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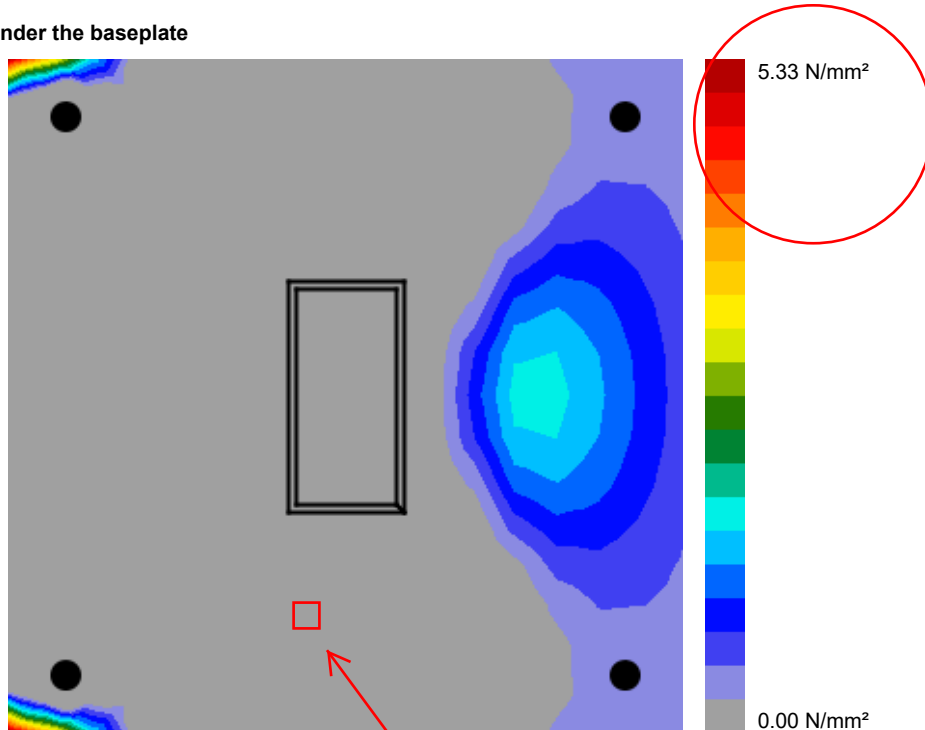
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 Date: 16.06.2022

**2.5 Concrete**

Decisive load combination: 2 - Combination 2

According to EN1992-1-1 section 6.7(4), the concrete should have sufficient reinforcement to take into account the tensile forces that develop due to the fixture attachment. The definition of the reinforcement in the concrete is not within the scope of PROFIS Engineering.

**2.5.1 Compression in concrete under the baseplate**



**2.5.2 Verification of compression in concrete under the baseplate around the profile as per EN1992-1 section 6.7 and EN1993-1-8, section 6.2.5**

**Equations**

$$f_{jd} = \frac{\beta_j k_j \alpha_{cc} f_{ck}}{\gamma_c}$$

$$\sigma = \frac{N}{A_{eff}}$$

$$Utilisation = \frac{\sigma}{f_{jd}}$$

Aprox. 307mm<sup>2</sup>

**Variables**

N [kN]	A <sub>eff</sub> [mm <sup>2</sup> ]	β <sub>j</sub>	k <sub>j</sub>	α <sub>cc</sub>	f <sub>ck</sub> [N/mm <sup>2</sup> ]	γ <sub>c</sub>
28.132	307	0.67	3.00	0.85	25.00	1.50

**Results**

σ [N/mm <sup>2</sup> ]	f <sub>jd</sub> [N/mm <sup>2</sup> ]	Utilisation [%]	Status
91.67	28.48	322	NOT OK