

Load Calcs for Exterior Grade Beams

Snow Loads = 9.5 ft. x 5 psf (Snow) = 47.5 #/lf (Snow)

LIVE LOADS:

Roof = 9.5ft x 20 psf (Roof Live Load) = 190 #/lf (Roof Live Load)

Living Space = 40 psf x 7.5 ft = 300 #/lf (Live Load)

DEAD LOADS :

Floor Framing : 2x12 @ 16" O.C. = 3.5 psf x 7.5 ft = 26.25 #/lf

Floor Plywood : 3/4" = 2.5 psf x 7.5 ft = 18.75 #/lf

Floor Carpet and Pad: 2 psf x 7.5 ft. = 15 #/lf

Walls 2x4 studs @ 16" o.c. = 12 psf x 7.5 ft. = 90 #/lf

Ceiling Framing: 2x8 @ 16" O.C. w/insul = 2.2 psf x 7.5 ft. = 16.5 #/lf

Roof 2x8 rafters @ 16" O.C., shingles, felt, sheathing  
8 psf x x 7.5 ft = 60 #/lf

Concrete Spread Footing 4.3 s.f. x 150 pcf = 645 #/lf

Total Dead Loads = 871.5 #/lf (Dead Load)

**Soils have a factor of safety built into the formula, Total Loads to Exterior Grade Beam are =**

**(871.5 +300+190+47.5) #/lf = 1409 #/lf / 2ft wide spread footing = 704.5 psf and the report allows for 750 psf**