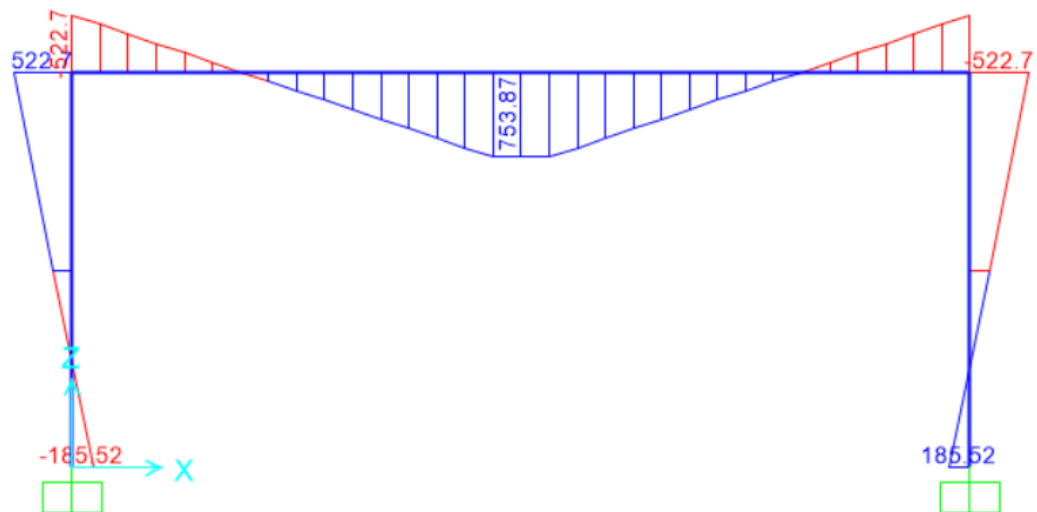
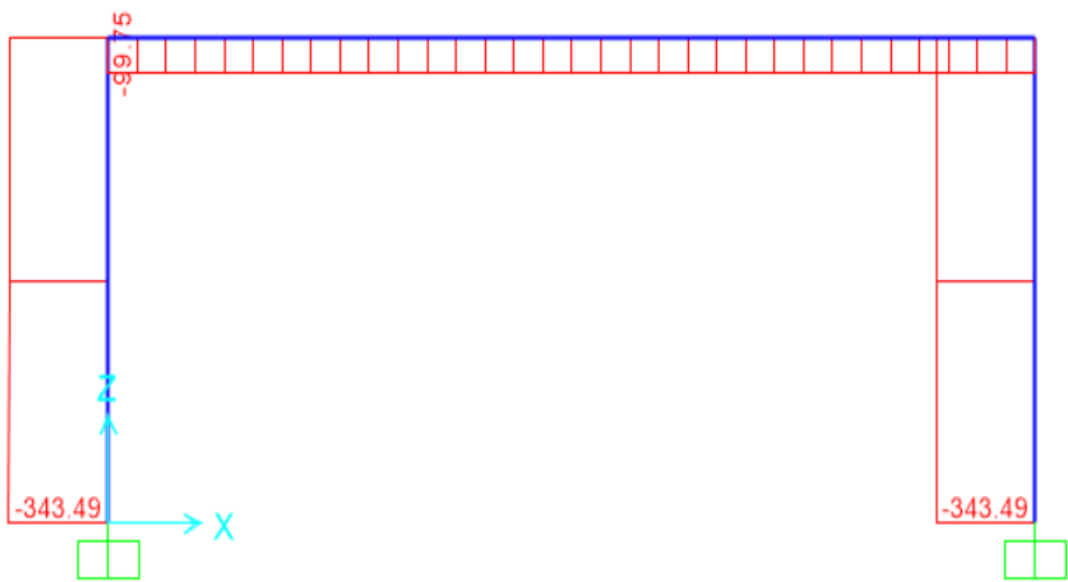
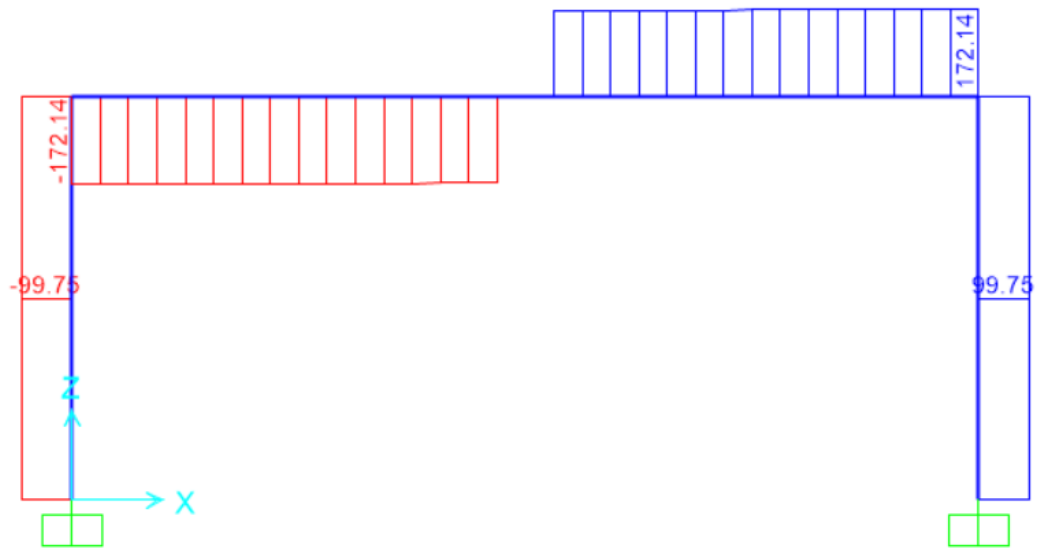


MAX MOMENT





Case

DL+LL

Items

Major (V2 and M3)

Single valued

End Length Offset (Location)

I-End:

0. m

(0. m)

J-End:

0. m

(16. m)

Display Options

☐ Scroll for Values
 ☒ Show Max

Equivalent Loads - Free Body Diagram (Concentrated Forces in Tonf, Concentrated Moments in Tonf-m)

The diagram shows a horizontal beam of length 16m. A distributed load of 0.518 Tonf/m is applied downwards. At the left end (0m), there is a counter-clockwise moment of 522.7 Tonf-m and an upward reaction of 172.14 Tonf. At 8m, there is a downward point load of 168.168 Tonf. At the right end (16m), there is an upward reaction of 340.14 Tonf and a clockwise moment of 522.7 Tonf-m.

Dist Load (2-dir)

0.518 Tonf/m

at 10. m

Positive in -2 direction

Resultant Shear

The shear force diagram shows a constant negative shear of -340.1443 Tonf from 0m to 8m, and a constant positive shear of 340.1443 Tonf from 8m to 16m.

Shear V2

340.1443 Tonf

at 16. m

Resultant Moment

The bending moment diagram shows a parabolic curve with a maximum negative moment of -753.87222 Tonf-m at 8m. The moment is zero at the ends (0m and 16m).

Moment M3

753.87222 Tonf-m

at 8. m

Deflections

The deflection diagram shows a smooth curve with a maximum downward deflection of 0.027345 m at 8m.

Deflection (2-dir)

0.027345 m

at 8. m

Positive in -2 direction

☐ Absolute
 ☐ Relative to Beam Minimum
 ☒ Relative to Beam Ends

Reset to Initial Units

Done

Units

Tonf, m, C