

Bearing capacity of foundation soil (Stage of construction 2)

Design load acting at the center of footing bottom

No.	Moment [lbfft/ft]	Norm. force [lbf/ft]	Shear Force [lbf/ft]	Eccentricity [-]	Stress [psf]
1	5779.7	6568.48	2437.40	0.147	1549.1

Service load acting at the center of footing bottom

No.	Moment [lbfft/ft]	Norm. force [lbf/ft]	Shear Force [lbf/ft]
1	5779.7	6568.48	2437.40

Verification of foundation soil

Stress in the footing bottom : rectangle

Eccentricity verification

Max. eccentricity of normal force $e = 0.147$

Maximum allowable eccentricity $e_{alw} = 0.333$

Eccentricity of the normal force is SATISFACTORY

Verification of bearing capacity

Max. stress at footing bottom $\sigma = 1549.1$ psf

Bearing capacity of foundation soil $R_d = 6000.0$ psf

Safety factor = 3.87 > 1.00

Bearing capacity of foundation soil is SATISFACTORY

Overall verification - bearing capacity of found. soil is SATISFACTORY

Slope stability analysis

Input data

Project

Settings

USA - Safety factor (2)

Stability analysis

Verification methodology : Safety factors (ASD)

Earthquake analysis : Standard

Safety factors	
Seismic design situation	
Safety factor :	$SF_s = 1.00$ [-]