

M.Arslan Khaleel  
Asst Coordinator Amanah Noor Residence, Lahore.

Test Performed By: Dr. /Engr. Waseem Abbas

Client Reference: Nil

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Gauge Length: 8 h

Test Specification:

Sample Type:

SOM Lab

Ref: 2283 (Page-1/1)

Dated: 31-05-2023

ASTM-A-615

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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |  |
| 1     | 2.709  | 8       | 1.007      | 0.799           | 0.796           | 23.14      | 35.09         | 64600                       | 64120                        | 97950                       | 97220                        | 1.20       | 8.0          | 15.0            |         |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |

**BEND TEST:**

|     |                                                                  |                                                             |
|-----|------------------------------------------------------------------|-------------------------------------------------------------|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/><br/>Only Two Samples Received and Tested</b> |
|     |                                                                  |                                                             |
|     |                                                                  |                                                             |
|     |                                                                  |                                                             |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engineer Muhammad Irfan  
Asst Dir Infra. DHA Gujranwala.(Sector K)

Test Performed By: Dr. /Engr. Waseem Abbas

Client Reference: 111/15/AD/RS/Lab/Sec-K/287

SOM Lab

Ref: 2284 (Page-1/1)

Dated: 30-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Gauge Length: 8 h

Sample Type:

Deformed Bar (Sheikhoo 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 3.222  | 9       | 1.098      | 1.00            | 0.947           | 26.91      | 39.78         | 59350                       | 62680                        | 87730                       | 92630                        | 1.50       | 8.0          | 18.8            |         |
| 2     | 3.216  | 9       | 1.097      | 1.00            | 0.945           | 30.35      | 41.44         | 66930                       | 70830                        | 91390                       | 96710                        | 1.30       | 8.0          | 16.3            |         |
| 3     | 2.630  | 8       | 0.992      | 0.79            | 0.773           | 24.41      | 33.61         | 68160                       | 69660                        | 93830                       | 95890                        | 1.30       | 8.0          | 16.3            |         |
| 4     | 2.644  | 8       | 0.995      | 0.79            | 0.777           | 25.35      | 33.94         | 70780                       | 71960                        | 94770                       | 96350                        | 1.50       | 8.0          | 18.8            |         |
| 5     | 1.483  | 6       | 0.745      | 0.44            | 0.436           | 14.34      | 19.32         | 71890                       | 72550                        | 96830                       | 97710                        | 1.40       | 8.0          | 17.5            |         |
| 6     | 1.484  | 6       | 0.745      | 0.44            | 0.436           | 14.85      | 19.52         | 74450                       | 75130                        | 97850                       | 98750                        | 1.40       | 8.0          | 17.5            |         |
| 7     | 0.656  | 4       | 0.496      | 0.20            | 0.193           | 6.44       | 8.66          | 71040                       | 73620                        | 95550                       | 99010                        | 1.30       | 8.0          | 16.3            |         |
| 8     | 0.654  | 4       | 0.494      | 0.20            | 0.192           | 6.68       | 8.77          | 73630                       | 76700                        | 96670                       | 100700                       | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |                                                                  |                                                           |
|-----|------------------------------------------------------------------|-----------------------------------------------------------|
| # 9 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/>Only Twelve Samples Received and Tested</b> |
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack |                                                           |
| # 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](http://www.uet-civil.edu.pk)

Chaudhary Zaheer Traders  
DHA Phase-8 Lahore.

Test Performed By: Dr. /Engr. Waseem Abbas

Client Reference: Nil

SOM Lab

Ref: 2285 (Page-1/1)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 h

Sample Type:

Deformed Bar (Sheikhoo 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.65<br>1 | 8       | 0.99<br>6  | 0.7<br>9        | 0.77<br>9       | 25.28      | 33.44         | 70580                       | 71570                        | 93340                       | 94660                        | 1.5<br>0   | 8.<br>0      | 18.<br>8        | 20      |
| 2     | 1.51<br>4 | 6       | 0.75<br>3  | 0.4<br>4        | 0.44<br>5       | 14.48      | 18.78         | 72560                       | 71740                        | 94120                       | 93060                        | 1.4<br>0   | 8.<br>0      | 17.<br>5        | 19      |
| 3     | 0.65<br>4 | 4       | 0.49<br>4  | 0.2<br>0        | 0.19<br>2       | 6.47       | 8.48          | 71380                       | 74360                        | 93530                       | 97420                        | 1.3<br>0   | 8.<br>0      | 16.<br>3        | 18      |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

Witnessed By: Muhammad Faisal (Shift Incharge, Sheikhoo Steel), Hunzla Rasheed (Engineer)

**BEND TEST:**

|     |                                                                  |                                                                 |
|-----|------------------------------------------------------------------|-----------------------------------------------------------------|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/><br/>Only Six Samples<br/>Received and Tested</b> |
| # 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](http://www.uet-civil.edu.pk)

Chaudhary Steel  
Badian Road Lahore.

Test Performed By: Dr. /Engr. Waseem Abbas

Client Reference: Nil

SOM Lab

Ref: 2286 (Page-1/1)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Gauge Length: 8 h

Sample Type:

Deformed Bar (Sheikhoo 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.673  | 8       | 1.000      | 0.79            | 0.786           | 26.88      | 34.81         | 75050                       | 75430                        | 97190                       | 97680                        | 1.30       | 8.0          | 16.3            | 40      |
| 2     | 1.484  | 6       | 0.745      | 0.44            | 0.436           | 14.34      | 19.24         | 71890                       | 72550                        | 96420                       | 97300                        | 1.30       | 8.0          | 16.3            | 38      |
| 3     | 1.049  | 5       | 0.626      | 0.31            | 0.308           | 10.24      | 13.99         | 72890                       | 73360                        | 99500                       | 100150                       | 1.30       | 8.0          | 16.3            | 38      |
| 4     | 0.660  | 4       | 0.497      | 0.20            | 0.194           | 6.09       | 8.48          | 67110                       | 69190                        | 93530                       | 96420                        | 1.30       | 8.0          | 16.3            | 36      |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

Witnessed By: Muhammad Faisal (Shift Incharge, Sheikhoo Steel), Hunzla Rasheed (Engineer)

**BEND TEST:**

|     |                                                                  |                                                          |
|-----|------------------------------------------------------------------|----------------------------------------------------------|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/>Only Eight Samples Received and Tested</b> |
| # 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](http://www.uet-civil.edu.pk)

AMU WEAVERS (Pvt) Ltd.  
Lahore.(New Bilal Ganj Harbanspura Lahore)

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

Client Reference: Nil

SOM Lab

Ref: 2287 (Page-1/1)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Gauge Length: 8 h

Sample Type:

Deformed Bar (Amreli 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.688  | 6       | 0.795      | 0.44            | 0.496           | 18.32      | 21.56         | 91820                       | 81450                        | 108070                      | 95870                        | 1.40       | 8.00         | 17.5            | M       |
| 2     | 1.484  | 6       | 0.745      | 0.44            | 0.436           | 14.27      | 19.29         | 71540                       | 72190                        | 96670                       | 97560                        | 1.40       | 8.00         | 17.5            | L       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

**BEND TEST:**

|     |                                                                  |                                                                    |
|-----|------------------------------------------------------------------|--------------------------------------------------------------------|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br><b>Only Three Samples Received and Tested</b> |
|     |                                                                  |                                                                    |
|     |                                                                  |                                                                    |
|     |                                                                  |                                                                    |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Sub Divisional officer,

Test Performed By: Dr. /Engr. Waseem Abbas

BSD No.2,Lhr.(Rehb at Govt. Model Girls High School Nazooli Bazar Moazang Lhr)

Client Reference: 1608 2nd

SOM Lab

Ref: 2288 (Page-1/1)

Dated: 15-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification: ASTM-A-615

Deformed

Gauge Length: 8 h

Sample Type:

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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.50<br>2 | 6       | 0.74<br>9  | 0.4<br>4        | 0.44<br>1       | 15.46      | 19.83         | 77510                       | 77340                        | 99380                       | 99160                        | 1.2<br>0   | 8.<br>0      | 15.<br>0        |         |
| 2     | 0.66<br>3 | 4       | 0.49<br>8  | 0.2<br>0        | 0.19<br>5       | 7.03       | 8.87          | 77560                       | 79550                        | 97800                       | 10030<br>0                   | 1.2<br>0   | 8.<br>0      | 15.<br>0        |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |                                                                  |                                                                          |
|-----|------------------------------------------------------------------|--------------------------------------------------------------------------|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <p><b>Note:-</b></p> <p><b>Only Four Samples Received and Tested</b></p> |
| # 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](http://www.uet-civil.edu.pk)

Muhammad Saleem,G.M

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

Professional Const.Services Lahore.(TCF Secondary Gelewal Khanewal/Bwp)

Client Reference: PCS/23/Eng/47-A

SOM Lab

Ref: 2290 (Page-1/3)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification: ASTM-A-615

Deformed

Gauge Length: 8 h

Sample Type:

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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 0.685  | 4       | 0.506      | 0.20            | 0.201           | 7.21       | 8.74          | 79470                       | 79080                        | 96340                       | 95860                        | 1.10       | 8.0          | 13.8            |         |
| 2     | 0.683  | 4       | 0.506      | 0.20            | 0.201           | 7.19       | 8.74          | 79250                       | 78860                        | 96340                       | 95860                        | 1.10       | 8.0          | 13.8            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

**BEND TEST:**

|    |                        |                                                        |
|----|------------------------|--------------------------------------------------------|
| -- | No Bend test performed | <b>Note:-<br/>Only Two Samples Received and Tested</b> |
|    |                        |                                                        |
|    |                        |                                                        |
|    |                        |                                                        |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Muhammad Saleem,G.M

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

Professional Const.Services Lahore.(TCF Secondary Gelewal Khanewal/Bwp)

Client Reference: PCS/23/Eng/47-C

SOM Lab

Ref: 2290 (Page-2/3)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification: ASTM-A-615  
Deformed

Gauge Length: 8 h

Sample Type: 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.717  | 8       | 1.008      | 0.799           | 0.798           | 27.19      | 35.95         | 75900                       | 75140                        | 100370                      | 99370                        | 1.30       | 8.0          | 16.3            |         |
| 2     | 2.705  | 8       | 1.006      | 0.799           | 0.795           | 28.49      | 36.95         | 79540                       | 79040                        | 103160                      | 102510                       | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|    |                        |                                                             |
|----|------------------------|-------------------------------------------------------------|
| -- | No Bend test performed | <b>Note:-<br/><br/>Only Two Samples Received and Tested</b> |
|    |                        |                                                             |
|    |                        |                                                             |
|    |                        |                                                             |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)



Muhammad Saleem,G.M

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

Professional Const.Services Lahore.(TCF Secondary Gelewal Khanawal/Bwp)

Client Reference: PCS/23/Eng/47-B

SOM Lab

Ref: 2290 (Page-3/3)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification: ASTM-A-615  
Deformed

Gauge Length: 8 h

Sample Type: 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |  |
| 1     | 1.508  | 6       | 0.751      | 0.44            | 0.443           | 15.95      | 20.20         | 79970                       | 79420                        | 101270                      | 100590                       | 1.00       | 8.0          | 12.5            |         |  |
| 2     | 1.493  | 6       | 0.748      | 0.44            | 0.439           | 15.14      | 19.47         | 75880                       | 76050                        | 97590                       | 97810                        | 1.10       | 8.0          | 13.8            |         |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |  |

**BEND TEST:**

|    |                        |                                                             |
|----|------------------------|-------------------------------------------------------------|
| -- | No Bend test performed | <b>Note:-<br/><br/>Only Two Samples Received and Tested</b> |
|    |                        |                                                             |
|    |                        |                                                             |
|    |                        |                                                             |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Ahmar Aslam  
Canal44 Luxury Apartments Lahore.

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

Client Reference: Nil

SOM Lab

Ref: 2291 (Page-1/1)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification:

ASTM-A-615

Gauge Length: 8 h

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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.60<br>4 | 8       | 0.98<br>7  | 0.7<br>9        | 0.76<br>5       | 27.44      | 33.91         | 76610                       | 79110                        | 94680                       | 97770                        | 1.4<br>0   | 8.<br>0      | 17.<br>5        |         |
| 2     | 1.47<br>4 | 6       | 0.74<br>3  | 0.4<br>4        | 0.43<br>3       | 14.55      | 18.96         | 72910                       | 74090                        | 95040                       | 96570                        | 1.4<br>0   | 8.<br>0      | 17.<br>5        |         |
| 3     | 0.64<br>5 | 4       | 0.49<br>2  | 0.2<br>0        | 0.19<br>0       | 6.29       | 8.02          | 69360                       | 73010                        | 88470                       | 93120                        | 1.2<br>0   | 8.<br>0      | 15.<br>0        |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

**BEND TEST:**

|     |                                                                  |                                                                 |
|-----|------------------------------------------------------------------|-----------------------------------------------------------------|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/><br/>Only Six Samples<br/>Received and Tested</b> |
| # 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](http://www.uet-civil.edu.pk)

Qamar Uz Zaman

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

PM Aujla & Associates.(Masjid Ali H-Block Overhead No.5 Royal Palm City H/Scheme Gujranwala)

SOM Lab

Client Reference: Nil

Ref: 2292 (Page-1/3)

Dated: 31-05-2023

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Test Specification: ASTM-A-615  
Deformed

Gauge Length: 8 h

Sample Type: 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 0.656  | 4       | 0.496      | 0.20            | 0.193           | 6.78       | 8.72          | 74750                       | 77470                        | 96110                       | 99600                        | 1.00       | 8.0          | 12.5            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |                                                                  |                                                             |
|-----|------------------------------------------------------------------|-------------------------------------------------------------|
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/><br/>Only Two Samples Received and Tested</b> |
|     |                                                                  |                                                             |
|     |                                                                  |                                                             |
|     |                                                                  |                                                             |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Qamar Uz Zaman Test Performed By: Dr. /Engr. Asad Ali Gillani  
 PM Aujla & Associates.(Masjid Ali H-Block Overhead No.5 Royal Palm City H/Scheme Gujranwala)

Client Reference: Nil  
 Dated: 31-05-2023

SOM Lab  
 Ref: 2292 (Page-2/3)  
 Dated: 31-05-2023

Test: Tension Test & Bend Test Test Specification: ASTM-A-615  
 Gauge Length: 8 h 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.495  | 6       | 0.748      | 0.44            | 0.439           | 18.86      | 22.45         | 94530                       | 94740                        | 112510                      | 112770                       | 12.0       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

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

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Qamar Uz Zaman Test Performed By: Dr. /Engr. Asad Ali Gillani  
 PM Aujla & Associates.(Masjid Ali H-Block Overhead No.5 Royal Palm City H/Scheme Gujranwala)

Client Reference: Nil

Dated: 31-05-2023

Test: Tension Test & Bend Test  
inc

Gauge Length: 8 h

Test Specification:

Sample Type:

SOM Lab

Ref: 2292 (Page-3/3)

Dated: 31-05-2023

ASTM-A-615

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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.624  | 8       | 0.991      | 0.79            | 0.771           | 24.77      | 32.44         | 69160                       | 70860                        | 90550                       | 92790                        | 1.60       | 8.0          | 20.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

**BEND TEST:**

|     |                                                                  |                                                        |
|-----|------------------------------------------------------------------|--------------------------------------------------------|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/>Only Two Samples Received and Tested</b> |
|     |                                                                  |                                                        |
|     |                                                                  |                                                        |

|                                                                                                                               |  |
|-------------------------------------------------------------------------------------------------------------------------------|--|
|                                                                                                                               |  |
|                                                                                                                               |  |
| Note: Please always confirm the results of above report on web <a href="http://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a> |  |

Muhammad Afnan Talha Test Performed By: Dr. /Engr. Asad Ali Gillani  
 Project Coordinator FORTIS Tower.(FORTIS Tower Bahria Town Phase 8 Rahawalpindi)

Client Reference: Nil  
 Dated: 31-05-2023

SOM Lab  
 Ref: 2293 (Page-1/1)  
 Dated: 31-05-2023

Test: Tension Test & Bend Test  
 inc

Test Specification: ASTM-A-615  
 Deformed Bar (Farooq Steel)

Gauge Length: 8 h

Sample Type:

| 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.418  | 6       | 0.729      | 0.44            | 0.417           | 18.37      | 18.01         | 92070                       | 97150                        | 90290                       | 95270                        | 1.00       | 8.0          | 12.5            |         |
| 2     | 1.411  | 6       | 0.727      | 0.44            | 0.415           | 11.26      | 17.96         | 56460                       | 59860                        | 90030                       | 95450                        | 1.00       | 8.0          | 12.5            |         |
| 3     | 1.014  | 5       | 0.616      | 0.31            | 0.298           | 9.17       | 14.32         | 65270                       | 67900                        | 101890                      | 106000                       | 1.10       | 8.0          | 13.8            |         |
| 4     | 1.030  | 5       | 0.621      | 0.31            | 0.303           | 9.38       | 14.34         | 66720                       | 68260                        | 102040                      | 104400                       | 1.40       | 8.0          | 17.5            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

Witnessed By: Afnan Talha (Project Coordinator)

**BEND TEST:**

|     |                                                                  |                                    |
|-----|------------------------------------------------------------------|------------------------------------|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-<br/>Only Six Samples</b> |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack |                                    |



|  |  |                            |
|--|--|----------------------------|
|  |  | <b>Received and Tested</b> |
|  |  |                            |
|  |  |                            |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Asif Shahzad Test Performed By: Dr. /Engr. Asad Ali Gillani  
 Project Engr. Building Section DHA Gujranwala.(Const Of Office Complex DHA Gujranwala)  
 Client Reference: 111/3/PE Bldqs/Gen/30 SOM Lab  
 Dated: 31-05-2023 Ref: 2295 (Page-1/1)  
 Test: Tension Test & Bend Test Test Specification: ASTM-A-615  
 Gauge Length: 8 h Sample Type: Deformed Bar (Siraj 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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.69<br>8 | 8       | 1.00<br>5  | 0.7<br>9        | 0.79<br>3       | 24.97      | 39.40         | 69720                       | 69460                        | 10999<br>0                  | 10957<br>0                   | 1.3<br>0   | 8.<br>0      | 16.<br>3        |         |
| 2     | 2.66<br>8 | 8       | 0.99<br>9  | 0.7<br>9        | 0.78<br>4       | 23.65      | 38.18         | 66020                       | 66530                        | 10658<br>0                  | 10739<br>0                   | 1.4<br>0   | 8.<br>0      | 17.<br>5        |         |
| 3     | 1.48<br>9 | 6       | 0.74<br>7  | 0.4<br>4        | 0.43<br>8       | 12.28      | 19.06         | 61570                       | 61850                        | 95550                       | 95990                        | 1.3<br>0   | 8.<br>0      | 16.<br>3        |         |
| 4     | 1.48<br>1 | 6       | 0.74<br>4  | 0.4<br>4        | 0.43<br>5       | 12.28      | 18.91         | 61570                       | 62280                        | 94780                       | 95870                        | 1.5<br>0   | 8.<br>0      | 18.<br>8        |         |
| 5     | 1.04<br>4 | 5       | 0.62<br>5  | 0.3<br>1        | 0.30<br>7       | 8.74       | 13.22         | 62150                       | 62760                        | 94060                       | 94980                        | 1.1<br>0   | 8.<br>0      | 13.<br>8        |         |
| 6     | 1.05<br>6 | 5       | 0.62<br>8  | 0.3<br>1        | 0.31<br>0       | 8.79       | 13.25         | 62520                       | 62520                        | 94280                       | 94280                        | 1.5<br>0   | 8.<br>0      | 18.<br>8        |         |
| 7     | 0.66<br>5 | 4       | 0.49<br>8  | 0.2<br>0        | 0.19<br>5       | 6.24       | 9.58          | 68800                       | 70560                        | 10567<br>0                  | 10837<br>0                   | 1.2<br>0   | 8.<br>0      | 15.<br>0        |         |
| 8     | 0.66<br>1 | 4       | 0.49<br>7  | 0.2<br>0        | 0.19<br>4       | 6.32       | 9.55          | 69700                       | 71850                        | 10533<br>0                  | 10859<br>0                   | 1.1<br>0   | 8.<br>0      | 13.<br>8        |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**





| <b>BEND TEST:</b>                                                                                                                    |                                                                  |                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|
| # 8                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br><b>Only Nine Samples Received and Tested</b> |
| # 6                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack |                                                                   |
| # 4                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack |                                                                   |
|                                                                                                                                      |                                                                  |                                                                   |
|                                                                                                                                      |                                                                  |                                                                   |
| <b>Note:</b> Please always confirm the results of above report on web <a href="http://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a> |                                                                  |                                                                   |

**Quality Construction Company**                      **Test Performed By:** Dr. /Engr. Asad Ali Gillani  
**Lahore.(Sunridge Foods SR III at Sharqpur Road Lahore)**

**Client Reference:** Nil                      **SOM Lab**  
**Dated:** 31-05-2023                      **Ref:** 2297 (Page-1/1)  
**Test:** Tension Test & Bend Test      **Test Specification:** ASTM-A-615  
                                                          inc                      **Deformed**  
**Gauge Length:** 8 h                      **Sample Type:** **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 <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.068  | 5       | 0.632      | 0.31            | 0.314           | 9.91       | 13.61         | 70490                       | 69600                        | 96820                       | 95580                        | 1.50       | 8.00         | 18.8            |         |
| 2     | 1.073  | 5       | 0.633      | 0.31            | 0.315           | 10.21      | 13.37         | 72670                       | 71520                        | 95150                       | 93640                        | 1.30       | 8.00         | 16.3            |         |
| 3     | 0.652  | 4       | 0.494      | 0.20            | 0.192           | 6.63       | 8.87          | 73070                       | 76110                        | 97800                       | 101870                       | 1.40       | 8.00         | 17.5            |         |
| 4     | 0.655  | 4       | 0.494      | 0.20            | 0.192           | 6.65       | 8.89          | 73290                       | 76350                        | 98020                       | 102110                       | 1.30       | 8.00         | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

| <b>BEND TEST:</b> |  |  |
|-------------------|--|--|
|-------------------|--|--|



**BEND TEST:**

|                                                                                                                                      |                                                                  |                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------|
| # 8                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br><b>Only Nine Samples<br/>Received and Tested</b> |
| # 6                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack |                                                                       |
| # 4                                                                                                                                  | Sample bend through 180 degrees Satisfactorily without any crack |                                                                       |
|                                                                                                                                      |                                                                  |                                                                       |
|                                                                                                                                      |                                                                  |                                                                       |
| <b>Note: Please always confirm the results of above report on web <a href="http://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a></b> |                                                                  |                                                                       |