ANALYSIS V5.05 — Engineering Building & Infrastructure Pty Ltd

Geometry for (Basement Beam Span): Concrete Fixed-End Beam

Description =	300mm (D) x 1000mm (W) beam		Ix =	2250	x10⁶ mm⁴
Span (L) =	5000	mm			
Span type =	F	(S)imple,(E)xt,(I)nt,(C)ant,(P)rop,(F)ixed,(O)ther	Ag =	300000	mm²
Material type =	C	(T)imber,(S)teel,(C)onc.,(SC)comp. steel,(O)ther	Density =	24.5175	kN Modified to match 2500*9.807/1000
			E =	29900	MPa

Loading

Uniform loads (kN/m)

Uniform loads	UDL	Partial 1	Partial 2
Dead load (wdl) =	36.00		
Live load (wll) =	30.00		
Start from LHS (mm) =	0		
End from LHS (mm) =	5000		
S.Wt =	0.00	kN/m	
Ultimate load (w*) =	48.60	0.00	0.00

Point loads (kN)

Point loads	PL 1	PL 2	PL 3
Dead load (pdl) =			
Live load (pll) =			
Pos. from LHS (mm) =			
Ultimate load (p*) =	0.00	0.00	0.00

Include S.Wt = N (Y)es,(N)o

Strength loadcase = D (D)ead Only,(C)omb.

Live Load type =	Floor	(Concrete)		
Short term LL (Ψsu) =	0.70	(Ψsp) =	1.00	
Long term LL (Ψlu) =	0.40	(Ψlp) =	0.60	
Actual LL (Ψsa) =	0.70	(Ψla) =	0.40	

Results at 4782mm from LHS

Position of result (x) = 4782 mm

1.35*G analysed, Comb. case to be checked

	Left	At x	Right	Max	At	Min	At	Units	
Rdl	90.00		90.00					kN	
Rll	75.00		75.00					kN	
R*	121.50		121.50					kN	
M*	-101.25	-75.94	-101.25	50.63	2500	-101.25	0	kNm	
V*	121.50	-110.91	-121.50	121.50	0			kN	Span /
δdl	0.00	0.02	0.00	0.87	2500	0.00	0	mm	5741
δll	0.00	0.02	0.00	0.73	2500	0.00	0	mm	6889
δdl+Ψs*δll	0.00	0.04	0.00	1.38	2500	0.00	0	mm	3626

δPll/δTot.ll = 0.000

Graphs

* Deflections are Gross Ig immediate - assessment of long term effects to be considered