



USER MANUAL

PLPak Version 1.01

**STRUCTURAL ANALYSIS SOFTWARE USING BOUNDARY
ELEMENTS METHOD**

PLPAK basic tutorials

Tutorial 16 – PLGen soil support

CONTACT DETAILS:

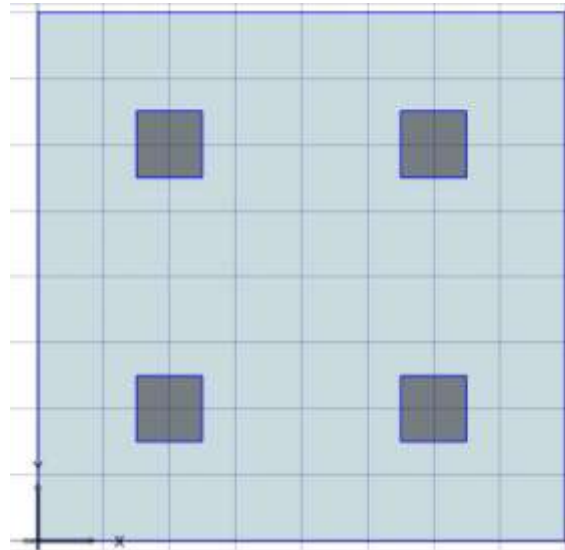
www.be4e.com

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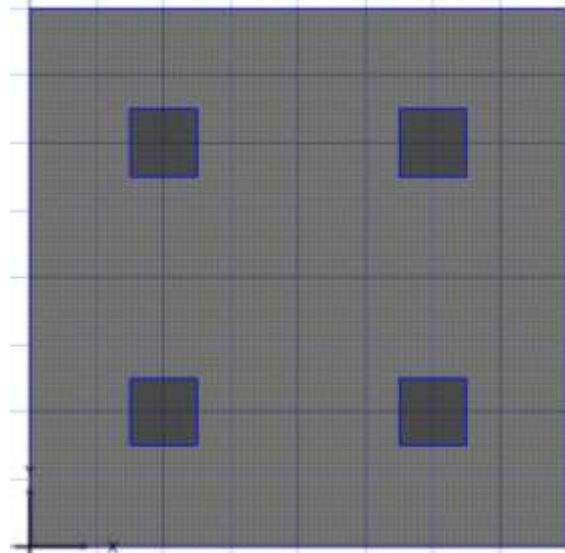
Tutorial 16

The objective of this tutorial is to discuss modelling soil support and rafts in the PLGen.

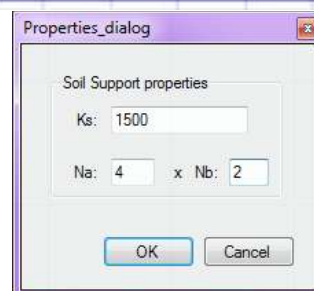
I – In PLGen draw a slab and four column loads.



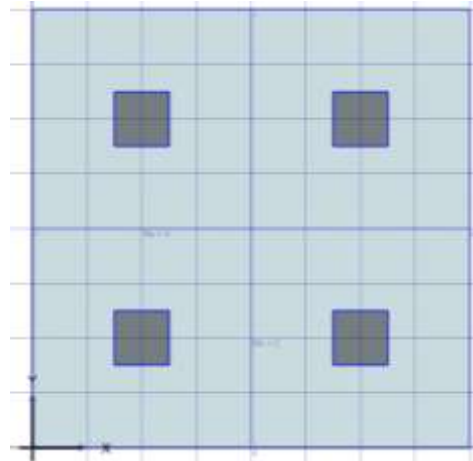
II – Draw a square on top of the slab and define it as Soil Support.



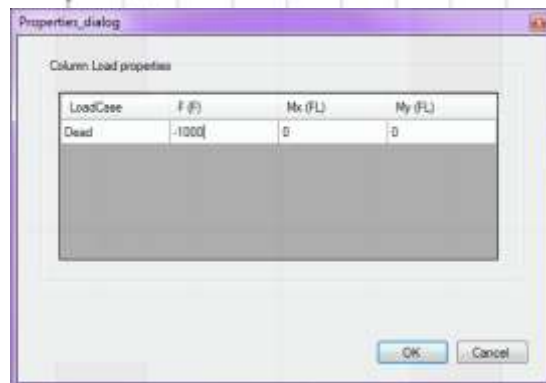
III – Under Select mode right-click on the soil support to open its properties dialogue box and keep the K_s of the modulus of sub grade reaction at 1500 kN/m^3 . Change the divisions of N_a to 4 and N_b to 2.



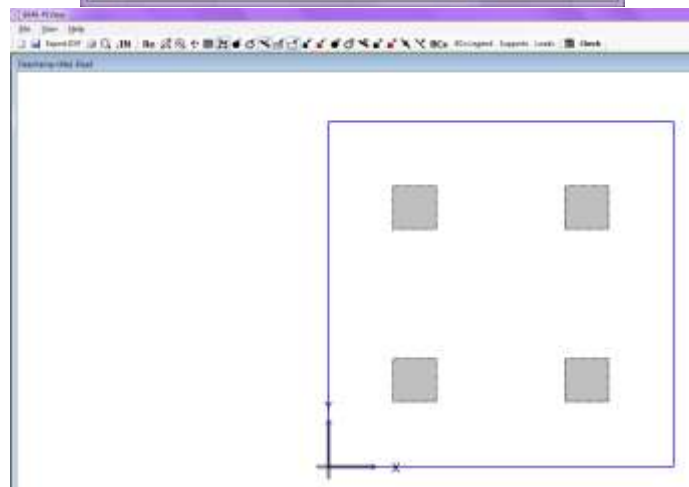
IV - Click Divisions to view the directions of the divisions



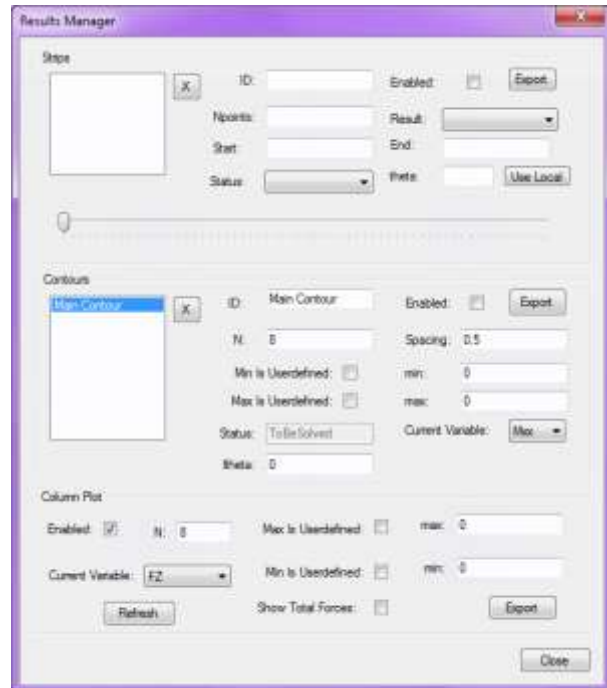
V - Right click on the column loads and enter in the force of the column as -1000 kN. Select the other column loads and using match, match the column loads to the adjusted one.



VI - Click on BE Model to view the divisions. Disable show supports to hide the soil support.



VII – Back in PLGen run the model then run the .exe command line solver. Open the model in the PLPost. In PLPost, open the Results Manager.



VIII – Click on Reactions to show the reactions. The plot becomes as shown.

