Span Calculations

100 psf @ 12″ Span

W = 100 psf

w = 100 psf x .5ft = 50 plf

M = (1/8) wl2

M = (1/8) 50 x (l)2 = 6.25 ft-lb for 100 psf at 12″ o/c span

60 psf @ 15″ Span

W = 60 psf

w = 60 psf x .5ft = 30 plf

M = (1/8) wl2

M = (1/8) 50 x (l.25)2 = 5.86 ft-lb for 60 psf at 15″ o/c span

50 psf @ 16″ Span

W = 50 psf

w = 50 psf x .5ft = 25 plf

M = (1/8) wl2

M = (1/8) 50 x (l.33)2 = 5.56 ft-lb for 50 psf at 16″ o/c span