BAKHTI Software Ltd
Civil engineering software development
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Project:

Client:
Location:
Date: 2026-07-28

Settlement: Linear elasticity

Standard: Eurocode 7: NF P 94-261

Formulas:

$$s = c_f \frac{1-\nu^2}{E} B\ q$$

Detailed Calculations:

The width of the foundation; $B = 2$ m

The effective vertical stress (uniform or average) applied by the foundatic; $q = 250$ kPa

A coefficient depending on the shape of the foundation; $c_f = 25$

The drained or undrained Young′s modulus of the soil; $E = 135$ MPa

The drained or undrained Poisson′s ratio of the soil; $\nu = 0,33$

Results:

The settlement of the foundation; S= 8,25 cm ✅