

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

To,
Sub Divisional Officer
Gujranwala Drainage Sub Division
Gujranwala
(Floral Protection of Kamala and A

(Flood Protection of Kamoke and Adjoining Areas (Package A))

Reference # CED/TFL <u>36408 (Dr. Safeer Abbass)</u>

Reference of the request letter # 90/3-W

Dated: 03-05-2021

Dated: 27-03-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | Aı (iı | rea 1 ²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|----------------|---------------|-----------|-------------------------|------------|------------------|---------|---------------|----------|-----------------|------------|--------------|-----------|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | H % | R |
| 1 | 0.367 | 3 | 0.370 | 0.11 | 0.108 | 3650 | 5610 | 73200 | 74640 | 112500 | 114800 | 1.00 | 12.5 | |
| 2 | 0.371 | 3 | 0.373 | 0.11 | 0.109 | 3730 | 5710 | 74800 | 75360 | 114500 | 115400 | 0.80 | 10.0 | A.F Steel |
| 3 | 4.194 | 10 | 1.253 | 1.27 | 1.233 | 32400 | 52800 | 56300 | 57930 | 91700 | 94400 | 1.70 | 21.3 | A.F |
| 4 | 4.234 | 10 | 1.259 | 1.27 | 1.245 | 32600 | 53000 | 56600 | 57740 | 92000 | 93900 | 1.60 | 20.0 | |
| - | ı | - | - | ı | - | 1 | - | - | - | - | - | - | 1 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | I | No | te: only | four s | amples fo | or tensile | and two | samples | for bend | test | ı | | |
| | | | | | | | Bend T | Cost | | | | | | |
| | | | | | | | Della I | CSI | | | | | | |

#3 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, General Manager AYQ Developers Pvt Ltd. Union Complex

Reference # CED/TFL <u>36418 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 04-05-2021

Dated: 29-04-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea 1 ²) | Yield load | Breaking Load | | Stress si) | Ultimat (p | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|-----------|-------------------------|------------|------------------|---------|---------------|---------------|-----------------|------------|--------------|-----------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| 1 | 0.405 | 3 | 0.389 | 0.11 | 0.119 | 2680 | 3420 | 53700 | 49590 | 68600 | 63300 | 1.70 | 21.3 | el |
| 2 | 0.390 | 3 | 0.382 | 0.11 | | | 3750 | 59800 | 57340 | 75200 | 72200 | 1.70 | 21.3 | H-I Steel |
| 3 | 0.373 | 3 | 0.374 | 0.11 | 0.110 | 3290 | 4100 | 66000 | 66150 | 82200 | 82500 | 1.40 | 17.5 | H |
| - | ı | 1 | ı | ı | - | - | - | - | - | 1 | 1 | - | 1 | |
| , | - | - | 1 | 1 | - | - | - | - | - | • | - | - | 1 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | No | ote: onl | ly two s | amples f | or tensile | and one | sample f | or bend t | est | T | | |
| 112 | D D | 1.75 | D1 1 | 1000: | G vi c | | Bend T | est est | | | | | | |
| #3 | Bar Ben | d Test ' | Through | 1 180° is | s Satısfa | ctory | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Sub Divisional Officer

R/O Drainage Sub Division

Sheikhupura

(Rehabilitation of Old Deg Nullah from Deg Diversion Channel to QB Link Canal RD 0+000-

103+000)

Reference # CED/TFL <u>36419 (Dr. Safeer Abbass)</u>

Reference of the request letter # 258/2-W

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Si | neter/ ize ch) | | rea 1 ²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|---------|----------------------|----------|-------------------------|------------|------------------|---------|---------------|----------|-----------------|------------|--------------|---------|
| | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Ŗ |
| 1 | 0.372 | 3/8 | 0.373 | 0.11 | 0.109 | 3790 | 5770 | 76000 | 76400 | 115700 | 116400 | 0.90 | 11.3 | |
| 2 | 0.368 | 3/8 | 0.371 | 0.11 | 0.108 | 3750 | 5700 | 75200 | 76500 | 114300 | 116300 | 1.00 | 12.5 | Steel |
| 3 | 4.238 | 10/8 | 1.259 | 1.27 | 1.246 | 35600 | 53800 | 61800 | 62990 | 93400 | 95200 | 1.50 | 18.8 | A.F. |
| 4 | 4.233 | 10/8 | 1.259 | 1.27 | 1.244 | 35800 | 53800 | 62200 | 63420 | 93400 | 95300 | 1.50 | 18.8 | |
| - | - | - | - | ı | - | 1 | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | I | I | No | te: only | four s | amples fo | or tensile | and two | samples | for bend | test | I | | |
| | | | | | | | D 15 | | | | | | | |
| | | | | | | | Bend T | est | | | | | | |

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

10/8" Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 04-05-2021

Dated: 27-04-2021

- 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



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

To, Resident Engineer Bahria Town Private Limited Shahid Qureshi House, Bahria Town Multan Road, Lahore

Reference # CED/TFL <u>36420 (Dr. Safeer Abbass)</u>
Reference of the request letter # QA/QC-Steel-2337

Dated: 04-05-2021

Dated: 03-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---|----------|------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|-------------------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re |
| 1 | 0.384 | 3 | 0.379 | 0.11 | 0.113 | 4030 | 5180 | 80800 | 78660 | 103800 | 101200 | 0.75 | 9.4 | al ne |
| 2 | 0.381 | 3 | 0.378 | 0.11 | 0.112 | 4000 | 5000 | 80200 | 78760 | 100200 | 98500 | 0.80 | 10.0 | Mughal Supreme |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | Su |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | ı | Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | |
| 42 | Dan Dan | A Task 5 | Γ1 | 1000: | - Catiafa | | Bend T | est | | | | | | |
| #3 | Bar Ben | d lest | I hrough | 1 180° 1 | s Satista | ictory | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, M/S Froebel's International School DHA Lahore

Reference # CED/TFL <u>36421 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 04-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|------------------|------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| 1 | 0.372 | 3 | 0.373 | 0.11 | 0.109 | 3390 | 4610 | 68000 | 68300 | 92400 | 92900 | 1.00 | 12.5 | |
| 2 | 0.378 | 3 | 0.376 | 0.11 | 0.111 | 3390 | 4650 | 68000 | 67320 | 93200 | 92400 | 0.80 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | No | ote: only two sa | | amples f | or tensile | and one | sample f | or bend | test | 1 | T | |
| | | | | | | | Dan 1 T | \t | | | | | | |
| 112 | D D | 1.00 | T1 1 | 1000 ' | G 4: C | | Bend T | est | | | | | | |

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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

SIMPLE RIVER AND THE REPORT OF THE REPORT OF

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 Vision Engineering (Pvt) Ltd Lahore

Reference # CED/TFL <u>36422 (Dr. Safeer Abbass)</u>

Reference of the request letter # VECO/2021/0503/5679

Dated: 04-05-2021

Tension Test Report (Page - 1/1)

Date of Test 06-05-2021 Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

| Sr. No. | Nominal Diameter | Nominal Weight | Measured weight | Yield st clause | _ | Breal strength (6.2 | clause | % Elongation | Remarks / Coil No. |
|---------|---------------------|-------------------|--------------------|--------------------|--------|---------------------------|--------|--------------|--------------------|
| | (mm) | (kg/km) | (kg/km) | (kg) | (kN) | (kg) | (kN) | % | Rema |
| 1 | 9.53 (3/8") | 432.0 | 435.0 | 10000 | 98.10 | 10900 | 106.93 | >3.50 | XX |
| 2 | 11.11 (7/16") | 432.0 582.0 | 600.0 | 13800 | 135.38 | 14900 | 146.17 | >3.50 | XX |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |

Only two samples for Test

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,
Resident Engineer
NESPAK
Dualization of Dina Mangla Road Length = 12.83 km District Jhelum
(Group No. 2 Construction of Bridge at Pandori)

Reference # CED/TFL <u>36423 (Dr. Safeer Abbass)</u>

Reference of the request letter # REF/4149/40/148

Dated: 04-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | ieter/ ze | | rea 1 ²) | Yield load | Breaking Load | | Stress si) | Ultimat (p | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|----------------|---------------|----------|-------------------------|------------|------------------|---------|---------------|---------------|-----------------|------------|--------------|---------|
| | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | H % | R |
| 1 | 0.387 | 3 | 0.381 | 0.11 | 0.114 | 4040 | 5100 | 81000 | 78260 | 102200 | 98800 | 1.00 | 12.5 | |
| 2 | 0.388 | 3 | 0.381 | 0.11 | 0.114 | 4010 | 5070 | 80400 | 77460 | 101600 | 98000 | 1.20 | 15.0 | |
| 3 | 4.275 | 10 | 1.265 | 1.27 | 1.257 | 42400 | 56200 | 73600 | 74380 | 97600 | 98600 | 1.60 | 20.0 | |
| 4 | 4.296 | 10 | 1.268 | 1.27 | 1.263 | 43600 | 56800 | 75700 | 76110 | 98600 | 99200 | 1.60 | 20.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | I | No | te: only | four s | amples fo | or tensile | and two | samples | for bend | test | I | | |
| | | | | | | | D 17 | ` , | | | | | | |
| | | | | | | | Bend T | est | | | | | | |

#3 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, M/S Design Matrix Lahore

Reference # CED/TFL <u>36424 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 04-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | Ultimat (p | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|----------------|---------------|---------|------------|------------|------------------|---------|---------------|---------------|-----------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re |
| 1 | 0.375 | 3 | 0.375 | 0.11 | 0.110 | 4280 | 5020 | 85800 | 85620 | 100600 | 100500 | 1.00 | 12.5 | |
| 2 | 0.382 | 3 | 0.378 | 0.11 | 0.112 | 3890 | 4520 | 78000 | 76340 | 90600 | 88700 | 0.80 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | No | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend t | test | · I | | |
| | D D | 170 47 | F1 1 | 1000: | Satisfa | | Bend T | est | | | | | | |

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,
Assistant Manager Coordination
Izhar Construction (Pvt) Ltd
Extension on Main Paints Shop at Hyund

Extension on Main Paints Shop at Hyundai Nishat Motor Pvt. Limited, Faisalabad

Reference # CED/TFL <u>36425 (Dr. Safeer Abbass)</u>

Reference of the request letter # ICPL/CONST-HNMPL/21/062

Dated: 04-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Si | neter/ ze m) | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|-----------|--------------------|---------|------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | ₩ E | Re |
| 1 | 0.380 | 10 | 9.58 | 0.12 | 0.112 | 4010 | 4940 | 73670 | 79090 | 90756 | 97500 | 0.80 | 10.0 | |
| 2 | 0.386 | 10 | 9.66 | 0.12 | 0.114 | 3720 | 4760 | 68343 | 72190 | 87449 | 92400 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend 1 | test | | | |
| | | | | | | | | | | | | | | |
| | | Bend Test | | | | | | | | | • | | | |
| 101 | nm Dia | Bar Bei | nd Test | Throug | h 180° i | s Satisfac | etory | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, M/S Style Textile (Pvt) Ltd Lahore (Style Raiwind)

Reference # CED/TFL <u>36426 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 04-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Si | neter/ ize nm) | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|---------|----------------------|---------|------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | ₩ E | Re |
| 1 | 0.423 | 10 | 10.11 | 0.12 | 0.124 | 4410 | 5430 | 81019 | 78190 | 99758 | 96300 | 0.80 | 10.0 | |
| 2 | 0.425 | 10 | 10.13 | 0.12 | 0.125 | 4260 | 5400 | 78263 | 75090 | 99207 | 95200 | 1.20 | 15.0 | |
| - | - | 1 | - | 1 | - | ı | - | - | - | - | - | - | 1 | |
| - | - | 1 | - | 1 | - | - | - | - | - | - | - | 1 | 1 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend | test | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | Bend T | `est | | | | | | |
| 101 | mm Dia | Bar Be | nd Test | Throug | h 180° i | s Satisfac | ctory | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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

MEERANG TO THE STATE OF THE STA

STRUCTURAL ENGINEERING DIVISION

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

To,
Assistant Project Director
PMU-SBP, Gujranwala
(Construction of Sports Stadium at Gujranwala (Nighar Phatak)) GS # 189

Reference # CED/TFL <u>36427 (Dr. Safeer Abbass)</u>

Reference of the request letter # APD/PMU/SBP/20/353

Dated: 05-05-2021

Dated: 26-04-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|------------|-----------|-------------|---------------|---------|------------|------------|------------------|------------|---------------|---------|-----------------|------------|--------------|----------|
| <i>S</i> 2 | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re |
| 1 | 0.358 | 3 | 0.366 | 0.11 | 0.105 | 3360 | 4460 | 67400 | 70340 | 89400 | 93400 | 0.90 | 11.3 | el |
| 2 | 0.356 | 3 | 0.365 | 0.11 | | | 4440 | 66800 | 70240 | 89000 | 93700 | 0.90 | 11.3 | FF Steel |
| 3 | 0.357 | 3 | 0.366 | 0.11 | 0.105 | 3280 | 4430 | 65800 | 68840 | 88800 | 93000 | 1.00 | 12.5 | <u>F</u> |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | | | Note | e: only th | ree samp | les for te | ensile test | | | 1 | | |
| | Bend Test | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, Projects Coordinator Banu Mukhtar Contracting (Pvt) Ltd (Ultra Kraft (Pvt) Ltd)

Reference # CED/TFL <u>36428 (Dr. Safeer Abbass)</u>

Reference of the request letter # BML/Ultrak/002

Dated: 05-05-2021

Dated: 03-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|-------------|---------------|----------|------------|------------|------------------|-------------|---------------|-----------|-----------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | 3 % | Re |
| 1 | 0.379 | 3 | 0.377 | 0.11 | 0.111 | 4160 | 5120 | 83400 | 82330 | 102600 | 101400 | 0.80 | 10.0 | |
| 2 | 0.381 | 3 | 0.378 | 0.11 | 0.112 | 3940 | 4920 | 79000 | 77500 | 98600 | 96800 | 1.00 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend t | test | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | Bend T | <u>'est</u> | | | | | | |
| #3 | Bar Ber | nd Test | Throug | h 180° i | s Satisf | actory | | | | | | | | |
| | | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, M/S Mughal Iron & Steel Industries Limited Lahore (CDS Navy Karachi)

Reference # CED/TFL <u>36429 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 05-05-2021

Dated: 03-05-2021

Tension Test Report (Page -1/2)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Diameter/ size | | Area (in²) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---------|---|-------------------|---------------|---------------|----------|------------|------------------|-----------------------|--------|--------------------------|--------|------------|--------------|-----------------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re |
| 1 | 0.380 | 3 | 0.377 | 0.11 | 0.112 | 3630 | 5060 | 72800 | 71600 | 101400 | 99900 | 1.00 | 12.5 | al |
| 2 | 0.379 | 3 | 0.377 | 0.11 | 0.112 | 3600 | 5050 | 72200 | 71150 | 101200 | 99900 | 0.90 | 11.3 | Mughal Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| - | - | - | - | - | - | - | - | - | - | _ | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | Bend T | est | | | | | | |
| #3 | Bar Ber | nd Test | Throug | h 180° i | s Satisf | actory | | | | | | | | |
| | 5 | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To, M/S Mughal Iron & Steel Industries Limited Lahore (CDS Navy Omara)

Reference # CED/TFL <u>36429 (Dr. Safeer Abbass)</u>

Reference of the request letter # Nil

Dated: 05-05-2021

Dated: 03-05-2021

Tension Test Report (Page -2/2)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Diameter/ size | | | Area (in²) | | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---------|---|-------------------|---------------|----------|---------------|--------|------------------|-----------------------|--------|--------------------------|--------|------------|--------------|-----------------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| 1 | 0.381 | 3 | 0.377 | 0.11 | 0.112 | 3640 | 5020 | 73000 | 71710 | 100600 | 98900 | 1.20 | 15.0 | al |
| 2 | 0.380 | 3 | 0.377 | 0.11 | 0.112 | 3680 | 5100 | 73800 | 72550 | 102200 | 100600 | 1.20 | 15.0 | Mughal Steel |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | Z |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | Bend T | est | | | | | | |
| #3 | Bar Ber | nd Test | Throug | h 180° i | is Satisf | actory | | | | | | | | |
| | #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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 <u>36433 (Dr. Qasim Khan)</u>
Reference of the request letter # ZD/ZQ/PILING/001
Dated: 06-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Diameter/ size | | | | Area (in²) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimat (p | חמו | | % Elongation | Remarks |
|---------|---|----------------------|---------------|----------|-----------|---------------|--------|------------|------------------|-----------------------|--------|---------------|------|----|--------------|---------|
| S | (lbs/ft) | (lbs/ft) Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re | | |
| 1 | 0.396 | 3 | 0.385 | 0.11 | 0.117 | 3400 | 5000 | 68200 | 64310 | 100200 | 94600 | 1.20 | 15.0 | | | |
| 2 | 0.402 | 3 | 0.388 | 0.11 | 0.118 | 3400 | 5000 | 68200 | 63360 | 100200 | 93200 | 1.10 | 13.8 | | | |
| - | - | - | - | - | - | - | - | - | - | _ | - | - | - | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| - | - | - | - | - | - | - | - | - | - | _ | - | - | - | | | |
| - | - | - | - | - | - | - | - | - | - | _ | - | - | - | | | |
| | Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | Bend T | `est | | | | | | | | |
| #3 | Bar Ber | nd Test | Throug | h 180° i | s Satisfa | actory | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



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

To,

Construction Manager (Opal)

Deevar Developers (Pvt)Ltd.

(Construction of Zameen Opal, Plot no.16, Sector-A, Land Breeze Housing Society, Raiwind

Road Lahore.

Reference # CED/TFL <u>36434 (Dr. Qasim Khan)</u>
Reference of the request letter # ZD/ZO/L/025
Dated: 06-05-2021

Tension Test Report (Page -1/1)

Date of Test 06-05-2021 Gauge length 8 inches

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

| Sr. No. | Weight | Diameter/ size | | Area (in²) | | Yield load | Breaking Load | Yield Stress (psi) | | Ultimate Stress (psi) | | Elongation | % Elongation | Remarks |
|---|---|-------------------|---------------|---------------|--------|------------|------------------|-----------------------|--------|--------------------------|--------|------------|--------------|---------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| 1 | 0.381 | 3 | 0.378 | 0.11 | 0.112 | 3400 | 4700 | 68200 | 66920 | 94200 | 92500 | 1.50 | 18.8 | |
| 2 | 0.382 | 3 | 0.378 | 0.11 | 0.112 | 3300 | 4700 | 66200 | 64710 | 94200 | 92200 | 1.40 | 17.5 | |
| 1 | - | - | | - | - | - | - | - | - | - | - | - | - | |
| 1 | - | ı | ı | ı | - | ı | - | - | - | - | • | - | ı | |
| | - | - | 1 | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| | Bend Test | | | | | | | | | | | | | |
| #3 | #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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