

JOB TITLE 1 Downside			ITEM Structural Calculations		
DESIGNED- MM	DATE Sep 24	CHECKED- MM	JOB NO. 24356	SHEET 1	REV

STEEL LOUNGE CALCULATION

Try 150x100x5mm RHS

Effective length = 7.00 m

Total Reaction, R = 1.00 kN

Total Moment, M = R(0.1+w) = 0.17 kNm

Compressive Force Capacity, Fc = 268.00 kN

Moment Capacity, Mc = 42.20 kNm

$R/F_c + M/M_c = 0.01 < 1$

Therefore use: 150x100x5mm RHS