

Raja Muhammad Aqeel

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Astt Dir. Building Section DHA Gujranwala.(Const Of Villas Block-D)

Client Reference: 111/3/AD Bldgs/Gen/35

SOM Lab

Ref:

1887 (Page-1/1)

Dated: 09-03-2023

Dated:

09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Sj Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.485 | 6 | 0.745 | 0.44 | 0.436 | 14.32 | 18.96 | 71790 | 72450 | 95040 | 95910 | 1.30 | 8.0 | 16.3 | |
| 2 | 1.472 | 6 | 0.743 | 0.44 | 0.433 | 14.12 | 18.65 | 70770 | 71910 | 93510 | 95020 | 1.40 | 8.0 | 17.5 | |
| 3 | 0.671 | 4 | 0.501 | 0.20 | 0.197 | 5.78 | 8.82 | 63740 | 64710 | 97230 | 98720 | 1.30 | 8.0 | 16.3 | |
| 4 | 0.673 | 4 | 0.502 | 0.20 | 0.198 | 5.81 | 8.92 | 64080 | 64720 | 98360 | 99350 | 1.20 | 8.0 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Saqib Akram

Test Performed By: Dr. /Engr. Asad Ali Gillani

RE Nespak Kahna Sports Complex, Lahore. (Estb Of Sports Complex at LDA City Kahna, Lahore)

Client Reference: 3772/103/NA129/RE/05/07

SOM Lab

Ref: 1891 (Page-1/1)

Dated: 21-02-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (SJ Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.635 | 8 | 0.993 | 0.79 | 0.774 | 25.86 | 37.28 | 72200 | 73690 | 104070 | 106220 | 1.40 | 8.0 | 17.5 | |
| 2 | 2.645 | 8 | 0.995 | 0.79 | 0.777 | 25.64 | 37.23 | 71570 | 72770 | 103930 | 105670 | 1.50 | 8.0 | 18.8 | |
| 3 | 1.521 | 6 | 0.754 | 0.44 | 0.447 | 13.27 | 18.37 | 66530 | 65490 | 92070 | 90630 | 1.50 | 8.0 | 18.8 | |
| 4 | 1.526 | 6 | 0.755 | 0.44 | 0.448 | 13.68 | 18.37 | 68570 | 67350 | 92070 | 90430 | 1.30 | 8.0 | 16.3 | |
| 5 | 0.673 | 4 | 0.502 | 0.20 | 0.198 | 6.98 | 8.63 | 77000 | 77780 | 95210 | 96170 | 1.10 | 8.0 | 13.8 | |
| 6 | 0.674 | 4 | 0.502 | 0.20 | 0.198 | 7.03 | 8.69 | 77560 | 78350 | 95770 | 96740 | 1.20 | 8.0 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Nine Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Manzoor Ashraf,PM

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Zoli International (Pvt) Ltd.(Const of Zoli Garment Factory Rana Ahmad Road Lahore)

Client Reference: Nil

SOM Lab

Ref:

1892 (Page-1/1)

Dated: 09-03-2023

Dated:

09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (FF Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.632 | 8 | 0.992 | 0.79 | 0.773 | 25.15 | 33.59 | 70210 | 71750 | 93770 | 95830 | 1.50 | 8.0 | 18.8 | |
| 2 | 2.640 | 8 | 0.994 | 0.79 | 0.776 | 25.10 | 33.66 | 70070 | 71330 | 93970 | 95660 | 1.30 | 8.0 | 16.3 | |
| 3 | 1.491 | 6 | 0.747 | 0.44 | 0.438 | 15.82 | 20.76 | 79300 | 79660 | 104080 | 104560 | 1.20 | 8.0 | 15.0 | |
| 4 | 1.485 | 6 | 0.745 | 0.44 | 0.436 | 14.55 | 20.56 | 72910 | 73580 | 103060 | 104000 | 1.40 | 8.0 | 17.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

SAK Associates
Lahore,

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: Nil

SOM Lab

Ref: 1894 (Page-1/1)

Dated: 09-03-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.647 | 8 | 0.995 | 0.79 | 0.778 | 25.71 | 35.32 | 71770 | 72880 | 98610 | 100130 | 1.40 | 8.0 | 17.5 | |
| 2 | 1.536 | 8 | 0.758 | 0.79 | 0.451 | 18.76 | 22.88 | 52370 | 91720 | 63890 | 111910 | 1.20 | 8.0 | 15.0 | |
| 3 | 0.662 | 4 | 0.498 | 0.20 | 0.195 | 7.08 | 8.97 | 78130 | 80130 | 98920 | 101460 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

BEND TEST:

| | | |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sher Afgan, XEN
 GE(Army)-I.(Const of 1xBn Office block, 97 Sig Bn at Gwa Cantt)

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: 6180-2606/12/E-6

SOM Lab

Ref: 1895 (Page-1/5)

Dated: 08-03-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (SJ Steel)

ASTM-A-615

Deformed Bar (SJ Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.638 | 8 | 0.993 | 0.79 | 0.775 | 24.84 | 33.51 | 69350 | 70700 | 93540 | 95350 | 1.60 | 8.0 | 20.0 | |
| 2 | 1.468 | 6 | 0.741 | 0.44 | 0.431 | 14.34 | 18.62 | 71890 | 73390 | 93350 | 95300 | 1.50 | 8.0 | 18.8 | |
| 3 | 1.061 | 5 | 0.630 | 0.31 | 0.312 | 10.67 | 14.04 | 75930 | 75450 | 99860 | 99220 | 1.40 | 8.0 | 17.5 | |
| 4 | 0.669 | 4 | 0.501 | 0.20 | 0.197 | 6.65 | 8.69 | 73290 | 74410 | 95770 | 97230 | 1.30 | 8.0 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Eight Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sher Afgan, XEN

Test Performed By: Dr. /Engr. Asad Ali Gillani

GE(Army)-I.(Const of 1xMT Shed For B Vehs, 97 Sig Bn/HQ 1 ALRG at Gwa Cantt)

Client Reference: 6180-2611/13/E-6

SOM Lab

Ref: 1895 (Page-2/5)

Dated: 08-03-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Mughal Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.495 | 6 | 0.748 | 0.44 | 0.439 | 15.39 | 18.88 | 77160 | 77330 | 94630 | 94840 | 1.50 | 8.0 | 18.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Two Samples Received and Tested |
| | | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sher Afgan, XEN

Test Performed By:

Dr. /Engr. Asad Ali Gillani

GE(Army)-I.(Const of 1xBn Office Block HQ 1 ALRG at Gwa Cantt)

Client Reference: 6180-2597/10/E-6

SOM Lab

Ref: 1895 (Page-3/5)

Dated: 08-03-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (SJ Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.500 | 6 | 0.749 | 0.44 | 0.441 | 14.73 | 18.83 | 73830 | 73670 | 94370 | 94160 | 1.50 | 8.0 | 18.8 | |
| 2 | 1.064 | 5 | 0.631 | 0.31 | 0.313 | 10.77 | 14.24 | 76660 | 75920 | 101310 | 100340 | 1.40 | 8.0 | 17.5 | |
| 3 | 0.665 | 4 | 0.498 | 0.20 | 0.195 | 6.73 | 8.77 | 74190 | 76090 | 96670 | 99150 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sher Afgan, XEN

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

GE(Army)-I.(Const of 1xBn Office Block,91 Sig Bn/HQ 1 ALRG at Gwa Cantt)

Client Reference: 6180-2608/10/E-6

SOM Lab

Ref:

1895 (Page-4/5)

Dated: 08-03-2023

Dated:

09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (SJ Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.640 | 8 | 0.994 | 0.79 | 0.776 | 25.74 | 34.00 | 71860 | 73150 | 94910 | 96620 | 1.20 | 8.0 | 15.0 | |
| 2 | 1.457 | 6 | 0.738 | 0.44 | 0.428 | 14.39 | 18.57 | 72150 | 74170 | 93100 | 95710 | 1.30 | 8.0 | 16.3 | |
| 3 | 1.027 | 5 | 0.620 | 0.31 | 0.302 | 9.68 | 13.32 | 68900 | 70720 | 94790 | 97300 | 1.30 | 8.0 | 16.3 | |
| 4 | 0.672 | 4 | 0.501 | 0.20 | 0.197 | 7.19 | 9.07 | 79250 | 80460 | 100050 | 101570 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Eight Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sher Afgan, XEN

Test Performed By:

Dr. /Engr. Asad Ali Gillani

GE(Army)-I.(Const of 8xBOQs 91 & 97 Sig Bn at Gwa Cantt)

Client Reference: 6180-2614/10/E-6

SOM Lab

Ref: 1895 (Page-5/5)

Dated: 08-03-2023

Dated: 09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (SJ Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.520 | 6 | 0.754 | 0.44 | 0.447 | 14.68 | 19.62 | 73580 | 72430 | 98360 | 96820 | 1.40 | 8.0 | 17.5 | |
| 2 | 1.144 | 5 | 0.654 | 0.31 | 0.336 | 12.97 | 16.13 | 92250 | 85110 | 114730 | 105850 | 1.30 | 8.0 | 16.3 | |
| 3 | 0.673 | 4 | 0.502 | 0.20 | 0.198 | 6.29 | 8.43 | 69360 | 70060 | 92960 | 93900 | 1.30 | 8.0 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Six Samples Received and Tested |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

ICON Construction Services

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Lahore.(Embroidery Export Corporation Production Building at Daska Rd Sialkot)

Client Reference: Nil

SOM Lab

Ref:

1896 (Page-1/1)

Dated: 08-03-2023

Dated:

09-03-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Mughal Steel)

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.658 | 8 | 0.997 | 0.79 | 0.781 | 30.04 | 36.60 | 83870 | 84830 | 102170 | 103340 | 1.40 | 8.0 | 17.5 | |
| 2 | 2.681 | 8 | 1.002 | 0.79 | 0.788 | 29.99 | 36.56 | 83730 | 83940 | 102080 | 102340 | 1.40 | 8.0 | 17.5 | |
| 3 | 1.642 | 6 | 0.784 | 0.44 | 0.483 | 15.29 | 20.31 | 76640 | 69820 | 101780 | 92720 | 1.30 | 8.0 | 16.3 | |
| 4 | 1.650 | 6 | 0.786 | 0.44 | 0.485 | 16.41 | 21.00 | 82260 | 74630 | 105260 | 95490 | 1.40 | 8.0 | 17.5 | |
| 5 | 1.063 | 5 | 0.630 | 0.31 | 0.312 | 12.15 | 14.60 | 86450 | 85890 | 103850 | 103190 | 1.20 | 8.0 | 15.0 | |
| 6 | 1.052 | 5 | 0.627 | 0.31 | 0.309 | 11.85 | 14.29 | 84270 | 84540 | 101680 | 102010 | 1.10 | 8.0 | 13.8 | |
| 7 | 0.668 | 4 | 0.500 | 0.20 | 0.196 | 6.70 | 8.00 | 73850 | 75360 | 88240 | 90040 | 1.10 | 8.0 | 13.8 | |
| 8 | 0.668 | 4 | 0.500 | 0.20 | 0.196 | 6.44 | 7.85 | 71040 | 72490 | 86560 | 88320 | 1.20 | 8.0 | 15.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|----|------------------------|---|
| -- | No Bend test performed | Note:- Only Eight Samples Received and Tested |
| | | |
| | | |
| | | |

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

HR/Admin Manager,
For China First Metallurgical Group Co.,Ltd,
Lahore

(Constructions of 275 Concentration Mill Project-Saindak-Baluchistan)

Client Reference No.: CFMCC/2023/004
SOM Lab Ref: CED/SOM/1888 (Page 1/3)

Dated: 09-03-2023
Dated: 09-03-2023

Test Type: Load Test

Sample Type: MS Scaffolding Couplers

Specification: BS 1139

Load Test Results

| Sample No. | Sample Type | Ultimate Breaking Load (kN) | Ultimate Breaking Load (Kg) | Remarks |
|------------|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1 | MS Scaffolding Coupler (Tension) | 45.2 | 4608 | Coupler breaks at this load |
| 2 | MS Scaffolding Coupler (Tension) | 34.2 | 3486 | Coupler breaks at this load |

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

HR/Admin Manager,
For China First Metallurgical Group Co.,Ltd,
Lahore

(Constructions of 275 Concentration Mill Project-Saindak-Baluchistan)

Client Reference No.: CFMCC/2023/002

Dated: 09-03-2023

SOM Lab Ref: CED/SOM/1888 (Page 2/3)

Dated: 09-03-2023

Test Type: Bend Test with Join

Sample Type: MS Scaffolding Couplers

Bend Test Results

| Sample No. | Sample Type | Test Type | Ultimate Load (kN) |
|------------|-----------------------------------|----------------------|--------------------|
| 1 | MS Scaffolding Coupler with Joint | Bend Test With Joint | 3.7 |

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

UNOPS Pakistan
Islamabad.
(Maintenance On Pedestrian Suspension Bridges in Kalam, Distt Swat)

Client Reference No.: UNOPS/UET/23-1

Dated: 09-03-2023

SOM Lab Ref: CED/SOM/1897 (Page 1/1)

Dated: 09-03-2023

Test Type: Load Test

Sample Type: Turnbuckle Jaw and Eye, Size: (3/4")

Load Test Results

| Sr No. | Sample Weight (Kg) | Sample Type | Ultimate Breaking Load (kN) | Remarks |
|--------|-----------------------|---------------------------|-----------------------------------|-----------------------------|
| 1 | 2.207 | Turnbuckle Jaw and Eye | 148.0 | Bolt Breaks at this load |

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: Dr. Nauman Khurram

HR/Admin Manager,
For China First Metallurgical Group Co.,Ltd,
Lahore

(Constructions of 275 Concentration Mill Project-Saindak-Baluchistan)

Client Reference No.: CFMCC/2023/011

Dated: 09-03-2023

SOM Lab Ref: CED/SOM/1888 (Page 3/3)

Dated: 09-03-2023

Test: Tensile Test

Sample Type: M.S Deformed Steel bar with Coupler (Sheikhoo Steel)

Tension Test Results

| Sr. No. | Bar Size | Area | Yield Load | Ultimate Load | Yield stress | Ultimate stress | Remarks |
|---------|----------|--------------------|------------|---------------|--------------|-----------------|-------------------------------------|
| | (mm) | (mm ²) | kN | kN | (Mpa) | (Mpa) | |
| 1 | 25 | 491 | 238.70 | 330.50 | 486 | 673 | Steel breaks from threaded portions |
| 2 | 25 | 491 | 240.00 | 333.50 | 489 | 679 | Steel breaks from threaded portions |
| 3 | 20 | 314 | 192.50 | 252.50 | 613 | 804 | Steel breaks from threaded portions |
| 4 | 20 | 314 | 195.70 | 254.50 | 623 | 810 | Steel breaks from threaded portions |

Note: Please always confirm the results on web www.uet-civil.edu.pk

