



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 Defence Housing Authority.
 Lahore Cantt
 (Const of U/G External Elec Works Alongwith Street Light Sys, Pkg E-2&4, Sec-N, DHA Ph-IX) (M/s NLC)

Reference # CED/TFL **35573** (Dr. Qasim Khan)
 Reference of the request letter # 408/241/E/Lab/1015/35

Dated: 29-10-2020
 Dated: 23-10-2020

Tension Test Report (Page -1/1)

Date of Test 02-11-2020
 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 | 0.369 | 3 | 0.372 | 0.11 | 0.108 | 3900 | 5900 | 78200 | 79240 | 118300 | 119900 | 1.00 | 12.5 | Saeed Kasur |
| 2 | 0.366 | 3 | 0.370 | 0.11 | 0.108 | 3900 | 5900 | 78200 | 79930 | 118300 | 121000 | 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:

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- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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To,
 Director
 Abdullah Ibrahim Construction
 Construction of Hussain Bibi Memorial Cardiac & General Hospital Gujranwala

Reference # CED/TFL **35576** (Dr. Qasim Khan) Dated: 29-10-2020
 Reference of the request letter # AIC/2020/GW Dated: 28-10-2020

Tension Test Report (Page -1/1)

Date of Test 02-11-2020
 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 | 0.408 | 3 | 0.391 | 0.11 | 0.120 | 3900 | 5700 | 78200 | 71750 | 114300 | 104900 | 1.30 | 16.3 | |
| 2 | 0.375 | 3 | 0.375 | 0.11 | 0.110 | 3200 | 5100 | 64200 | 64030 | 102200 | 102100 | 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 | | | | | | | | | | | | | | |
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Pakistan. Ph: 92-42-99029202

To,
 Project Manager
 MEK Multistory Offices
 P-156 Gulberg II Lahore

Reference # CED/TFL **35579** (Dr. Qasim Khan)
 Reference of the request letter # P-156/159

Dated: 29-10-2020
 Dated: 29-10-2020

Tension Test Report (Page -1/1)

Date of Test 02-11-2020
 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 | 0.110 | 4000 | 5400 | 80200 | 79850 | 108200 | 107800 | 1.00 | 12.5 | |
| 2 | 0.377 | 3 | 0.376 | 0.11 | 0.111 | 3800 | 5200 | 76200 | 75630 | 104200 | 103500 | 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 | | | | | | | | | | | | | | |
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To,
M/S Defence Housing Authority.
Lahore Cantt
(Infra Development Works at Sector-R, DHA Ph-IX (Prism) (M/s DHA-C)

Reference # CED/TFL **35580** (Dr. Qasim Khan)
Reference of the request letter # 408/241/E/Lab/1014/075

Dated: 29-10-2020
Dated: 23-10-2020

Tension Test Report (Page -1/1)

Date of Test 02-11-2020
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 | 0.370 | 3 | 0.372 | 0.11 | 0.109 | 3600 | 5200 | 72200 | 72960 | 104200 | 105400 | 1.30 | 16.3 | Kamran Steel |
| 2 | 0.376 | 3 | 0.375 | 0.11 | 0.110 | 3700 | 5300 | 74200 | 73840 | 106200 | 105800 | 1.20 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | | | | | | | | | | | | | | |
| Bend Test | | | | | | | | | | | | | | |
| #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |
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To,
M/S Amin Brothers Engineers Pak (Pvt) Ltd
Gulberg-III, Lahore
(Manufacturing of PCC Poles at Jhang Pole Plant)

Reference # CED/TFL **35582** (Dr. Qasim Khan)
Reference of the request letter # ABEL/UET/20/10

Dated: 29-10-2020
Dated: 27-10-2020

Tension Test Report (Page – 1/1)

Date of Test 02-11-2020
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) | | % Elongation | Max. Elongation (cm) |
|---------|------------------|----------------|-----------------|-----------------------------|--------|--------------------------------|--------|--------------|----------------------|
| | (mm) | (kg/km) | (kg/km) | (kg) | (kN) | (kg) | (kN) | | |
| 1 | 9.53 (3/8") | 432.0 | 441.0 | 10100 | 99.08 | 11000 | 107.91 | >3.50 | xx |
| 2 | 9.53 (3/8") | 432.0 | 440.0 | 10200 | 100.06 | 11000 | 107.91 | >3.50 | xx |
| 3 | 11.11 (7/16") | 582.0 | 598.0 | 13000 | 127.53 | 14300 | 140.28 | >3.50 | xx |
| 4 | 11.11 (7/16") | 582.0 | 598.0 | 13300 | 130.47 | 14400 | 141.26 | >3.50 | xx |
| - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - |

Only four sample for Test

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