

4" Gypsum Partion Wall

Ceiling Height	9 ft
studs 2x4 @ 12	2 psf
Gypsum board	4 psf
1/2" both sides	
Insulation	0.5 psf
Total	6.5 psf
Uniform load of one Storey Wall	58.5 plf
Two Storey Wall	117 plf
	0.117 k/ft

DL	LL
Psf	Psf
Roof	15 30
First Floor	16 50
Ground Floor	18 50
Total	49 130
DL+LL	179

Floor DL

3/4" finish wood	3
Wood Sheating 3/4"	3
Ceiling Gypsum board	3
Floor Joist 2x6 @12	4
Misc.	3
	16 psf

Roof DL

Shingles asphalt	3
Wood Sheating 3/4"	3
Ceiling Gypsum board	3
Wood Truss	1
Roof Beams 2x6	4
Misc.	1
	15 psf

Beam L=	8.16 ft
Tributary Width =	11.65 ft
No of Stories =	3
DL =	49 psf
LL =	130 psf
Total Load =	179 psf

Floor Load on Beam =	2085.35 lb/ft
	2.08535 Kip/ft
Wall Self load	0.117 Kip/ft
Total Load on Beam W =	2.20235 Kip/ft