

Ali Yousaf
PM, Shahan Brothers, Gulberg III, Lahore

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

Client Reference: Nil
Dated: 05-05-2020

SOM Lab
Ref: 2470(Page-1/1)
Dated: 06-05-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615
Deformed
Bar

Gauge Length: 8 inch

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 ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.650 | 8 | 0.996 | 0.79 | 0.779 | 27.32 | 37.00 | 76270 | 77350 | 103300 | 104760 | 0.90 | 8.0 | 11.3 | |
| 2 | 1.464 | 6 | 0.740 | 0.44 | 0.430 | 13.86 | 19.08 | 69490 | 71110 | 95650 | 97880 | 1.00 | 8.0 | 12.5 | |
| 3 | 0.665 | 4 | 0.498 | 0.20 | 0.195 | 6.03 | 9.19 | 66550 | 68250 | 101390 | 103990 | 1.00 | 8.0 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

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

Sub Divisional Officer
Buildings Sub Division No. 8, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: 892 / 8th

SOM Lab

Ref: 2471(Page-1/1)

Dated: 27-02-2020

Dated: 06-05-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

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 ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 2.689 | 8 | 1.003 | 0.79 | 0.790 | 19.72 | 30.73 | 55070 | 55070 | 85800 | 85800 | 1.60 | 8.0 | 20.0 | |
| 2 | 1.504 | 6 | 0.750 | 0.44 | 0.442 | 10.93 | 16.62 | 54780 | 54530 | 83290 | 82910 | 1.70 | 8.0 | 21.3 | |
| 3 | 0.668 | 4 | 0.500 | 0.20 | 0.196 | 4.69 | 6.63 | 51710 | 52770 | 73070 | 74560 | 1.50 | 8.0 | 18.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

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

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

Engr M. Naveed Sadiq
Resident Engineer, Orbit Housing, Lahore

Test Performed By: Dr. /Engr.

S. Asad Ali
Gillani

Client Reference: Nil

SOM Lab

Ref: 2472(Page-1/1)

Dated: 06-05-2020

Dated: 06-05-2020

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Deformed

Gauge Length: 8 inch

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 ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 0.651 | 4 | 0.493 | 0.20 | 0.191 | 6.22 | 9.09 | 68570 | 71800 | 100270 | 104990 | 1.00 | 8.0 | 12.5 | |
| 2 | 0.664 | 4 | 0.498 | 0.20 | 0.195 | 5.76 | 8.33 | 63510 | 65140 | 91840 | 94190 | 1.00 | 8.0 | 12.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

| | | |
|-----|--|--|
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | Note:- Only Three Samples Received and Tested |
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Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Waqas Ali
Variant, 25-t-Gulberg- 2, Lahore

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

Client Reference: VA/23/163

SOM Lab 2473(Page-1/1)
Ref:

Dated: 04-05-2020

Dated: 06-05-2020

Test: Tension Test

Test Specification:

ASTM-A-615

Guage Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.486 | 6 | 0.746 | 0.44 | 0.437 | 15.14 | 20.51 | 75880 | 76400 | 102800 | 103510 | 1.00 | 8.0 | 12.5 | |
| 2 | 1.470 | 6 | 0.742 | 0.44 | 0.432 | 14.88 | 19.72 | 74600 | 75980 | 98870 | 100700 | 0.90 | 8.0 | 11.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

BEND TEST:

| | | |
|----|------------------------|---|
| -- | No Bend test performed | Note:- Only Two Samples Received and Tested |
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Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Waqas Ali
Variant, 25-t-Gulberg- 2, Lahore

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

Client Reference: VA/23/162

SOM Lab Ref: 2474(Page-1/1)

Dated: 04-05-2020

Dated: 06-05-2020

Test: Tension Test

Test Specification:

ASTM-A-615

Guage Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia. | | Area | | Yield Load | Ultimate Load | Yield Stress | | Ult. Stress | | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
| | | Nominal | Calculated | Nominal | Calculated | | | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) | | | | |
| | lb/ft | # | in | in ² | in ² | Tons | Tons | psi | psi | psi | psi | in | in | % | |
| 1 | 1.499 | 6 | 0.749 | 0.44 | 0.441 | 16.79 | 22.73 | 84160 | 83960 | 113940 | 113680 | 1.00 | 8.0 | 12.5 | |
| 2 | 1.488 | 6 | 0.746 | 0.44 | 0.437 | 16.11 | 20.00 | 80730 | 81290 | 100250 | 100940 | 1.00 | 8.0 | 12.5 | |
| 3 | 0.594 | 4 | 0.472 | 0.20 | 0.175 | 5.93 | 7.82 | 65420 | 74770 | 86220 | 98540 | 1.00 | 8.0 | 12.5 | |
| 4 | 0.589 | 4 | 0.469 | 0.20 | 0.173 | 5.58 | 6.90 | 61490 | 71090 | 76100 | 87980 | 0.80 | 8.0 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |

BEND TEST:

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

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

