



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/07/36706
2021

Dated: 07-07-

Dated of Test: 15-07-2021

To
Municipal Officer (I&S)
Municipal Committee
Vehari
(Provision of Sewerage Line for Sewer Pond Anwarabad, Muslim Town Vehari)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. 390/MO(I)/MC(VR), dated 24.03.2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	15	7.76	7.29	1.60	1.22	2.27	9600	12200	2376	3019

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/07/36743
2021

Dated: 12-07-

Dated of Test: 15-07-2021

To
M/S Capital City
Okara

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. Nil, dated 12.07.2021 on the subject cited above. Three R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12 (Mughal)	7.79	7.34	1.34	1.02	1.94	2300	3800	680	1124
2	12	7.79	7.33	1.32	0.97	2.09	9400	14700	2904	4541
3	18	7.71	7.22	1.65	1.20	2.70	5600	9600	1428	2448

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/07/36746
2021

Dated: 13-07-

Dated of Test: 15-07-2021

To

Assistant Executive Engineer (Civil)

KBCMA, CVAS, Narowal

Construction of External Sewerage System, External Water Supply / Fire Fighting System, Overhead Water Tank (50000 Gallon) Sewerage Equalization Tank No. 1 & 2, Disposal Tank No. 1 & 2, Tube well and Tube well Chamber, Septic Tanks (1-2), Oil separator, Grease Trap at CVAS, Narowal

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]

Reference to your letter No. A.E.E/NC/079, dated 24.06.2021 on the subject cited above. Three R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.78	7.30	0.91	0.71	1.18	10000	14500	4240	6148
2	12	7.77	7.32	1.31	0.97	2.02	17500	20000	5436	6213
3	18	7.77	7.29	1.92	1.49	2.60	11800	14900	2396	3025

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
 Project Manager/ Resident Head (Civil) JHC
 Jaggran-II Hydropower Consultants
 EPC Contract for 48MW Jaggran-II Hydropower Project

Reference # CED/TFL **36749** (Dr. Usman Akmal)
 Reference of the request letter # E314-JHC-EPCC-OC-406

Dated: 13-07-2021
 Dated: 13-07-2021

Tension Test Report (Page -1/2)

Date of Test 15-07-2021
 Gauge length 8 inches
 Description Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual							
1	0.257	6	6.46	-----	32.8	1280	1960	383	587	1.60	20.0	MSM Steel
2	0.242	6	6.27	-----	30.9	1240	2280	394	724	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test												
Bend Test												
6mm Dia Bar Bend Test Through 180° is Satisfactory												

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Project Manager/ Resident Head (Civil) JHC
 Jaggran-II Hydropower Consultants
 EPC Contract for 48MW Jaggran-II Hydropower Project

Reference # CED/TFL **36749** (Dr. Usman Akmal)
 Reference of the request letter # E314-JHC-EPCC-OC-408

Dated: 13-07-2021
 Dated: 13-07-2021

Tension Test Report (Page -2/2)

Date of Test 15-07-2021
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.392	10	9.73	0.12	0.115	4200	5300	77161	80260	97370	101300	0.80	10.0	Mughal Steel
2	0.396	10	9.77	0.12	0.116	4300	5600	78998	81490	102881	106200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
M/S Myco Engineers
Lahore
(Construction of Sports Complex & Swimming Pool at Buch Villa Multan)

Reference # CED/TFL **36752** (Dr. Usman Akmal)
Reference of the request letter # MEC/MEV/SMC/05

Dated: 13-07-2021
Dated: 13-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.379	3/8	0.377	0.11	0.111	3200	4500	64200	63340	90200	89100	1.00	12.5	FF Steel
2	0.378	3/8	0.376	0.11	0.111	3300	4500	66200	65440	90200	89300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two sample for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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To,
M/S Tijaarat Developers
Lahore
(Project at Opus, Lahore)

Reference # CED/TFL **36756** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 13-07-2021
Dated: 13-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.351	3	0.362	0.11	0.103	2800	4300	56200	59830	86200	91900	1.20	15.0	
2	0.350	3	0.362	0.11	0.103	2800	4400	56200	59980	88200	94300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
M/S Building Standards Ltd
Lahore
(Construction of Residential Building at Plot No. 244-D, Phase-V, DHA, Lahore)

Reference # CED/TFL **36757** (Dr. Usman Akmal)
Reference of the request letter # GT/LTR/210713-074

Dated: 13-07-2021
Dated: 13-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.368	10	9.42	0.12	0.108	3400	4700	62464	69330	86347	95900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Resident Engineer
 Velosi Integrity & Safety Pakistan (Pvt) Ltd
 Consultancy Services (Design & Resident Type Supervision) for Construction of Confucius
 Institute at University of Agriculture Faisalabad

Reference # CED/TFL **36758** (Dr. Usman Akmal)
 Reference of the request letter # VISP/CON/FSD-016

Dated: 13-07-2021
 Dated: 03-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.406	3	0.390	0.11	0.119	3000	4500	60200	55410	90200	83200	1.30	16.3	P.K Supreme
2	0.424	3	0.398	0.11	0.125	3600	5400	72200	63630	108200	95500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

To,
 Project Manager
 CCECC-MATRACON-HABIB Joint Venture
 Re-Construction of & Up-gradation of Main Runway (18L/36R) at Allama Iqbal International
 Airport (AIIAP), Lahore

Reference # CED/TFL **36766** (Dr. Usman Akmal)

Dated: 14-07-2021

Reference of the request letter # AIIAP/CCECC-MATRACON-HABIB Jv/2021/504

Dated: 12-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.415	10	10.01	0.12	0.122	3500	5320	64301	63290	97737	96200	1.20	15.0	Batala Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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Ref: CED/TFL/07/36767

Dated: 07-07-2021

Dated of Test: 15-07-2021

To
Municipal Officer (I&S)
Municipal Coporation
Hafizabad
(Rehabilitation of Municipal Servies Infrastructure Hafizabad)
(M/s Ch. Amjad Ali Govt. Contractor)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page -1/3)**

Reference to your letter No. 19/PCP/mo(I&S)/HFD, dated 04.06.2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	18	7.74	7.30	1.92	1.49	2.57	7400	12600	1495	2546

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/07/36767

Dated: 07-07-2021

Dated of Test: 15-07-2021

To
Municipal Officer (I&S)
Municipal Coporation
Hafizabad
(Rehabilitation of Municipal Servies Infrastructure Hafizabad)
(M/s Ch. Amjad Ali Govt. Contractor)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]** (Page -2/3)

Reference to your letter No. 19/PCP/mo(I&S)/HFD, dated 04.06.2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.72	7.33	1.32	0.97	2.11	11800	19700	3668	6124

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/07/36767

Dated: 07-07-2021

Dated of Test: 15-07-2021

To
Municipal Officer (I&S)
Municipal Coporation
Hafizabad
(Rehabilitation of Municipal Servies Infrastructure Hafizabad)
(M/s Ch. Amjad Ali Govt. Contractor)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]** (Page -3/3)

Reference to your letter No. 19/PCP/mo(I&S)/HFD, dated 04.06.2021 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	15	7.78	7.27	1.63	1.22	2.47	7200	9900	1786	2456

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/07/36768

Dated: 14-07-2021

Dated of Test: 15-07-2021

To
Manager SPC
Army Welfare Trust Housing Scheme
Sewerage System in Block-E (82 Kanal) AWT Housing Scheme Phase-2, Lahore

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]

Reference to your letter No. AWRES/Dev-N/Ph-2, dated 05.07.2021 on the subject cited above. Two R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(foot)	(foot)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.74	7.34	1.34	0.99	2.08	10500	16800	3194	5110
2	12	7.71	7.34	1.32	0.98	2.03	12500	19200	3830	5883

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
M/S One Liberty
Lahore
(Islamabad Supreme)

Reference # CED/TFL **36769** (Dr. Qasim Khan)
Reference of the request letter # OL/2021/07/06

Dated: 15-07-2021
Dated: 15-07-2021

Tension Test Report (Page -1/1)

Date of Test 15-07-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.383	3	0.378	0.11	0.112	3600	5300	72200	70570	106200	103900	1.10	13.8	
2	0.391	3	0.383	0.11	0.115	3400	5300	68200	65140	106200	101600	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
Commercial Officer
Al Fazal Engineering
General Electric
Mangla Refurbishment Project Package IX
WAPDA – NESPA – China CAMC Engineering Co., Ltd.
Reference # CED/TFL **36771** (Dr. Qasim Khan)
Reference of the request letter # ALF-21-07-0006

Dated: 15-07-2021

Dated: 15-07-2021

Tension Test Report (Page – 1/1)

Date of Test 15-07-2021
Gauge length 2 inches
Description Plate Sheet Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	2	24.50x2.00	49.00	1700	2200	340.35	440.45	0.40	20.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only One Sample for Tensile Test										
Bend Test										

I/C Testing Laboratories
UET Lahore, Pakistan.

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Ref: CED/TFL/07/36772

Dated: 15-07-2021

Date of Calibration: 15-07-2021

To
Chief Resident Engineer
Future Development Holdings (Pvt) Ltd
Capital Smart City Islamabad

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/36772) (Page – 1/1)

Reference to your Letter No. FDHL/CSC/07/2021/0163, dated: 10/07/2021 on the subject cited above. One Hydraulic Jack (Jack No. 5478, Pump Gauge No. 965(B2)) as received by us has been calibrated. The results are tabulated as under:

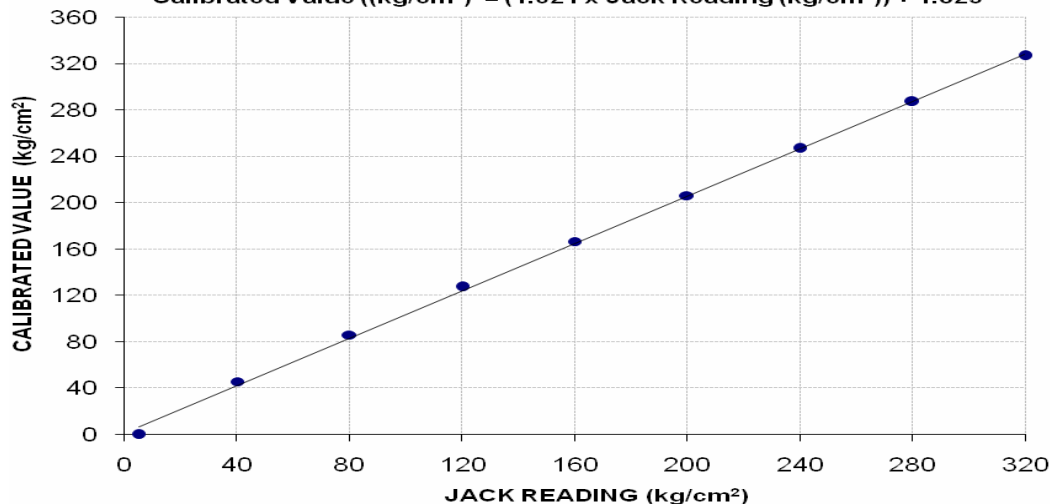
Total Range : Zero - 1000 (kg/cm²)
Calibrated Range : Zero - 320 (kg/cm²)

Hydraulic Jack Reading (kg/cm ²)	5	40	80	120	160	200	240	280	320
Calibrated Load (kg)	0	27600	51800	76600	100200	124200	148600	173000	196800
Calibrated Pressure (kg/cm ²)	0	45.82	85.99	127.16	166.33	206.18	246.68	287.18	326.69

The Ram Area of Jack = 602.40 cm²

Calibration Curve For Jack No. 5478

Calibrated Value ((kg/cm²) = (1.021 × Jack Reading (kg/cm²)) + 1.825



I/C Testing Laboratories
UET Lahore, Pakistan.

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