



Use of Computer Software in Analysis and Design of Structures

The direction to engineers regarding the use of computer software.

CODE REFERENCE

2019 California Building Code (CBC)

FINDINGS:

Use of computer software is acceptable in performing structural calculations per the following conditions:

1. The program being used is software which has a long history of use and has been extensively utilized by the design professional (i.e. RISA, ETABS, ENERCALC, RAMSTEEL, etc.):
In most cases only the input and output should be verified thoroughly (no independent verification of the program is required).
In cases of complex models and/or dynamic analysis, a disk containing the input data is required in addition to the printed data. Or,
2. The program employed is one developed in-house by a design office (i.e. the program has no established track record of use in the design community): In this case independent verification for sample calculations shall be provided to substantiate the validity of the analyses. Such calculations may be performed either manually or with another software program acceptable to the reviewer.