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


,
Engineer's Representative/RE
NESPAK
Construction of New Academic Blockat GIK Institute, TOPI, KPK

Reference # CED/TFL **33640** (Dr. Ali Ahmed) Dated: 29-07-2019
Reference of the request letter # 3524/31/KMB/0725/330 Dated: 25-07-2019

## Tension Test Report (Page – 1/2)

Date of Test 01-08-2019
Gauge length 2 inches
Description Aluminium Section Strip Tensile Test

| Sr. No. | Designation | Size of Strip | X Section Area | Yield load | Breaking Load | Yield Stress | Ultimate Stress | Elongation | % Elongation | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| | ---- | (mm) | ($mm^2$) | (kN) | (kN) | (MPa) | (MPa) | (in) | | |
| 1 | AA | 26.50x1.80 | 47.70 | 10.02 | 12.00 | 210.06 | 251.57 | 0.25 | 12.50 | |
| 2 | | 26.20x1.80 | 47.16 | 10.85 | 12.00 | 230.07 | 254.45 | 0.20 | 10.00 | |
| 3 | BB | 26.40x1.70 | 44.88 | 10.41 | 12.00 | 231.95 | 267.38 | 0.20 | 10.00 | |
| 4 | | 26.30x1.70 | 44.71 | 10.86 | 12.00 | 242.90 | 268.40 | 0.15 | 7.50 | |
| 5 | CC | 26.40x1.85 | 48.84 | 7.13 | 8.5 | 145.99 | 174.04 | 0.25 | 12.50 | |
| 6 | | 26.40x1.85 | 48.84 | 7.67 | 8.5 | 157.04 | 174.04 | 0.25 | 12.50 | |
| 7 | DD | 26.40x1.90 | 50.16 | 10.63 | 11.5 | 211.92 | 229.27 | 0.15 | 7.50 | |
| 8 | | 26.40x1.90 | 50.16 | 10.23 | 11.5 | 203.95 | 229.27 | 0.20 | 10.00 | |
| **Only Eight Samples for Tensile Test** | | | | | | | | | | |
| | | | | | | | | | | |
| **Bend Test** | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

**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,
Engineer's Representative/RE
NESPAK
Construction of New Academic Blockat GIK Institute, TOPI, KPK

Reference # CED/TFL **33640** (Dr. Ali Ahmed) Dated: 29-07-2019
Reference of the request letter # 3524/31/KMB/0725/330 Dated: 25-07-2019

## Thickness Test Report (Page – 2/2)

Date of Test 01-08-2019
Gauge length -------
Description Aluminium Section Thickness Test

| Sr. No. | Designation | Thickness | Remark |
|---|---|---|---|
| | ------- | (mm) | |
| **1** | **AA** | **1.80** | |
| **2** | **BB** | **1.70** | |
| **3** | **CC** | **1.85** | |
| **4** | **DD** | **1.90** | |
| **-** | **-** | **-** | |
| **-** | **-** | **-** | |
| **-** | **-** | **-** | |
| **Only Four Sample for Test** | | | |
| | | | |

**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,
Sub-Divisional Officer
GC University
Faisalabad
Construction of External Development (Sewerage Sump External Sewerage & Power Cable etc) of Academic Block # 6 at New Campus Government College University Faisalabad

Reference # CED/TFL **33654** (Dr. Ali Ahmed) Dated: 30-07-2019
Reference of the request letter # GCUF/EC/1133 Dated: 22-07-2019

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

Date of Test 01-08-2019
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 | 0.386 | 3/8 | 0.380 | 0.11 | 0.113 | 3300 | 4500 | 66200 | 64170 | 90200 | 87600 | 1.30 | 16.3 | |
| 2 | 0.380 | 3/8 | 0.377 | 0.11 | 0.112 | 3100 | 4300 | 62200 | 61190 | 86200 | 84900 | 1.40 | 17.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180º 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,
Resident Engineer
NESPAK Pkg-01
Dualization & Improvement of Indus Highway Road Project Package - 01 (Sarai Gambila – Karak)
(Mujahid Stee)

Reference # CED/TFL **33655** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 36267/103/TH/01/61 Dated: 30-07-2019

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

Date of Test 01-08-2019
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 | 5.109 | 11 | 1.383 | 1.56 | 1.502 | 44000 | 66600 | 62200 | 64580 | 94100 | 97800 | 1.40 | 17.5 | |
| 2 | 5.155 | 11 | 1.389 | 1.56 | 1.515 | 31400 | 47200 | 44400 | 45680 | 66700 | 68700 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #11 Bar Bend Test Through 180º is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

Witness test Report

**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,
SQN LDR
GE (AIR) Rafiqui
(Rehabilitation of Stores at PAF Base Rafiqui – CA No. CMES-SGD-133/2019)(M/s Al-Aadiat Fiber Glass)

Reference # CED/TFL **33658** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 6279/14/E-6 Dated: 10-06-2019

## Tension Test Report (Page -1/5)

Date of Test 01-08-2019
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 | Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.385 | 3/8 | 0.379 | 0.11 | 0.113 | 3200 | 4700 | 64200 | 62390 | 94200 | 91700 | 1.10 | 13.8 | 40 |
| 2 | 0.374 | 3/8 | 0.374 | 0.11 | 0.110 | 4100 | 5200 | 82200 | 82180 | 104200 | 104300 | 1.00 | 12.5 | 60 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
SQN LDR
GE (AIR) Rafiqui
(Replacement of Roof Slab Markazi Masjid at PAF Base Rafiqui – CA No. CEAF-CZ-54/2019)(M/s Naji Traders & Builders)

Reference # CED/TFL **33658** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 6223/38/E-6 Dated: 10-06-2019

## Tension Test Report



Date of Test 01-08-2019
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 | 0.375 | 3/8 | 0.375 | 0.11 | 0.110 | 3300 | 5000 | 66200 | 65960 | 100200 | 100000 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
SQN LDR
GE (AIR) Rafiqui
(Rehabilitation/Uplifting of Officers Mess at PAF Base Rafiqui – CA No. CEAF-CZ-53/2019)
(M/s Kasco Builders)

Reference # CED/TFL **33658** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 6177/18/E-6 Dated: 10-06-2019

## Tension Test Report (Page -3/5)

Date of Test 01-08-2019
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 | 0.369 | 3/8 | 0.372 | 0.11 | 0.109 | 2800 | 4200 | 56200 | 56840 | 84200 | 85300 | 1.50 | 18.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
SQN LDR
GE (AIR) Rafiqui
(Rehabilitation of Airmen Quarters Block No. 93 in Domestic Camp at PAF Base Rafiqui – CA No. CEAF-CZ-80/2019)(M/s Ghulam Farid Kuplana Construction Co)

Reference # CED/TFL **33658** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 6261/22/E-6 Dated: 10-06-2019

## Tension Test Report (Page -4/5)

Date of Test 01-08-2019
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 | 0.383 | 3/8 | 0.378 | 0.11 | 0.113 | 3000 | 4300 | 60200 | 58770 | 86200 | 84300 | 1.50 | 18.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
SQN LDR
GE (AIR) Rafiqui
(Provision of External Services for Diagnostic Centre/MRI Building in PAF Hospital at PAF Base Rafiqui – CA No. CEAF-CZ-86/2019)(M/s Haroon Habib Construction Co)

Reference # CED/TFL **33658** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 6037/21/E-6 Dated: 02-06-2019

## Tension Test Report (Page -5/5)

Date of Test 01-08-2019
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 | Grade |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | | |
| 1 | 0.373 | 3/8 | 0.374 | 0.11 | 0.110 | 4200 | 5000 | 84200 | 84390 | 100200 | 100500 | 1.10 | 13.8 | 40 |
| 2 | 0.369 | 3/8 | 0.372 | 0.11 | 0.108 | 4200 | 4900 | 84200 | 85400 | 98200 | 99700 | 1.20 | 15.0 | 60 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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**

o,
Assistant Engineer-III
Pakistan Railways, Lahore
Improvement to the existing facilities at washing line Lahore

Reference # CED/TFL **33659** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # Nil Dated: 31-07-2019

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

Date of Test 01-08-2019
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 | 0.376 | 3 | 0.375 | 0.11 | 0.111 | 3900 | 5000 | 78200 | 77770 | 100200 | 99800 | 0.80 | 10.0 | |
| 2 | 0.374 | 3 | 0.374 | 0.11 | 0.110 | 3600 | 4900 | 72200 | 72230 | 98200 | 98400 | 0.90 | 11.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º 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,
Sub Divisional Officer
Highway Sub Division
Mianwali
(Rural Accessability Programme (Naya Pakistan Manzilyen Asan) in District Mianwali)

Reference # CED/TFL **33663** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 344/SDO/Mwi Dated: 27-07-2019

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

Date of Test 01-08-2019
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 | 0.370 | 3 | 0.372 | 0.11 | 0.109 | 2700 | 4000 | 54100 | 54700 | 80200 | 81100 | 1.50 | 18.8 | |
| 2 | 0.374 | 3 | 0.374 | 0.11 | 0.110 | 2600 | 4000 | 52100 | 52190 | 80200 | 80300 | 1.50 | 18.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and one sample for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180º 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,
Sub Divisional Officer
Highway Sub Division
Hafizabad
(Rehablitation/Wideining/Construction of (Rural) Roads Under Accessability Programme (RAP) 2018-19 in District Hafizabad)
Reference # CED/TFL **33665** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # 157/H Dated: 26-07-2019

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

Date of Test 01-08-2019
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 | 0.374 | 3/8 | 0.374 | 0.11 | 0.110 | 3600 | 4700 | 72200 | 72120 | 94200 | 94200 | 1.30 | 16.3 | |
| 2 | 0.372 | 3/8 | 0.373 | 0.11 | 0.109 | 3500 | 4500 | 70200 | 70490 | 90200 | 90700 | 0.90 | 11.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
Sub Divisional Officer
Buildings Sub Division C.M Sectt ;
Lahore
(Provision of Security Arrangement in Chief Minister's Office at 7-Club Road and 90-SQA, Lahore)
Reference # CED/TFL **33666** (Dr. Ali Ahmed) Dated: 31-07-2019
Reference of the request letter # SDO/CMS/871 Dated: 27-07-2019

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

Date of Test 01-08-2019
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 | 0.386 | 3/8 | 0.380 | 0.11 | 0.113 | -------- | 11400 | -------- | -------- | 228500 | 221600 | 0.30 | 3.8 | |
| 2 | 0.389 | 3/8 | 0.382 | 0.11 | 0.114 | -------- | 12800 | -------- | -------- | 256500 | 246800 | 0.30 | 3.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only two samples for tensile and two samples for bend test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180º is Failed | | | | | | | | | | | | | | |
| 3/8" Dia Bar Bend Test Through 180º is Failed | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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,
Production Manager
Afco Steel Industries
Lahore

Reference # CED/TFL **33667** (Dr. Ali Ahmed) Dated: 01-08-2019
Reference of the request letter # Nil Dated: 01-08-2019

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

Date of Test 01-08-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

| Sr. No. | Weight | Diameter/ Size (mm) | | 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 | 0.403 | 10 | 9.86 | 0.12 | 0.118 | 4700 | 6300 | 86347 | 87490 | 115742 | 117300 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| **Note: only one sample for tensile test** | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

**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