

# **Stress Distribution Analysis Report**

## **PEYSANJ 2** **geotechnical engineering software**

developed by : Alireza Afkhami ([www.afkhami.com](http://www.afkhami.com))

---

Project : N.A.  
Client : N.A.  
Location : N.A.  
Code : N.A.



**Stress Distribution Analysis Report**

B (m) : 2  
Q (kg/cm<sup>2</sup>) : 5

L (m) : 3  
Calculation method : Rectangle Uniform Load

~~~~~  
i1=0.83 , i2=2.226  
i=(i1+i2)/(4\*3.141593)=0.243  
Delta P at Z=0.4 m is : 4.864 kg/cm2  
~~~~~  
i1=1.163 , i2=1.52  
i=(i1+i2)/(4\*3.141593)=0.214  
Delta P at Z=0.8 m is : 4.271 kg/cm2  
~~~~~  
i1=1.132 , i2=1.047  
i=(i1+i2)/(4\*3.141593)=0.173  
Delta P at Z=1.2 m is : 3.468 kg/cm2  
~~~~~  
i1=0.973 , i2=0.742  
i=(i1+i2)/(4\*3.141593)=0.136  
Delta P at Z=1.6 m is : 2.73 kg/cm2  
~~~~~  
i1=0.802 , i2=0.543  
i=(i1+i2)/(4\*3.141593)=0.107  
Delta P at Z=2 m is : 2.141 kg/cm2  
~~~~~  
i1=0.654 , i2=0.411  
i=(i1+i2)/(4\*3.141593)=0.085  
Delta P at Z=2.4 m is : 1.695 kg/cm2  
~~~~~  
i1=0.535 , i2=0.319  
i=(i1+i2)/(4\*3.141593)=0.068  
Delta P at Z=2.8 m is : 1.36 kg/cm2  
~~~~~  
i1=0.442 , i2=0.254  
i=(i1+i2)/(4\*3.141593)=0.055  
Delta P at Z=3.2 m is : 1.107 kg/cm2  
~~~~~  
i1=0.369 , i2=0.206  
i=(i1+i2)/(4\*3.141593)=0.046  
Delta P at Z=3.6 m is : 0.915 kg/cm2  
~~~~~  
i1=0.311 , i2=0.171  
i=(i1+i2)/(4\*3.141593)=0.038  
Delta P at Z=4 m is : 0.766 kg/cm2  
~~~~~  
i1=0.265 , i2=0.143  
i=(i1+i2)/(4\*3.141593)=0.032  
Delta P at Z=4.4 m is : 0.649 kg/cm2  
~~~~~  
i1=0.228 , i2=0.122  
i=(i1+i2)/(4\*3.141593)=0.028  
Delta P at Z=4.8 m is : 0.556 kg/cm2  
~~~~~  
i1=0.198 , i2=0.105  
i=(i1+i2)/(4\*3.141593)=0.024  
Delta P at Z=5.2 m is : 0.482 kg/cm2  
~~~~~  
i1=0.173 , i2=0.091  
i=(i1+i2)/(4\*3.141593)=0.021  
Delta P at Z=5.6 m is : 0.421 kg/cm2  
~~~~~  
i1=0.153 , i2=0.08  
i=(i1+i2)/(4\*3.141593)=0.019  
Delta P at Z=6 m is : 0.37 kg/cm2  
~~~~~  
i1=0.136 , i2=0.07  
i=(i1+i2)/(4\*3.141593)=0.016  
Delta P at Z=6.4 m is : 0.328 kg/cm2  
~~~~~  
i1=0.121 , i2=0.063  
i=(i1+i2)/(4\*3.141593)=0.015  
Delta P at Z=6.8 m is : 0.293 kg/cm2  
~~~~~  
i1=0.109 , i2=0.056  
i=(i1+i2)/(4\*3.141593)=0.013  
Delta P at Z=7.2 m is : 0.263 kg/cm2  
~~~~~  
i1=0.098 , i2=0.051

Project : N.A.  
Client : N.A.  
Location : N.A.  
Code : N.A.



### Stress Distribution Analysis Report

$i = (i_1 + i_2) / (4 * 3.141593) = 0.012$   
Delta P at Z=7.6 m is : 0.237 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.089$  ,  $i_2 = 0.046$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.011$   
Delta P at Z=8 m is : 0.215 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.081$  ,  $i_2 = 0.042$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.01$   
Delta P at Z=8.4 m is : 0.196 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.074$  ,  $i_2 = 0.038$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.009$   
Delta P at Z=8.8 m is : 0.179 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.068$  ,  $i_2 = 0.035$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.008$   
Delta P at Z=9.2 m is : 0.164 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.063$  ,  $i_2 = 0.032$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.008$   
Delta P at Z=9.6 m is : 0.151 kg/cm<sup>2</sup>  
~~~~~  
 $i_1 = 0.058$  ,  $i_2 = 0.03$   
 $i = (i_1 + i_2) / (4 * 3.141593) = 0.007$   
Delta P at Z=10 m is : 0.139 kg/cm<sup>2</sup>  
~~~~~

