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


To,

Planning Engineer
DSG Energy, Lahore.

Reference # CED/TFL **5452** (Dr. M Rizwan Riaz) Dated: 05-08-2024
Reference of the request letter # Nil Dated: 05-08-2024

## Tension Test Report (Page – 1/1)

Date of Test 12-08-2024
Gauge length 2 inches
Description Aluminum Structure 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 | A-1 | 26.00x1.00 | 26.00 | 440 | 640 | 166.02 | 241.48 | 0.35 | 17.50 | |
| 2 | A-2 | 26.00x2.10 | 54.60 | 670 | 920 | 120.38 | 165.30 | 0.35 | 17.50 | |
| 3 | A-3 | 25.70x1.20 | 30.84 | 570 | 640 | 181.31 | 203.58 | 0.10 | 5.00 | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |
| **Only Three Samples for Tensile Test** | | | | | | | | | | |
| | | | | | | | | | | |
| **Bend Test** | | | | | | | | | | |
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To,

Assistant Manager
Allied Engineering & Services (Private) Ltd.

**I/C Testing Laboratoires**
**UET Lahore, Pakistan.**

Note:

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http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
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**Pakistan. Ph: 92-42-99029202**

Project of Rice /Corn Warehouse of 2000 Ton Capacity Situated at Main Okara Depalpur Road, District Okara.

Reference # CED/TFL **5490** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # Nil Dated: 09-08-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.371 | 3 | 0.372 | 0.11 | 0.109 | 4100 | 4900 | 82200 | 82980 | 98200 | 99200 | 0.90 | 11.3 | Afco Steel |
| 2 | 0.369 | 3 | 0.372 | 0.11 | 0.108 | 3700 | 4700 | 74200 | 75230 | 94200 | 95600 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
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**Test Floor Laboratory**
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**University of Engineering and Technology Lahore, 54890**
**Pakistan. Ph: 92-42-99029202**

To,

Garrison Engineer (Army)-1
Sialkot Cantonment
(Const of 1 x 150 Men CH/DH ex 16 NLI Regt, HQ 15 Div at Slk Cantt.)

Reference # CED/TFL **5491** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # 6002/36/E-6 Dated: 27-06-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (inch) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.375 | 3/8 | 0.375 | 0.11 | 0.110 | 3300 | 4900 | 66200 | 65990 | 98200 | 98000 | 1.30 | 16.3 | Aziz Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

**Note: only one sample for tensile and one sample for bend test**

Bend Test

3/8" Dia Bar Bend Test Through 180º is Satisfactory

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# STRUCTURAL ENGINEERING DIVISION

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

To,

Garrison Engineer (Army)-1
Sialkot Cantonment
(Upgradation of Gynae Ward, OT Complex Waiting Area & Misc Work at CMH Slk Cantt.)

Reference # CED/TFL **5492** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # 6002/37/E-6 Dated: 29-07-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (inch) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.377 | 3/8 | 0.376 | 0.11 | 0.111 | 3500 | 5100 | 70200 | 69610 | 102200 | 101500 | 1.20 | 15.0 | SJ Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
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**I/C Testing Laboratoires**
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# STRUCTURAL ENGINEERING DIVISION

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

To,

Director P & D
King Edward Medical University,
Lahore
(Construction of Bio Safety Lab Level III KEMU, Lahore

Reference # CED/TFL **5494** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # P&D/KEMU/632-634 Dated: 09-08-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.368 | 3 | 0.371 | 0.11 | 0.108 | 3300 | 4900 | 66200 | 67270 | 98200 | 99900 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
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**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,

Sub Divisional Officer
Buildings Sub Division C.M Sectt;
Lahore
(Special Repair to The Offices of GOR-I, Lahore)

Reference # CED/TFL **5495** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # SDO/CMS/937 Dated: 04-07-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (inch) | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.381 | 3/8 | 0.377 | 0.11 | 0.112 | 4100 | 5300 | 82200 | 80790 | 106200 | 104500 | 1.30 | 16.3 | |
| 2 | 0.380 | 3/8 | 0.377 | 0.11 | 0.112 | 3900 | 5100 | 78200 | 76980 | 102200 | 100700 | 0.80 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
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To,

Resident Engineer
NESPAK
PRSWSSP, Taunsa
Punjab Rural Municipal Services Company
Punjab Rural Sustainable Water Supply and Sanitation Project (PRSWSSP). Tehsil Taunsa (Package-II & V).

Reference # CED/TFL **5496** (Dr. M Rizwan Riaz) Dated: 09-08-2024
Reference of the request letter # NESPAK/PRSWSSP/TAUNSA/ME/307 Dated: 23-07-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.373 | 3 | 0.374 | 0.11 | 0.110 | 3300 | 4900 | 66200 | 66360 | 98200 | 98600 | 1.30 | 16.3 | Sheikhoo Steel |
| 2 | 0.376 | 3 | 0.375 | 0.11 | 0.111 | 3400 | 4900 | 68200 | 67790 | 98200 | 97700 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

**Note: only two samples for tensile and one sample for bend test**

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

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**UET Lahore, Pakistan.**

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

To,

M/s Prime Steel Re-Rolling Mills
Sheikhupura

Reference # CED/TFL **5501** (Dr. M Rizwan Riaz) Dated: 12-08-2024
Reference of the request letter # Nil Dated: 12-08-2024

## Tension Test Report (Page -1/1)

Date of Test 12-08-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size | | Area ($in^2$) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.385 | 3 | 0.380 | 0.11 | 0.113 | 3600 | 5300 | 72200 | 70110 | 106200 | 103300 | 1.00 | 12.5 | Prime Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
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