

Simplified Beam Analysis Report



Software: SkyCiv Beam v3.3.2

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Load Combination: DL

RESULT SUMMARY

Check	Status	Limit	Ratio	Max
Deflection	PASS	L/250	0.294	L/849
Custom Stress Limit	PASS	250 MPa	0.062	15.494 MPa
Material Yield	PASS	260 MPa	0.06	15.494 MPa
Material Strength	PASS	410 MPa	0.038	15.494 MPa

ANALYSIS SUMMARY

Reactions

Support at	R _x (kN)	R _y (kN)	M (kN-m)
0	0	9.622	6.972
2.5	0	7.878	0

Force Extremes

Result	Max	Min
Bending Moment	5.056 kN-m	-6.972 kN-m
Shear	9.622 kN	-3.503 kN
Displacement Y	2.518 mm	-0.269 mm

Stress Extremes

Result	Max (MPa)	Min (MPa)
Bending Stress	15.494	-15.494
Shear Stress Total	7.167	0
Max Combined Normal Stress	15.494	0
Min Combined Normal Stress	0	-15.494