

ANCHOR BOLT

CAST-IN ANCHOR BOLTS
DESIGN | S31

Summary

Anchor Bolt allows you to design cast-in headed anchors subject to tension loads. The module can be used as a stand-alone product, or it can be used in combination with the output of **Base Plate**. The reinforcement layout can be imported from **Pad Footing** Design.

What makes this module special?

- Rapid results are given for otherwise tedious hand calculations
- Results are easily navigated to identify input parameters that need adjustment to satisfy design criteria
- Strong integration with **Base Plate** and **Pad Footing** modules

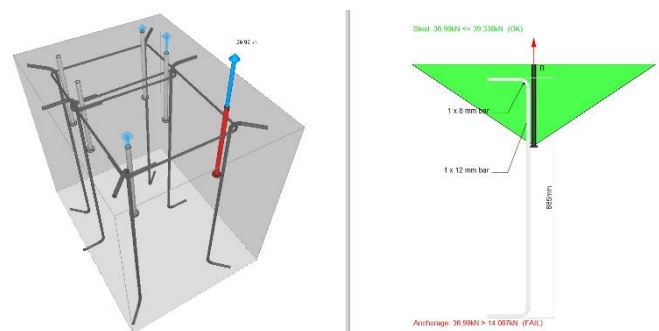
Detailed Description

The module allows you to specify the anchor parameters, anchor layout, concrete base properties, and load distribution. If required, additional reinforcing can be specified.

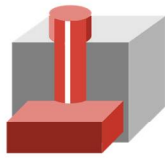
Several failure mechanisms are considered. A summary of the results in the form of a visual representation is given to help identify parameters that need to be adjusted to ensure compliance with the required verifications in the code.

Failure mechanisms

- Steel failure of fastener
- Concrete cone failure
- Supplementary reinforcement failure
- Pull-out failure of fastener
- Concrete splitting failure
- Concrete blowout failure



A design report is published to the Calcsheet. Here you can specify all the required information to be contained within your report. This can include the input data, a result summary, and detailed design calculations.



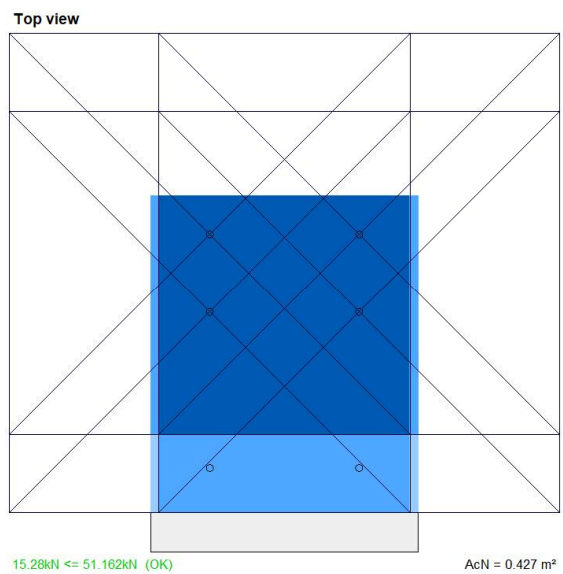
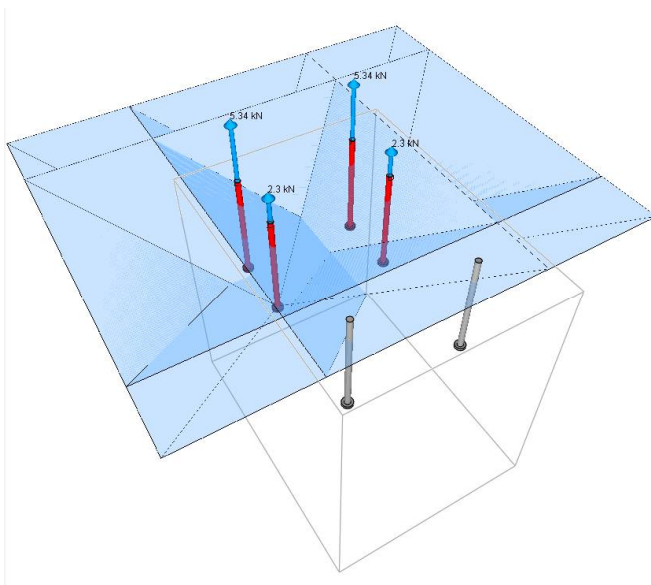
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Theory used in this module

For this module, the following assumptions apply:

- Anchors are subjected to tension loads only
- Design loading is static
- The load distribution was calculated using elastic analysis
- Anchor forces are calculated from ultimate limit state actions
- Accidental loads are not considered



Supported Codes

Design Codes

- Eurocode 2-2004
- SABS 0100-2000