sample Type	Hardness (Shore A)
1	Elastomeric Bearing Pad	60.3

