Masood

**POWERMECH** 

Solution Pvt. Ltd. Karachi

Client Reference No.: Nil Dated: 29-04-2024 SOM Lab Ref: CED/SOM/4039 (Page 1/5) Dated: 30-04-2024

Test Type: Load Test

Sample Type: Rubber Lined Clamp (Brand: Diamond)

#### **Load Test Results**

| Sr No. | Sample Type                     | Proof Load<br>(Kg) | Remarks   |  |  |  |
|--------|---------------------------------|--------------------|---|--|--|--|
| 1      | Rubber Lined Clamp<br>(Size 4") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |
| 2      | Rubber Lined Clamp<br>(Size 4") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |

**Note:** Please always confirm the results on web <a href="www.uet-civil.edu.pk">www.uet-civil.edu.pk</a>

Masood POWERMECH

Solution Pvt. Ltd. Karachi

Client Reference No.: Nil Dated: 29-04-2024 SOM Lab Ref: CED/SOM/4039 (Page 2/5) Dated: 30-04-2024

Test Type: Load Test

**Sample Type:** Rubber Lined Clamp (Brand: Diamond)

### **Load Test Results**

| Sr No. | Sample Type                     | Proof Load<br>(Kg) | Remarks   |  |  |  |
|--------|---------------------------------|--------------------|---|--|--|--|
| 3      | Rubber Lined Clamp<br>(Size 3") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |
| 4      | Rubber Lined Clamp<br>(Size 3") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |

**Note:** Please always confirm the results on web <a href="https://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a>

Masood POWERMECH

Solution Pvt. Ltd. Karachi

 Client Reference No.: Nil
 Dated: 29-04-2024

 SOM Lab Ref: CED/SOM/4039 (Page 3/5)
 Dated: 30-04-2024

Test Type: Load Test

**Sample Type:** Rubber Lined Clamp (Brand: Diamond)

## **Load Test Results**

| Sr No. | Sample Type                     | Proof Load<br>(Kg) | Remarks   |  |  |  |
|--------|---------------------------------|--------------------|---|--|--|--|
| 5      | Rubber Lined Clamp<br>(Size 2") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |
| 6      | Rubber Lined Clamp<br>(Size 2") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |

**Note:** Please always confirm the results on web <a href="www.uet-civil.edu.pk">www.uet-civil.edu.pk</a>

Masood

POWERMECH

Solution Pvt. Ltd. Karachi

 Client Reference No.: Nil
 Dated: 29-04-2024

 SOM Lab Ref: CED/SOM/4039 (Page 4/5)
 Dated: 30-04-2024

Test Type: Load Test

Sample Type: Sprinkler Clamp (Brand: Diamond)

# **Load Test Results**

| Sr No. | Sample Type                  | Proof Load<br>(Kg) | Remarks   |  |  |  |  |
|--------|------------------------------|--------------------|---|--|--|--|--|
| 1      | Sprinkler Clamp<br>(Size 1") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |  |
| 2      | Sprinkler Clamp<br>(Size 1") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |  |

**Note:** Please always confirm the results on web <a href="www.uet-civil.edu.pk">www.uet-civil.edu.pk</a>

Masood POWERMECH

Solution Pvt. Ltd. Karachi

Client Reference No.: Nil Dated: 29-04-2024 SOM Lab Ref: CED/SOM/4039 (Page 5/5) Dated: 30-04-2024

**Test Type:** Load Test

Sample Type: Sprinkler Clamp (Brand: Diamond)

# **Load Test Results**

| Sr No. | Sample Type                     | Proof Load<br>(Kg) | Remarks   |  |  |  |
|--------|---------------------------------|--------------------|---|--|--|--|
| 3      | Sprinkler Clamp<br>(Size 1 ½")  | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |
| 4      | Sprinkler Clamp<br>(Size 1 ½ ") | 200                | Sample deforms at this proof load but remains safe without any cracking |  |  |  |

**Note:** Please always confirm the results on web <a href="https://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a>

M/S Taha Associates Test Performed By: Dr. /Engr. Asad Ali Gillani

Faisalabad

**SOM Lab** 

Client Reference: Nil Ref: 4011 (Page-1/1)

**Dated**: 26-04-2024 **Dated**: 26-04-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

|       |        | Dia. Area Yield Ultimate Yield Street |            |                 |                 |       | Stress | Ult. S                         | tress                           |                                |                                 | n          |              |                 |         |
|-------|--------|---------------------------------------|------------|-----------------|-----------------|-------|--------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal                               | Calculated | Nominal         | Calculated      | Load  | Load   | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #                                     | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons   | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 2.612  | 8                                     | 0.989      | 0.79            | 0.768           | 30.48 | 37.02  | 85090                          | 87530                           | 103360                         | 106320                          | 1.20       | 8.0          | 15.0            |         |
| 2     | 2.603  | 8                                     | 0.987      | 0.79            | 0.765           | 30.58 | 37.23  | 85380                          | 88170                           | 103930                         | 107330                          | 1.30       | 8.0          | 16.3            |         |
| 3     | 1.460  | 6                                     | 0.739      | 0.44            | 0.429           | 14.53 | 18.93  | 72810                          | 74680                           | 94880                          | 97320                           | 1.20       | 8.0          | 15.0            |         |
| 4     | 1.470  | 6                                     | 0.742      | 0.44            | 0.432           | 14.14 | 18.55  | 70870                          | 72180                           | 92990                          | 94720                           | 1.00       | 8.0          | 12.5            |         |
| 5     | 0.666  | 4                                     | 0.500      | 0.20            | 0.196           | 5.71  | 8.28   | 62950                          | 64240                           | 91280                          | 93140                           | 1.30       | 8.0          | 16.3            |         |
| 6     | 0.661  | 4                                     | 0.497      | 0.20            | 0.194           | 5.73  | 8.36   | 63180                          | 65130                           | 92180                          | 95030                           | 1.40       | 8.0          | 17.5            |         |
| -     | -      | -                                     | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -                                     | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -                                     | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -                                     | -          | -               | -               | ı     | -      | -                              | 1                               | -                              | -                               | -          | ı            | -               |         |
|       | •      | •                                     |            |                 |                 |       | •      |                                | •                               | •                              | •                               |            | •            |                 |         |

## **BEND TEST:**

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

Dr.Khalil Ahmad, PM Test Performed By: Dr./Engr. Nauman Khurram

PHCIP-P&SHD Lhr.(Two Story Pre-fabricated Office Building at PHCIP 05-Montgomery Road Lhr)

SOM Lab

 Client Reference:
 PIU-H/PHCIP/PM/520/2024
 Ref:
 4031 (Page-1/1)

**Dated:** 29-04-2024 **Dated:** 30-04-2024

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

|       | Dia. Area |         | rea        | Yield           | Ultimate        | Yield | Stress | Ult. S                         | stress                          |                                |                                 | n          |              |                 |         |
|-------|-----------|---------|------------|-----------------|-----------------|-------|--------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight    | Nominal | Calculated | Nominal         | Calculated      | Load  | Load   | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft     | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons   | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 0.674     | 4       | 0.502      | 0.20            | 0.198           | 6.42  | 8.61   | 70820                          | 71540                           | 94990                          | 95950                           | 1.20       | 8.0          | 15.0            |         |
| 2     | 0.669     | 4       | 0.501      | 0.20            | 0.197           | 6.39  | 8.66   | 70480                          | 71560                           | 95550                          | 97000                           | 1.30       | 8.0          | 16.3            |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -         | -       | -          | -               | -               | -     | -      | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |           |         |            |                 |                 |       |        |                                |                                 |                                |                                 |            |              |                 |         |

### **BEND TEST:**

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

<u>Nauman</u>

**Test Performed By:** Director Dr. /Engr. **Khaurram** 

M/S Premier Town Developers.(Foundation of Jamia Masjid at Al Hamra Town Lhr)

**SOM Lab** 

**Client Reference:** PTDC/186

Dated:

25-04-2024

Ref:

4032 (Page-1/1)

Dated:

30-04-2024

**Test Specification: Tension Test Test** Test: ASTM-A-615 Sample Type: Gauge Length: 8 inch **Deformed Bar** 

|       |        | D       | ia.        | А               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | Stress                          |            |              | u               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.480  | 6       | 0.744      | 0.44            | 0.435           | 14.58 | 19.95    | 73070                          | 73910                           | 99990                          | 101140                          | 1.20       | 8.0          | 15.0            |         |
| 2     | 1.481  | 6       | 0.744      | 0.44            | 0.435           | 14.60 | 19.98    | 73170                          | 74010                           | 100150                         | 101300                          | 1.40       | 8.0          | 17.5            |         |
| 3     | 0.665  | 4       | 0.498      | 0.20            | 0.195           | 5.63  | 7.72     | 62050                          | 63640                           | 85100                          | 87280                           | 1.10       | 8.0          | 13.8            |         |
| 4     | 0.667  | 4       | 0.500      | 0.20            | 0.196           | 5.68  | 7.75     | 62610                          | 63890                           | 85430                          | 87180                           | 1.10       | 8.0          | 13.8            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

### **BEND TEST:**

| <br>No Bend test performed | Note:-              |
|----------------------------|---------------------|
|                            |                     |
|                            | Only Four Samples   |
|                            | Received and Tested |
|                            |                     |
| ·                          | ·                   |

Project Manager Test Performed By: Dr. /Engr. Asad Ali

Tawasul Developers (Pvt) Ltd Lahore (Creek Tower 6-D Upper Mall Lahore)

SOM Lab

 Client Reference:
 Nil
 Ref:
 4033 (Page-1/1)

 Dated:
 29-04-2024
 Dated:
 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar

|       |        | D       | ia.        | А               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | tress                           |            |              | u               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 2.639  | 8       | 0.994      | 0.79            | 0.776           | 27.19 | 35.68    | 75900                          | 77270                           | 99600                          | 101400                          | 1.50       | 8.0          | 18.8            |         |
| 2     | 1.501  | 6       | 0.749      | 0.44            | 0.441           | 13.78 | 19.37    | 69080                          | 68930                           | 97080                          | 96860                           | 1.30       | 8.0          | 16.3            |         |
| 3     | 0.667  | 4       | 0.500      | 0.20            | 0.196           | 6.75  | 8.63     | 74420                          | 75940                           | 95210                          | 97150                           | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

## **BEND TEST:**

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

Executive Engineer Test Performed By: Dr. /Engr. Nauman Khurram

Highway Div NankanaSahib.(ReConst Bridges on Daig Nullah Village Distt Nankana Sahib)

SOM Lab

 Client Reference:
 584/M/CB
 Ref:
 4034 (Page-1/1)

**Dated:** 23-04-2024 **Dated:** 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar

|       |        | D <u>i</u> a. |            | А               | rea             | Yield | Ultimate Yield Stre | Stress                         | Ult. S                          | tress                          |                                 |            | 'n           |                 |         |
|-------|--------|---------------|------------|-----------------|-----------------|-------|---------------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal       | Calculated | Nominal         | Calculated      | Load  | Load                | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #             | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons                | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 2.670  | 8             | 1.000      | 0.79            | 0.785           | 24.69 | 34.51               | 68930                          | 69370                           | 96330                          | 96940                           | 1.50       | 8.0          | 18.8            |         |
| 2     | 1.504  | 6             | 0.750      | 0.44            | 0.442           | 13.73 | 19.47               | 68830                          | 68520                           | 97590                          | 97150                           | 1.30       | 8.0          | 16.3            |         |
| 3     | 0.670  | 4             | 0.501      | 0.20            | 0.197           | 6.49  | 8.97                | 71610                          | 72700                           | 98920                          | 100430                          | 1.00       | 8.0          | 12.5            |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | ı               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               |                                | -                               | -          | -            | -               |         |
| -     | -      | -             | -          | -               | -               | -     | -                   | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |               |            |                 |                 |       |                     |                                |                                 |                                |                                 |            |              |                 |         |

## **BEND TEST:**

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

Resident Engineer Test Performed By: Dr. /Engr. Nauman Khurram

ECSP Lahore.(Revamping of Children Hospital Lahore)

**SOM Lab** 

 Client Reference:
 ECSP/RE/386/24
 Ref:
 4035 (Page-1/1)

**Dated:** 03-02-2024 **Dated:** 30-04-2024

**Test:** Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar (Amreli Steel)

|       |        | Dia.    |            | Α               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | tress                           |            |              | Ē               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 0.669  | 4       | 0.501      | 0.20            | 0.197           | 6.57  | 8.63     | 72510                          | 73610                           | 95210                          | 96660                           | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

## **BEND TEST:**

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

Sub Divisional officer, Test Performed By: Dr. /Engr. Asad Ali Gillani

MSD No.II,GOR-III Lhr.(Const Of Multistorey Building For Residences For Staff Colony at Chauburgi)

SOM Lab

Client Reference: 338 sd/Gor-III,Lhr Ref: 4036 (Page-1/1)

**Dated:** 14-03-2024 **Dated:** 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar

|       |        | Dia.    |            | A               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | tress                           |            |              | Ē               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 2.671  | 8       | 1.000      | 0.79            | 0.785           | 22.94 | 37.56    | 64030                          | 64440                           | 104870                         | 105540                          | 1.40       | 8.0          | 17.5            |         |
| 2     | 2.664  | 8       | 0.998      | 0.79            | 0.783           | 23.26 | 37.64    | 64940                          | 65520                           | 105070                         | 106010                          | 1.30       | 8.0          | 16.3            |         |
| 3     | 1.490  | 6       | 0.747      | 0.44            | 0.438           | 12.41 | 19.24    | 62190                          | 62470                           | 96420                          | 96860                           | 1.40       | 8.0          | 17.5            |         |
| 4     | 1.487  | 6       | 0.746      | 0.44            | 0.437           | 12.23 | 19.13    | 61320                          | 61740                           | 95910                          | 96560                           | 1.40       | 8.0          | 17.5            |         |
| 5     | 0.658  | 4       | 0.496      | 0.20            | 0.193           | 6.22  | 8.53     | 68570                          | 71060                           | 94090                          | 97500                           | 1.30       | 8.0          | 16.3            |         |
| 6     | 0.658  | 4       | 0.496      | 0.20            | 0.193           | 6.22  | 8.53     | 68570                          | 71060                           | 94090                          | 97500                           | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       | -      | -       | -          | -               | -               | -     | -        | -                              | 1                               | -                              | -                               | -          | -            | -               |         |
|       | -      | -       | -          | -               | -               | -     | -        | -                              | 1                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

## **BEND TEST:**

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

Raja Muhammad Aqeel Test Performed By: Dr. /Engr. Nauman Khurram

Astt Dir.Building Section DHA Gujranwala.(Const Of 10 Marla Villas Block-A)

**SOM Lab** 

 Client Reference:
 111/3/AD Bldgs/Lab/1306
 Ref:
 4037 (Page-1/1)

**Dated:** 03-04-2024 **Dated:** 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar (SJ Steel)

|       |        | D       | ia.        | Α               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | stress                          |            |              | _               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.486  | 6       | 0.746      | 0.44            | 0.437           | 14.85 | 19.44    | 74450                          | 74960                           | 97440                          | 98110                           | 1.50       | 8.0          | 18.8            |         |
| 2     | 1.489  | 6       | 0.747      | 0.44            | 0.438           | 15.49 | 19.83    | 77670                          | 78020                           | 99380                          | 99830                           | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        | •       |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

### **BEND TEST:**

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

Engineer Muhammad Irshad Test Performed By: Dr. /Engr. Nauman Khurram

Dy Dir Dev. DHA Gujranwala.(Const of Sec Comm Shops (Villas Space))

**SOM Lab** 

Client Reference: 111/3/AD/Dev/Techno Time/31 Ref: 4038 (Page-1/1)

**Dated:** 11-03-2024 **Dated:** 30-04-2024

**Test:** Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar (SJ Steel)

|       | -      | D       | ia.        | А               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | tress                           |            |              | ч               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.449  | 6       | 0.736      | 0.44            | 0.426           | 14.34 | 18.17    | 71890                          | 74260                           | 91050                          | 94040                           | 1.40       | 8.0          | 17.5            |         |
| 2     | 1.459  | 6       | 0.739      | 0.44            | 0.429           | 14.55 | 18.37    | 72910                          | 74780                           | 92070                          | 94440                           | 1.40       | 8.0          | 17.5            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | 1      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | 1      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

#### **BEND TEST:**

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

Maj Ghulam Abbas Test Performed By: Dr. /Engr. Nauman Khurram

ADH (QA) Centre Lahore.

**SOM Lab** 

 Client Reference:
 30/61/HD/QA/11001
 Ref:
 4040 (Page-1/1)

**Dated:** 24-04-2024 **Dated:** 30-04-2024

**Test:** Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar (Sheikhoo Steel)

|       |        | D       | ia.        | Α               | rea             | Yield | Ultimate | Yield                          | Stress                          | Ult. S                         | tress                           |            |              | Ē               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.486  | 6       | 0.746      | 0.44            | 0.437           | 13.27 | 18.60    | 66530                          | 66980                           | 93250                          | 93890                           | 1.10       | 8.0          | 13.8            |         |
| 2     | 1.472  | 6       | 0.743      | 0.44            | 0.433           | 13.58 | 19.24    | 68060                          | 69160                           | 96420                          | 97980                           | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | ı          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | 1                               | -                              | -                               | 1          | -            | -               | _       |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

### **BEND TEST:**

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

Sub Divisional officer, Test Performed By: Dr. /Engr. Nauman Khurram

BSD No.16,Lhr.(Const Of Smart Police Station Johar Town Lahore)

**SOM Lab** 

 Client Reference:
 370

 Pated:
 19-02-2024

 Ref:
 4041 (Page-1/1)

 Dated:
 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar

|       |        | D       | a. Area    |                 | rea             | Yield | Yield Ultimate | Yield Stress                   |                                 | Ult. Stress                    |                                 |            |              | _               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load           | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons           | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.514  | 6       | 0.753      | 0.44            | 0.445           | 15.41 | 21.43          | 77260                          | 76390                           | 107400                         | 106200                          | 1.10       | 8.0          | 13.8            |         |
| 2     | 1.492  | 6       | 0.747      | 0.44            | 0.438           | 15.36 | 21.17          | 77000                          | 77350                           | 106130                         | 106610                          | 1.30       | 8.0          | 16.3            |         |
| 3     | 0.684  | 4       | 0.506      | 0.20            | 0.201           | 6.70  | 8.89           | 73850                          | 73490                           | 98020                          | 97530                           | 1.10       | 8.0          | 13.8            |         |
| 4     | 0.676  | 4       | 0.503      | 0.20            | 0.199           | 6.93  | 8.92           | 76440                          | 76820                           | 98360                          | 98850                           | 1.10       | 8.0          | 13.8            |         |
| -     | -      | -       | -          | -               | -               | -     | -              | ı                              | 1                               | -                              | -                               | -          | ı            | ı               |         |
| -     | -      | -       | -          | -               | -               | -     | -              | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -              | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -              | -                              | -                               | -                              | -                               | -          | ı            | ı               |         |
| -     | -      | -       | -          | -               | -               | -     | -              | -                              | -                               | -                              | -                               | -          | ı            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -              | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |                |                                |                                 |                                |                                 |            |              |                 |         |

## **BEND TEST:**

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

Sub Divisional officer, Test Performed By: Dr. /Engr. Nauman Khurram

BSD No.16,Lhr.(Const Of Smart Police Station Quaid-e-Azam Estate Lahore)

**SOM Lab** 

 Client Reference:
 362
 Ref:
 4042 (Page-1/1)

 Dated:
 19-02-2024
 Dated:
 30-04-2024

Test: Tension Test & Bend Test Test Specification: ASTM-A-615

Gauge Length: 8 inch Sample Type: Deformed Bar

|       |        | D       | ia. Area   |                 | rea             | Yield | Ultimate | Yield Stress                   |                                 | Ult. Stress                    |                                 |            |              | ٥               |         |
|-------|--------|---------|------------|-----------------|-----------------|-------|----------|--------------------------------|---------------------------------|--------------------------------|---------------------------------|------------|--------------|-----------------|---------|
| S.No. | Weight | Nominal | Calculated | Nominal         | Calculated      | Load  | Load     | (according to<br>nominal area) | (according to<br>measured area) | (according to<br>nominal area) | (according to<br>measured area) | Elongation | Gauge Length | %age Elongation | Remarks |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons  | Tons     | psi                            | psi                             | psi                            | psi                             | in         | in           | %               |         |
| 1     | 1.468  | 6       | 0.741      | 0.44            | 0.431           | 15.60 | 21.51    | 78180                          | 79810                           | 107810                         | 110060                          | 1.20       | 8.0          | 15.0            |         |
| 2     | 1.465  | 6       | 0.741      | 0.44            | 0.431           | 15.46 | 21.15    | 77510                          | 79130                           | 106020                         | 108240                          | 1.20       | 8.0          | 15.0            |         |
| 3     | 0.667  | 4       | 0.500      | 0.20            | 0.196           | 6.90  | 8.82     | 76100                          | 77660                           | 97230                          | 99220                           | 1.30       | 8.0          | 16.3            |         |
| 4     | 0.673  | 4       | 0.502      | 0.20            | 0.198           | 6.95  | 9.09     | 76660                          | 77440                           | 100270                         | 101280                          | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | ı     | -        | -                              | 1                               | -                              | -                               | -          | ı            | ı               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | 1            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | ı            | ı               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | ı            | -               |         |
| -     | -      | -       | -          | -               | -               | -     | -        | -                              | -                               | -                              | -                               | -          | -            | -               |         |
|       |        |         |            |                 |                 |       |          |                                |                                 |                                |                                 |            |              |                 |         |

### **BEND TEST:**

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