



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
ACE Limited, Sambrial Sialkot
Establishment of University of Applied Engineering and Emerging Technologies
(UAEET) Sambrial, Sialkot

Reference # CED/TFL **2311** (Dr. M Kashif)
Reference of the request letter # ER/UAEET/ACE/2022/90

Dated: 18-11-2022
Dated: 17-11-2022

Tension Test Report (Page – 1/2)

Date of Test 25-11-2022
Gauge length -----
Description Chain Link Fence Wire Tensile Test

| Sr. No. | Measure Diameter of Single Wire | Breaking Load | | Remarks |
|----------------------------------|---------------------------------------|---------------|------|---------|
| | (mm) | (kg) | (kN) | |
| 1 | 2.90 | 400 | 3.92 | |
| 2 | 2.90 | 320 | 3.14 | |
| - | - | - | - | |
| - | - | - | - | |
| - | - | - | - | |
| - | - | - | - | |
| - | - | - | - | |
| Only Two Samples 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,

Resident Engineer
ACE Limited, Sambrial Sialkot
Establishment of University of Applied Engineering and Emerging Technologies
(UAEET) Sambrial, Sialkot

Reference # CED/TFL **2311** (Dr. M Kashif)
Reference of the request letter # ER/UAEET/ACE/2022/90

Dated: 18-11-2022
Dated: 17-11-2022

Tension Test Report (Page – 2/2)

Date of Test 25-11-2022
Gauge length 2 inches
Description GI Pipe Strip Tensile and Bend Test

| Sr. No. | Designation | | Size of Strip | X Section Area | Yield load | Breaking Load | Yield Stress | Ultimate Stress | Elongation | % Elongation | Remarks |
|--|-------------|------|--------------------|----------------|------------|---------------|--------------|-----------------|------------|--------------|---------|
| | (inch) | (mm) | (mm ²) | (kg) | (kg) | (MPa) | (MPa) | (in) | | | |
| 1 | GI pipe | 2 | 27.30x1.40 | 38.22 | 1200 | 2040 | 308 | 524 | 0.50 | 25.00 | |
| 2 | GI pipe | 3.5 | 27.20x1.50 | 40.80 | 1040 | 1520 | 250 | 365 | 0.50 | 25.00 | |
| - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | |
| Only Two Samples for Tensile and Two Samples for Bend Test | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | |
| Strip taken from GI Pipe 2" Bend Test Through 180° is Satisfactory | | | | | | | | | | | |
| Strip taken from GI Pipe 3.5" 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,

Assistant Executive Engineer-II
 CCD, PAK.PWD. Gujranwala
 Renovation / Refurbishment / Up-Gradation of Existing Boundary Wall of Land of
 NHMP (N-5) Beat No. 09 Mouza Aujla Kalan, District Gujranwala.

Reference # CED/TFL **2331** (Dr. M Kashif)

Dated: 22-11-2022

Reference of the request letter # AEE-II/CCD/GA/Work/GA/Work/NHMP/B-9/Lab/79

Dated: 18-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022

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 | 0.396 | 3 | 0.385 | 0.11 | 0.116 | 3100 | 4600 | 62200 | 58720 | 92200 | 87200 | 1.60 | 20.0 | |
| 2 | 0.389 | 3 | 0.382 | 0.11 | 0.114 | 3000 | 4600 | 60200 | 57790 | 92200 | 88700 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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,

Sub Divisional Officer
 Building Sub Division
 Hafizabad

(Upgradation of D.H.Q. Hospital Hafizabad (Group No. 1) Construction of Main Hospital Block No.1 I/C Covered Passage between Block No. 1 & Block No. 2)

Reference # CED/TFL **2334** (Dr. M Kashif)

Dated: 23-11-2022

Reference of the request letter # 1865/HZ

Dated: 22-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022

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 | 3400 | 4800 | 68200 | 67970 | 96200 | 96000 | 1.50 | 18.8 | |
| 2 | 0.369 | 3/8 | 0.372 | 0.11 | 0.109 | 3300 | 4700 | 66200 | 67000 | 94200 | 95500 | 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 180° is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratories
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,
 Abdul Qadir Ali
 Lahore

Reference # CED/TFL **2335** (Dr. M Kashif)
 Reference of the request letter # Nil

Dated: 23-11-2022
 Dated: 23-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.388 | 3 | 0.381 | 0.11 | 0.114 | 3500 | 5100 | 70200 | 67650 | 102200 | 98600 | 1.10 | 13.8 | SJ Steel |
| 2 | 0.387 | 3 | 0.380 | 0.11 | 0.114 | 3600 | 5200 | 72200 | 69800 | 104200 | 100900 | 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,
 Project Engineer
 Defence Housing Authority
 Gujranwala
 “Construction of Office Complex DHA Gujranwala”

Reference # CED/TFL **2336** (Dr. M Kashif)
 Reference of the request letter # 111/3/PE JV Bldgs/Gen/07

Dated: 23-11-2022
 Dated: 22-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.340 | 3 | 0.357 | 0.11 | 0.100 | 4000 | 4700 | 80200 | 88260 | 94200 | 103800 | 0.80 | 10.0 | Afco Steel |
| 2 | 0.355 | 3 | 0.364 | 0.11 | 0.104 | 4400 | 5100 | 88200 | 93020 | 102200 | 107900 | 0.80 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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,
 Procurement Manager
 Premier Developers & Builders
 Lyallpur Galleria-II near Four Season Colony Samundri Road, Faisalabad

Reference # CED/TFL **2338** (Dr. M Kashif)
 Reference of the request letter # LG-II/032

Dated: 23-11-2022
 Dated: 22-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.377 | 3 | 0.376 | 0.11 | 0.111 | 3600 | 4900 | 72200 | 71620 | 98200 | 97500 | 0.90 | 11.3 | FF Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one 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.

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
 Building Sub Division
 Chakwal
 (Construction of Multipurpose Conference Hall Auditorium and Restaurant at Kallar
 Kahar District Chakwal)

Reference # CED/TFL **2341** (Dr. M Kashif)
 Reference of the request letter # 1430/CKC

Dated: 23-11-2022
 Dated: 14-10-2022

Tension Test Report (Page -1/2)

Date of Test 25-11-2022
 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 | 0.377 | 3/8 | 0.376 | 0.11 | 0.111 | 4400 | 5200 | 88200 | 87500 | 104200 | 103500 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one 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.

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
 Building Sub Division
 Chakwal
 (Establishment of University of Chakwal ADP No. 66 for The Year 2020-21)
 (Construction of Female Student Hostel Ground / First Floor with Additional Items &
 Architectural Features Group No. 3

Reference # CED/TFL **2341** (Dr. M Kashif)
 Reference of the request letter # 559/CKC

Dated: 23-11-2022

Dated: 15-04-2022

Tension Test Report (Page -2/2)

Date of Test 25-11-2022

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 | 0.366 | 3/8 | 0.370 | 0.11 | 0.108 | 2900 | 4200 | 58200 | 59400 | 84200 | 86100 | 1.40 | 17.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one 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.

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,
 Khalid M. Noon
 211-C Phase 8 DHA, Lahore

Reference # CED/TFL **2342** (Dr. M Kashif)
 Reference of the request letter # 211C/DHA 01

Dated: 24-11-2022
 Dated: 23-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.373 | 0.11 | 0.110 | 3700 | 4600 | 74200 | 74460 | 92200 | 92600 | 1.10 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only one sample for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratories
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,

Sr. Manager Coordination
 Dream Builders
 Construction of Apartment Building at 32-P, Model Town Ext, Lahore

Reference # CED/TFL **2344** (Dr. M. Kashif)

Dated: 24-11-2022

Reference of the request letter # DB/CONST-32P/22/1124

Dated: 24-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022

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 | 0.360 | 3 | 0.367 | 0.11 | 0.106 | 3400 | 5100 | 68200 | 70920 | 102200 | 106400 | 1.20 | 15.0 | |
| 2 | 0.359 | 3 | 0.367 | 0.11 | 0.106 | 3300 | 5100 | 66200 | 68930 | 102200 | 106600 | 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 Laboratories
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
ZEERUK – LOYA – MIHA JV
Construction of Korang Bridge & About 1.5 km Approach Road on Islamabad Highway

Reference # CED/TFL **2345** (Dr. M Kashif)
Reference of the request letter # ZI/RE.FWO-RB/22/196

Dated: 25-11-2022
Dated: 24-11-2022

Tension Test Report (Page -1/5)

Date of Test 25-11-2022
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

| Sr. No. | Nominal Diameter | Nominal Weight | Measured weight | Yield strength clause (6.3) | | Breaking strength clause (6.2) | | Young's Modulus of Elasticity "E" | % Elongation | Remarks / Coil No. |
|---------|------------------|----------------|-----------------|-----------------------------|--------|--------------------------------|--------|-----------------------------------|--------------|--------------------|
| | (mm) | (kg/km) | (kg/km) | (kg) | (kN) | (kg) | (kN) | GPa | | |
| 1 | 12.70 (1/2") | 775.0 | 786.0 | 17300 | 169.71 | 19800 | 194.24 | 199 | >3.50 | 24229 |
| 2 | 12.70 (1/2") | 775.0 | 785.0 | 18100 | 177.56 | 19400 | 190.31 | 198 | >3.50 | 24245 |
| 3 | 12.70 (1/2") | 775.0 | 785.0 | 18400 | 180.50 | 19800 | 194.24 | 199 | >3.50 | 24253 |
| 4 | 12.70 (1/2") | 775.0 | 788.0 | 18400 | 180.50 | 20000 | 196.20 | 199 | >3.50 | 24268 |
| - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | |

Only four samples for Test

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratories
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
ZEERUK – LOYA – MIHA JV
Construction of Korang Bridge & About 1.5 km Approach Road on Islamabad Highway

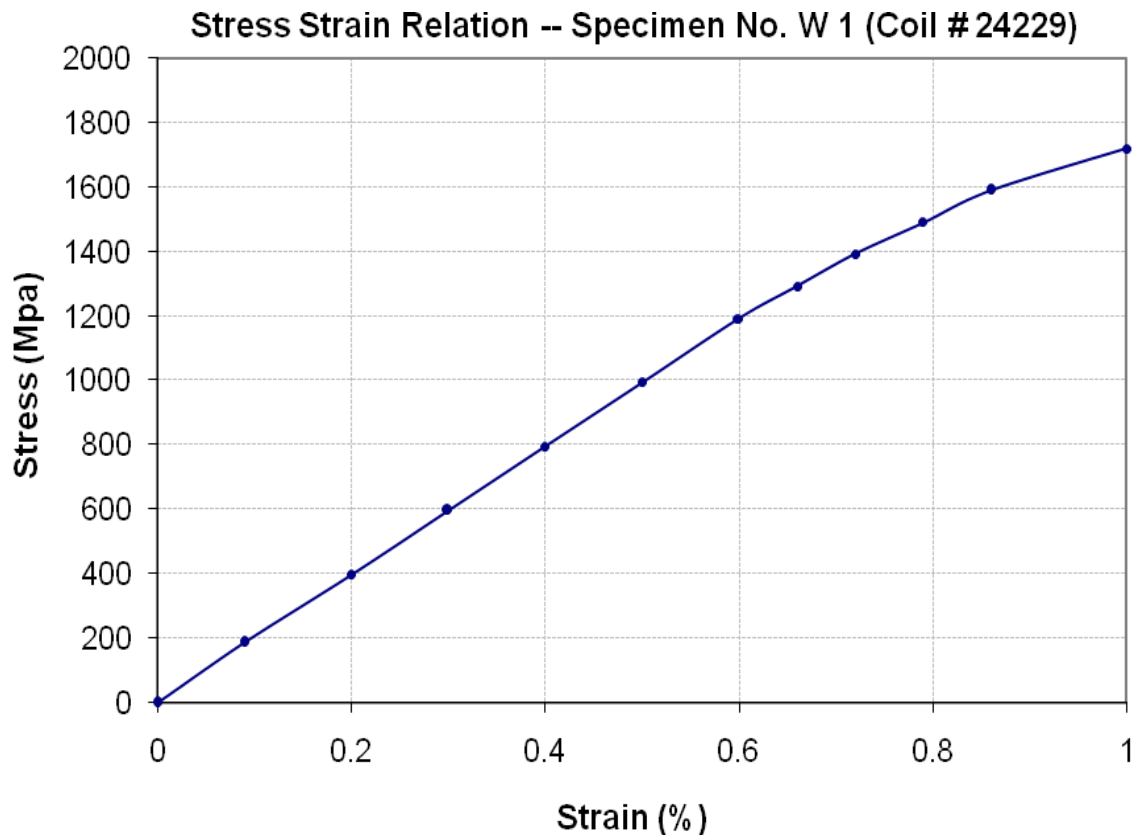
Reference # CED/TFL **2345** (Dr. M Kashif)

Dated: 25-11-2022

Reference of the request letter # ZI/RE.FWO-RB/22/196

Dated: 24-11-2022

Graph (Page – 2/5)



I/C Testing Laboratories
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
ZEERUK – LOYA – MIHA JV
Construction of Korang Bridge & About 1.5 km Approach Road on Islamabad Highway

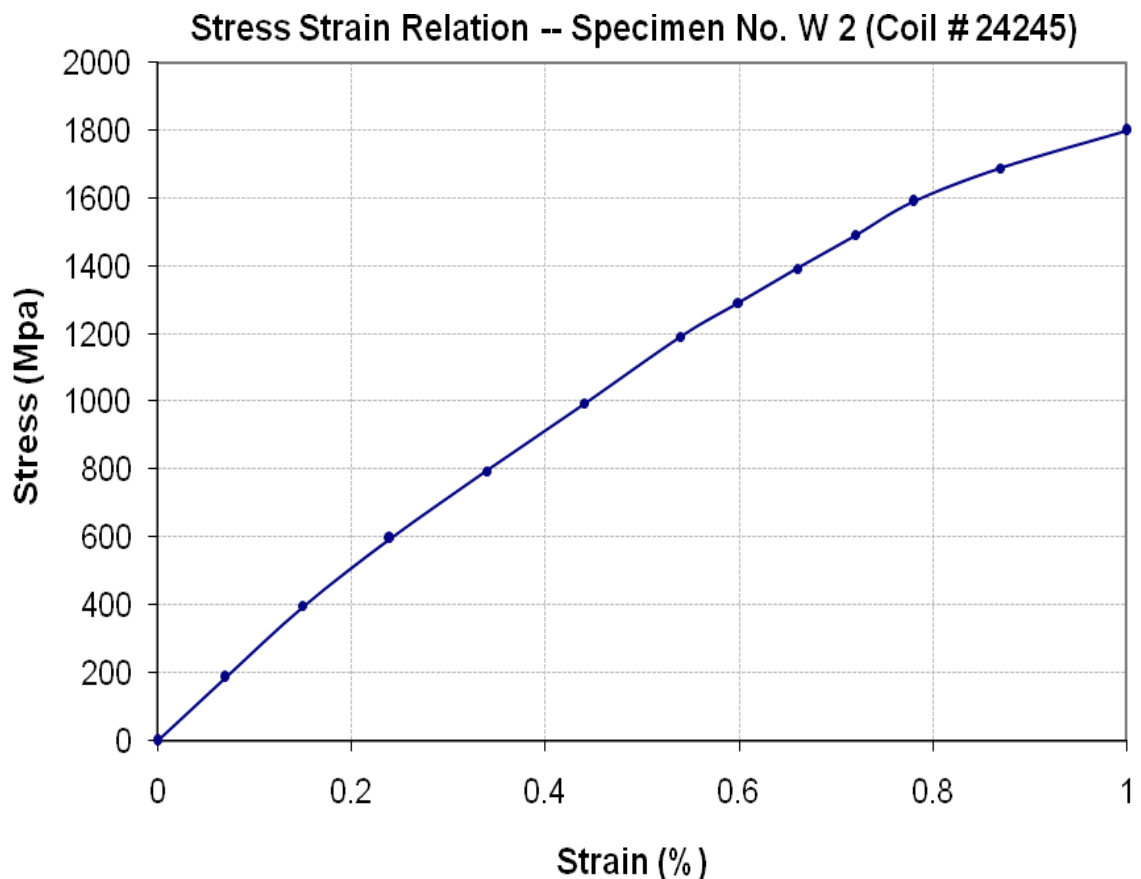
Reference # CED/TFL **2345** (Dr. M Kashif)

Dated: 25-11-2022

Reference of the request letter # ZI/RE.FWO-RB/22/196

Dated: 24-11-2022

Graph (Page – 3/5)



I/C Testing Laboratories
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
ZEERUK – LOYA – MIHA JV
Construction of Korang Bridge & About 1.5 km Approach Road on Islamabad Highway

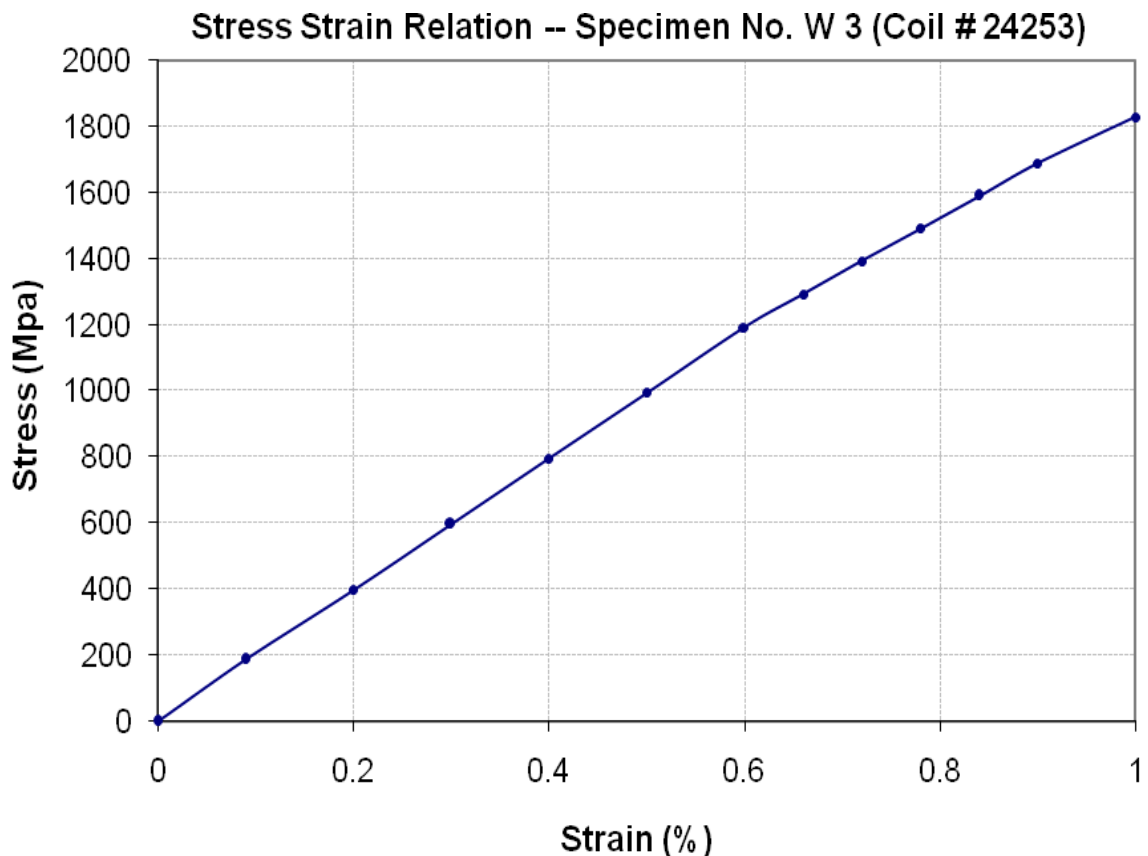
Reference # CED/TFL 2345 (Dr. M Kashif)

Dated: 25-11-2022

Reference of the request letter # ZI/RE.FWO-RB/22/196

Dated: 24-11-2022

Graph (Page – 4/5)



I/C Testing Laboratories
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
ZEERUK – LOYA – MIHA JV
Construction of Korang Bridge & About 1.5 km Approach Road on Islamabad Highway

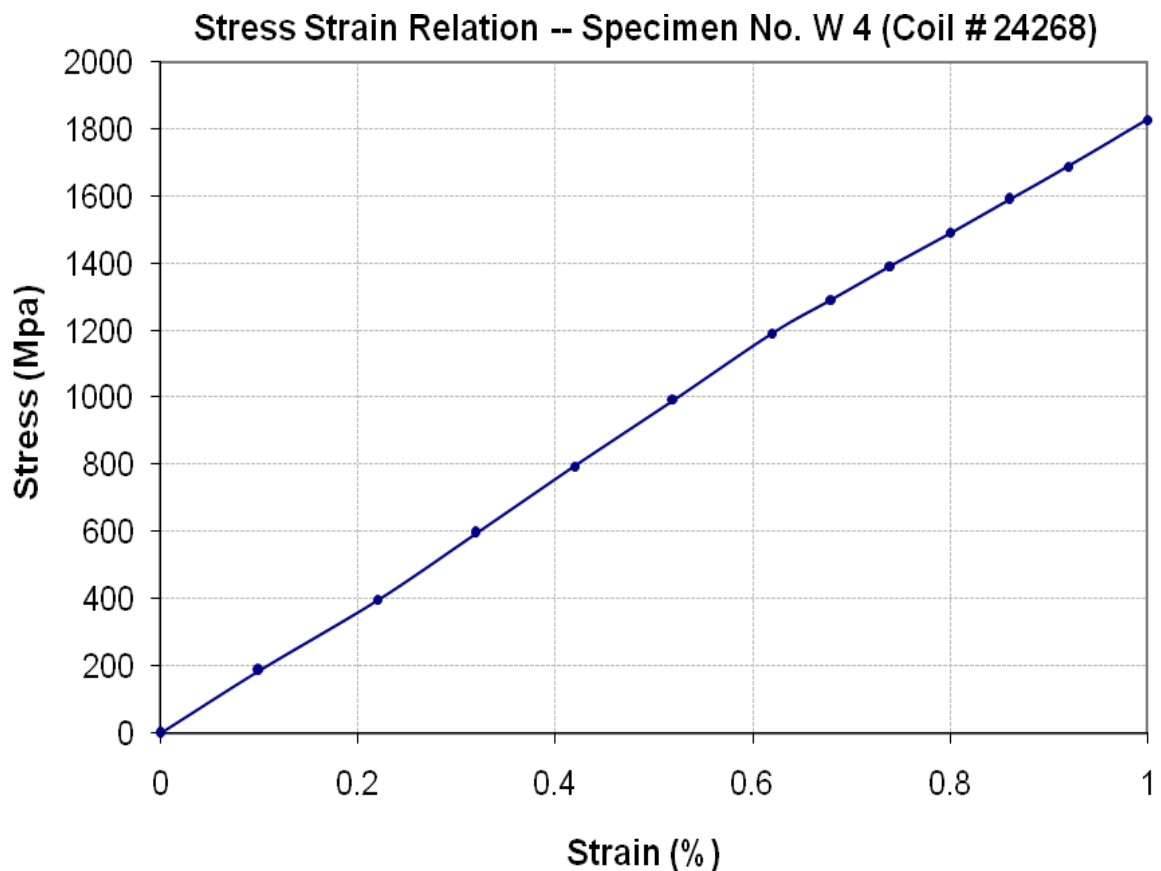
Reference # CED/TFL 2345 (Dr. M Kashif)

Dated: 25-11-2022

Reference of the request letter # ZI/RE.FWO-RB/22/196

Dated: 24-11-2022

Graph (Page – 5/5)



I/C Testing Laboratories
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,

Construction Manager
 Zameen Quadrangle
 Construction of Zameen Quadrangle at Plot No. 49 Gulberg-V, Zafar Ali Road, Lahore

Reference # CED/TFL **2346** (Dr. M Kashif)
 Reference of the request letter # ZD/ZQ/GSW/038

Dated: 24-11-2022
 Dated: 24-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.371 | 3 | 0.373 | 0.11 | 0.109 | 3300 | 4900 | 66200 | 66660 | 98200 | 99000 | 1.30 | 16.3 | Ittefaq Steel |
| 2 | 0.370 | 3 | 0.372 | 0.11 | 0.109 | 3400 | 4900 | 68200 | 68970 | 98200 | 99400 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 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 Laboratories
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,
 Project Manager
 Union Developers
 Construction of Union Luxury Apartments, Etihad Town, Lahore

Reference # CED/TFL **2347** (Dr. M Kashif)
 Reference of the request letter # UA/SO/2022/033

Dated: 24-11-2022
 Dated: 23-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.357 | 3 | 0.366 | 0.11 | 0.105 | 4400 | 5200 | 88200 | 92320 | 104200 | 109100 | 0.70 | 8.8 | Afco Steel |
| 2 | 0.358 | 3 | 0.366 | 0.11 | 0.105 | 4700 | 5400 | 94200 | 98470 | 108200 | 113200 | 0.70 | 8.8 | |
| 3 | 0.367 | 3 | 0.370 | 0.11 | 0.108 | 4700 | 5400 | 94200 | 96110 | 108200 | 110500 | 0.70 | 8.8 | |
| 4 | 0.375 | 3 | 0.374 | 0.11 | 0.110 | 5000 | 5800 | 100200 | 100100 | 116300 | 116200 | 0.60 | 7.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only four samples for tensile and two samples for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
| #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,
 Chief Technical Officer
 Sheekhoo Sugar Mills (Steel Division)
 Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL **2349** (Dr. M Kashif)
 Reference of the request letter #Nil

Dated: 25-11-2022
 Dated: 24-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
 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 | 0.418 | 10 | 10.05 | 0.12 | 0.123 | 3740 | 5400 | 68710 | 67110 | 99207 | 96900 | 1.40 | 17.5 | 482N |
| 2 | 0.418 | 10 | 10.04 | 0.12 | 0.123 | 3820 | 5350 | 70180 | 68590 | 98288 | 96100 | 1.00 | 12.5 | 483N |
| 3 | 0.409 | 10 | 9.94 | 0.12 | 0.120 | 3670 | 5100 | 67424 | 67210 | 93696 | 93400 | 1.40 | 17.5 | 493N |
| 4 | 0.415 | 10 | 10.01 | 0.12 | 0.122 | 3870 | 5320 | 71098 | 69940 | 97737 | 96200 | 1.50 | 18.8 | 495N |
| 5 | 0.415 | 10 | 10.01 | 0.12 | 0.122 | 3930 | 5320 | 72201 | 71060 | 97737 | 96200 | 1.50 | 18.8 | 496N |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only five 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,
Project Manager
Alkhidmat Foundation Pakistan
Aghash Gilgit Hostel

Reference # CED/TFL **2350** (Dr. Asad Ali)
Reference of the request letter # AKFP-D-781

Dated: 25-11-2022
Dated: 19-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022
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 | 0.371 | 3/8 | 0.373 | 0.11 | 0.109 | 3820 | 5050 | 76600 | 77140 | 101200 | 102000 | 1.10 | 13.8 | |
| 2 | 0.367 | 3/8 | 0.371 | 0.11 | 0.108 | 3840 | 5070 | 77000 | 78500 | 101600 | 103700 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples 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.

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
 ACE Limited, Sambrial Sialkot
 Establishment of University of Applied Engineering and Emerging Technologies
 (UAEET) Sambrial, Sialkot

Reference # CED/TFL **2351** (Dr. Asad Ali)

Dated: 25-11-2022

Reference of the request letter # ER/UAEET/ACE/2022/108

Dated: 25-11-2022

Tension Test Report (Page -1/1)

Date of Test 25-11-2022

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 | 0.388 | 3 | 0.381 | 0.11 | 0.114 | 3770 | 5200 | 75600 | 72910 | 104200 | 100600 | 1.10 | 13.8 | AF Steel |
| 2 | 0.390 | 3 | 0.382 | 0.11 | 0.115 | 4100 | 5420 | 82200 | 78790 | 108600 | 104200 | 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