



Coastal Construction Manual

FORMULA CALCULATOR

11.11 Seismic Base Shear by the Simplified Analysis Procedure

W :		V =	lb
R :			
S_{DS} :			

$$V = 1.2S_{DS}W/R$$

V = seismic base shear in lb

W = Effective Seismic Weight of the building in lb from Steps 4 and 5

R = Response Modification Coefficient of structural system

S_{DS} = Design Spectral Response Acceleration, calculated using the short-period maximum considered earthquake spectral response seismic acceleration from Step1 and the Site Class from Step2