Validity Check

Internal layer: (X_1, Y_1), W_1, H_1, t_1

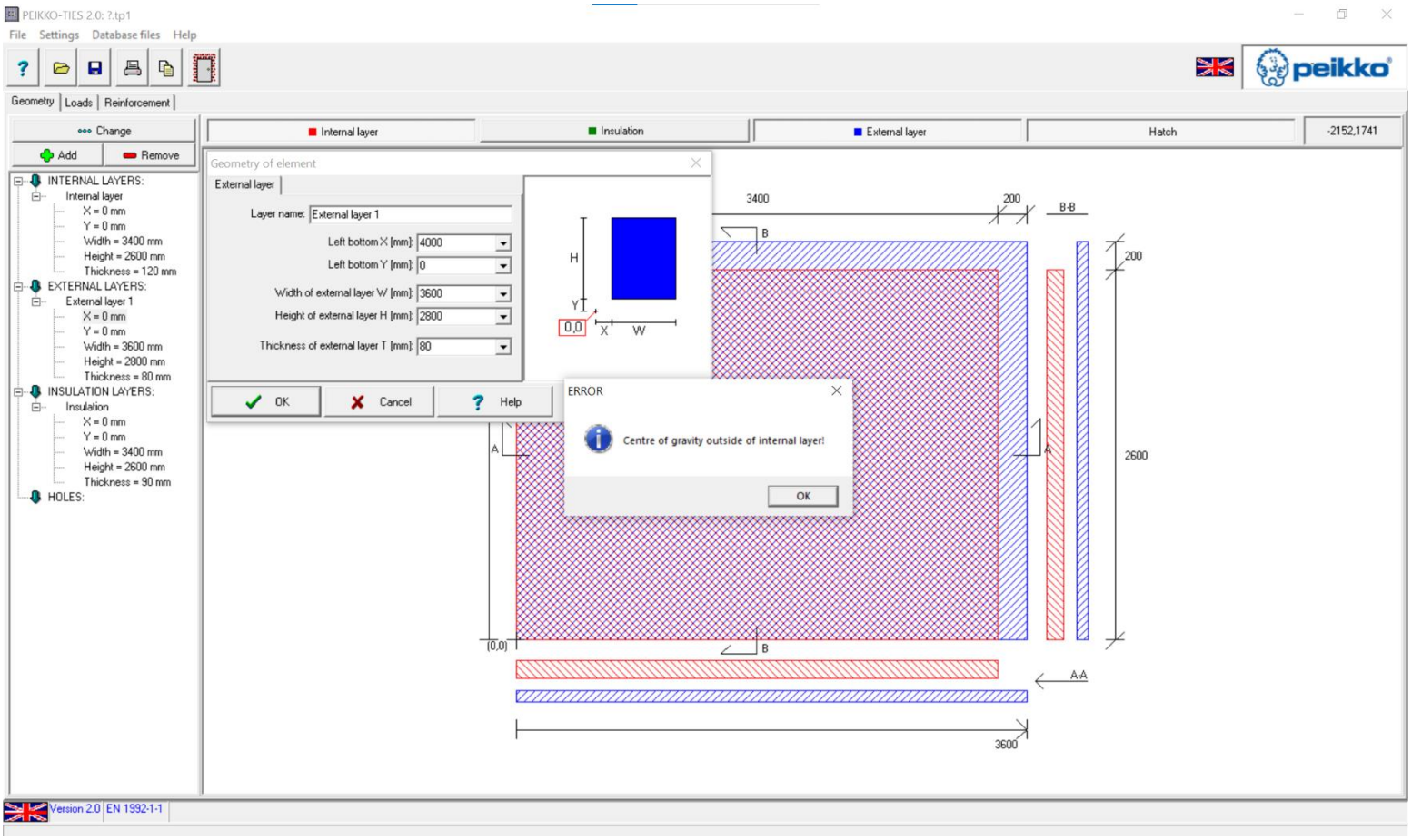
External layer: (X_2, Y_2), W_2, H_2, t_2 : inputs

Insulation layer: t_3

Holes: (X_4, Y_4), W_4, H_4, $t_4 = t_1 + t_2 + t_3$

1- The dimensions of the external layer should be chosen so that the center of gravity is not outside the Internal layer.

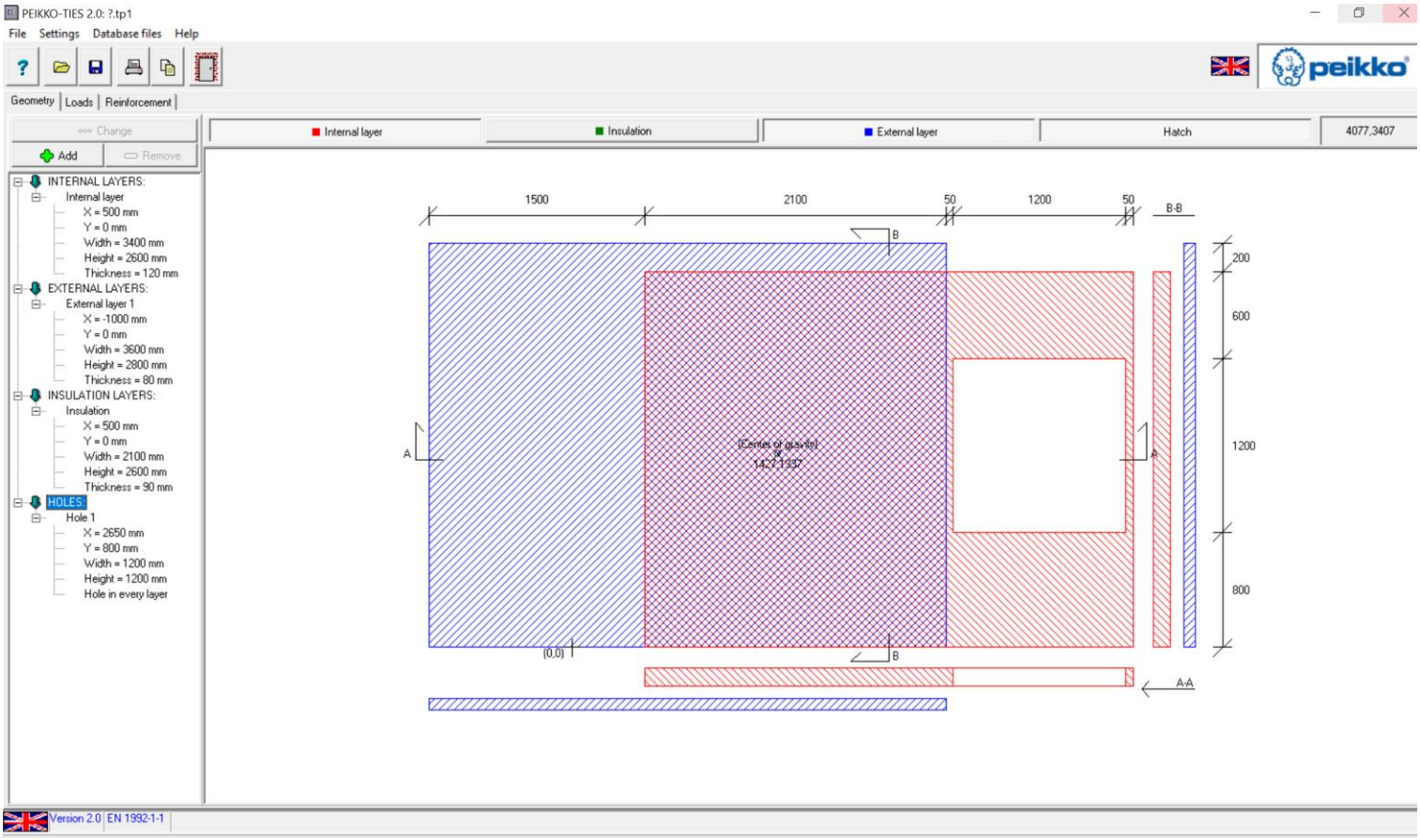
- center of gravity can be found by summing (Σ) the multiplication of the distance by the weight and dividing it by the summation of all weights.



2- The insulation layer is located between the external layer and internal layer and changes with the changes in the dimensions of the external layer or internal layer. We are only able to change the thickness of the insulation layer.

3- The dimensions of the insulated layer are equal to the interface between the outer and inner layers.

4- Holes have to be located in the external layer or internal layer or both.



PEIKKO-TIES 2.0: ?.tp1

File Settings Database files Help

Geometry | Loads | Reinforcement

Change

Add Remove

- INTERNAL LAYERS:
  - Internal layer
    - X = 500 mm
    - Y = 0 mm
    - Width = 3400 mm
    - Height = 2600 mm
    - Thickness = 120 mm
- EXTERNAL LAYERS:
  - External layer 1
    - X = -1000 mm
    - Y = 0 mm
    - Width = 3600 mm
    - Height = 2800 mm
    - Thickness = 80 mm
- INSULATION LAYERS:
  - Insulation
    - X = 500 mm
    - Y = 0 mm
    - Width = 2100 mm
    - Height = 2600 mm
    - Thickness = 90 mm
- HOLES:
  - Hole 1
    - X = -800 mm
    - Y = 800 mm
    - Width = 1200 mm
    - Height = 1200 mm
    - Hole in every layer

Internal layer | Insulation | External layer | Hatch | 4501,3279