

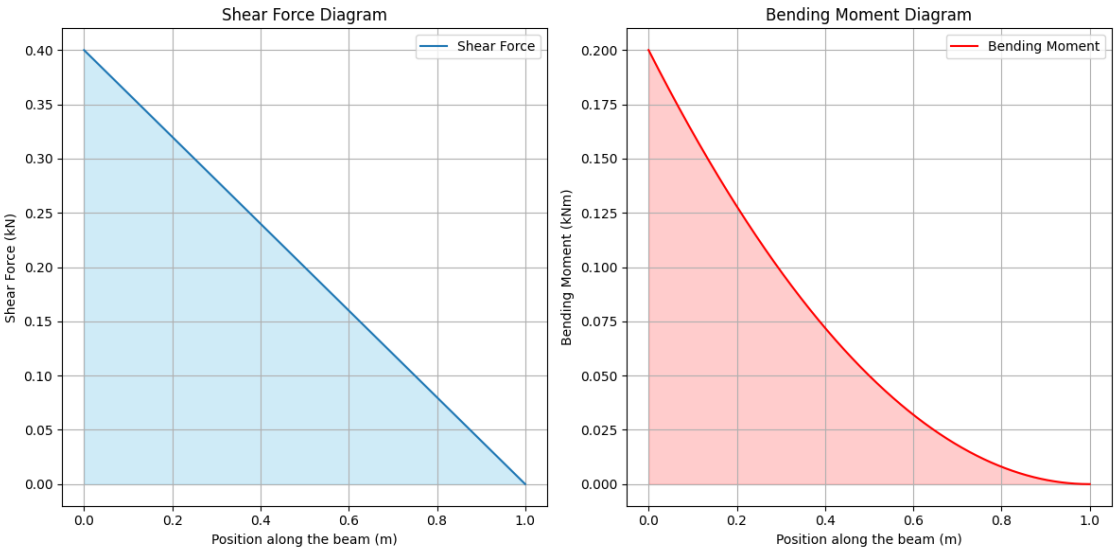
JOB TITLE			ITEM Structural Calculations		
DESIGNED- MM	DATE	CHECKED- MM	JOB NO. 0	SHEET 1	REV

Span = 1.0 m

Effective length = 1.20 m

Allowable Deflection = 2.78 mm

Loading Type	Magnitude (kN/m^2 or kN)	Distance (m)	Point Loading (kN)	Factored Point Loading (kN)	Total Loading (kN/m)	Factored Loading (kN/m)
Floor	2.00	3.00	-	-	6.00	9.30
Self-weight	0.40	1.00	-	-	0.40	0.56
Point Load	-	-	4.00	6.00	-	-
Total	-	-	4.00	6.00	6.40	9.86



JOB TITLE			ITEM Structural Calculations		
DESIGNED- MM	DATE	CHECKED- MM	JOB NO. 0	SHEET 2	REV

Maximum Factored Moment = 10.80 kNm

Minimum Second Moment of Area required = 421.46 cm⁴

Therefore Use Beam : 127x76x13 UB

Moment of Beam Chosen at Effective Length of 1.5m = 18.0 kNm

Second Moment of Area of Beam Chosen = 473 cm⁴

Reaction at Fixed End = 10.40 kN

Moment at Fixed End = 7.20 kN