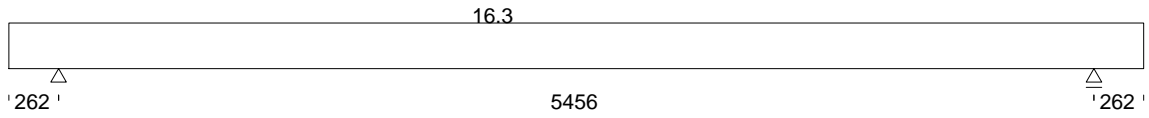


Project : Roger 19.0 kit
 Part : Purlin 1 field



Data input

Total horz. length : 5.980 m
 Centre-to-centre : 0.900 m
 Overhang length L/R : 0.262 0.262 m
 Sideways supports : Contin.
 Inclination roof : 16.3 deg

Material : K24/B

Direct height : 600 mm

Moist class : I inter.
 Safety class : 2 normal

Permanent load : 0.25 kN/m2
 Direct input (a.m: AUTO) (0.25)
 Snow load : 1.00 kN/m2
 Direct input
 Special loads : 1
 Pnt.load R 1.5kN 3.0m -90deg

Deflection End Add
 Without precamber : 1/250 1/333

Beam design data (mm-m3) Result: OK (92%)

W H m3
 60 x 240 0.086

Loads (kN/m')

| Loadcase | | Left | Middle | Right |
|-----------|---|------|--------|-------|
| Permanent | Y | 0.22 | 0.22 | 0.22 |
| Permanent | Z | 0.06 | 0.06 | 0.06 |
| Snow | Y | 0.83 | 0.83 | 0.83 |
| Snow | Z | 0.24 | 0.24 | 0.24 |

Special loads
 Pnt.load R 1.5kN 3.0m -90deg

Reactions

| | | | |
|------|---|---|--------|
| Node | X | Y | Y-axis |
| | m | m | kN |

1.35 * Permanent

| | | | |
|-------|-------|-------|------|
| Left | 0.262 | 0.000 | 1.17 |
| Right | 5.718 | 0.000 | 1.17 |

1.20 * Permanent

1.30 * Snow

| | | | |
|-------|-------|-------|------|
| Left | 0.262 | 0.000 | 4.26 |
| Right | 5.718 | 0.000 | 4.26 |

1.20 * Permanent

1.30 * Repair

| | | | |
|-------|-------|-------|------|
| Left | 0.262 | 0.000 | 1.97 |
| Right | 5.718 | 0.000 | 1.97 |

Sections field 1 of 1 (Y-axis)

| | | | | | | | |
|---|---|----|-------|-------|--------|-----|-------|
| X | Y | h | Axial | Shear | Moment | end | addit |
| m | m | mm | kN | kN | kNm | mm | mm |

1.35S;1.00T;1.00L * Permanent

| | | | | | | | | |
|-------|-------|-----|-------|-------|-------|------|------|---|
| 0.000 | 0.000 | 240 | 0.00 | -0.00 | 0.00 | -0.0 | -0.0 | o |
| 0.131 | 0.000 | 240 | 0.00 | -0.05 | -0.00 | -0.0 | -0.0 | |
| 0.262 | 0.000 | 240 | -0.00 | -0.10 | -0.01 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 0.262 | 0.000 | 240 | 0.00 | 1.07 | -0.01 | -0.0 | -0.0 | * |
| 1.171 | 0.000 | 240 | 0.00 | 0.71 | 0.79 | 3.5 | 1.3 | |
| 2.081 | 0.000 | 240 | 0.00 | 0.36 | 1.28 | 6.0 | 2.3 | |
| 2.990 | 0.000 | 240 | 0.00 | 0.00 | 1.44 | 7.0 | 2.6 | |
| 3.899 | 0.000 | 240 | -0.00 | -0.36 | 1.28 | 6.0 | 2.3 | |
| 4.809 | 0.000 | 240 | -0.00 | -0.71 | 0.79 | 3.5 | 1.3 | |
| 5.718 | 0.000 | 240 | -0.00 | -1.07 | -0.01 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 5.718 | 0.000 | 240 | 0.00 | 0.10 | -0.01 | -0.0 | -0.0 | * |
| 5.849 | 0.000 | 240 | 0.00 | 0.05 | -0.00 | -0.0 | -0.0 | |
| 5.980 | 0.000 | 240 | -0.00 | 0.00 | 0.00 | -0.0 | -0.0 | o |

| X | Y | h | Axial | Shear | Moment | end | addit | |
|-------------------------------|-------|-----|-------|-------|--------|------|-------|---|
| m | m | mm | kN | kN | kNm | mm | mm | |
| 1.20S;1.00T;1.00L * Permanent | | | | | | | | |
| 1.30S;1.00T;1.00L * Snow | | | | | | | | |
| 0.000 | 0.000 | 240 | 0.00 | -0.00 | -0.00 | -0.0 | -0.0 | o |
| 0.131 | 0.000 | 240 | 0.00 | -0.19 | -0.01 | -0.0 | -0.0 | |
| 0.262 | 0.000 | 240 | -0.00 | -0.37 | -0.05 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 0.262 | 0.000 | 240 | 0.00 | 3.89 | -0.05 | -0.0 | -0.0 | * |
| 1.171 | 0.000 | 240 | 0.00 | 2.59 | 2.90 | 9.8 | 7.6 | |
| 2.081 | 0.000 | 240 | 0.00 | 1.30 | 4.67 | 16.9 | 13.1 | |
| 2.990 | 0.000 | 240 | 0.00 | 0.00 | 5.25 | 19.4 | 15.0 | |
| 3.899 | 0.000 | 240 | -0.00 | -1.30 | 4.67 | 16.9 | 13.1 | |
| 4.809 | 0.000 | 240 | -0.00 | -2.59 | 2.90 | 9.8 | 7.6 | |
| 5.718 | 0.000 | 240 | -0.00 | -3.89 | -0.05 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 5.718 | 0.000 | 240 | 0.00 | 0.37 | -0.05 | -0.0 | -0.0 | * |
| 5.849 | 0.000 | 240 | 0.00 | 0.19 | -0.01 | -0.0 | -0.0 | |
| 5.980 | 0.000 | 240 | -0.00 | 0.00 | 0.00 | -0.0 | -0.0 | o |

1.20S;1.00T;1.00L * Permanent
 1.30S;0.00T;0.00L * Repair

| | | | | | | | | |
|-------|-------|-----|-------|-------|-------|------|------|---|
| 0.000 | 0.000 | 240 | 0.00 | -0.00 | 0.00 | -0.0 | -0.0 | o |
| 0.131 | 0.000 | 240 | 0.00 | -0.05 | -0.00 | -0.0 | -0.0 | |
| 0.262 | 0.000 | 240 | -0.00 | -0.09 | -0.01 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 0.262 | 0.000 | 240 | 0.00 | 1.88 | -0.01 | -0.0 | -0.0 | * |
| 1.171 | 0.000 | 240 | 0.00 | 1.57 | 1.52 | 3.5 | 1.3 | |
| 2.081 | 0.000 | 240 | 0.00 | 1.25 | 2.77 | 6.0 | 2.3 | |
| 2.990 | 0.000 | 240 | 0.00 | 0.94 | 3.73 | 7.0 | 2.6 | |
| 3.899 | 0.000 | 240 | -0.00 | -1.25 | 2.77 | 6.0 | 2.3 | |
| 4.809 | 0.000 | 240 | -0.00 | -1.57 | 1.52 | 3.5 | 1.3 | |
| 5.718 | 0.000 | 240 | -0.00 | -1.88 | -0.01 | -0.0 | -0.0 | * |
| (| | | | | | | | |
| 5.718 | 0.000 | 240 | 0.00 | 0.09 | -0.01 | -0.0 | -0.0 | * |
| 5.849 | 0.000 | 240 | 0.00 | 0.05 | -0.00 | -0.0 | -0.0 | |
| 5.980 | 0.000 | 240 | -0.00 | -0.00 | -0.00 | -0.0 | -0.0 | o |

Checks field 1 of 1

Overview of checks performed:

Bending and/or axial force (MAX) : 0.55
 Shear force (MAX) : 0.24
 Deflection total load (Y) (MAX) : 0.89
 Additional deflection (Y) (MAX) : 0.92