



















**Pole Footing Embedded in Soil**

File = Z:\VISIGN-92018\JTS-74-1 ECG  
 ENERCALC, INC 1983-2017 Build:10.17.8.29 Ver:10.17.8.29  
 JTS INC.

**Code References**

Calculations per IBC 2015 1807.3, CBC 2016, ASCE 7-10  
 Load Combinations Used : IBC 2015

**General Information**

Pole Footing Shape ..... Circular  
 Pole Footing Diameter ..... 30.0 in  
 Calculate Min. Depth for Allowable Pressures  
 No Lateral Restraint at Ground Surface  
 Allow Passive ..... 200.0 psf  
 Max Passive ..... 1,500.0 psf

**Controlling Values**

Governing Load Combination : +D+0.60W

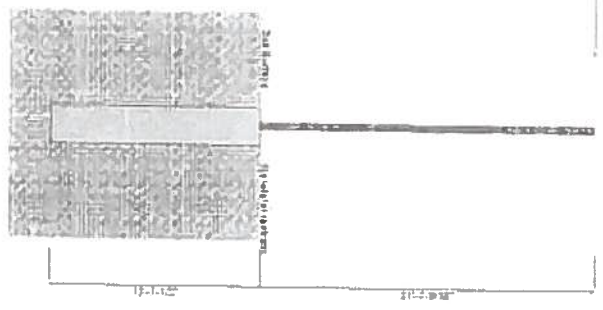
Lateral Load Moment  
 4.806 k  
 103.954 k-ft

NO Ground Surface Restraint

Pressures at 1/3 Depth  
 Actual 905.66 psf  
 Allowable 905.76 psf

Minimum Required Depth 13.625 ft

Footing Base Area 4.809 ft<sup>2</sup>  
 Maximum Soil Pressure 0.2375 ksf



**Applied Loads**

Load Type	Value (k)	Value (k/ft)	Value (k/ft)	Value (k)
D : Dead Load	k	k/ft	k/ft	1.166 k
L : Roof Live	k	k/ft	k	k
L : Live	k	k/ft	k	k
S : Snow	k	k/ft	k/ft	k
W : Wind	8.010 k	k/ft	k/ft	k
E : Earthquake	k	k/ft	k/ft	k
H : Lateral Earth	k	k/ft	k/ft	k
Load distance above ground surface	21.630 ft	ft	ft	ft
TOP of Load above ground surface				
BOTTOM of Load above ground surface				

**Load Combination Results**

Load Combination	Forces @ Ground Surface		Required Depth - (ft)	Pressure at 1/3 Depth		Soil Increase Factor
	Loads - (k)	Moments - (ft-k)		Actual - (psf)	Allow - (psf)	
D Only	0.000	0.000	0.13	0.0	0.0	1.000
+D+0.60W	4.806	103.954	13.63	905.7	905.8	1.000
+D-0.60W	4.806	103.954	13.63	905.7	905.8	1.000
+D+0.450W	3.605	77.965	12.25	812.2	812.6	1.000
+D-0.450W	3.605	77.965	12.25	812.2	812.6	1.000
+0.60D+0.60W	4.806	103.954	13.63	905.7	905.8	1.000
+0.60D-0.60W	4.806	103.954	13.63	905.7	905.8	1.000
+0.60D	0.000	0.000	0.13	0.0	0.0	1.000