



Summary

Frame performs frame and finite element analyses of 2D and 3D structures. It can perform linear, second order, stage, and non-linear static analysis as well as, buckling, modal, harmonic, and seismic analyses of 3D models.

Frame is easy to learn and simple to use. Build your model using a combination of beams, shells, and solid finite elements. Analysis results can be exported to various other **PROKON**® modules for design purposes. The design links include steel member and connection design, timber member design and reinforced concrete design. Results can be viewed and added to a Calcsheet, both in graphics format and analysis reports.

Frame also links to other software by way of DXF, DWG, CIS/2 and SNF (Strucad) files. **Frame** models can also be exported to and imported from **Autodesk**® **Revit**® using **Prodesk**.

What makes this module special?

- Link with other software by way of DXF, DWG, CIS/2 and SNF (Strucad) files
- Model with different elements
- Various analysis modes
- Import/export Revit models through **Prodesk**
- Input wizard to speed up modelling
- Text file interface enables the use of pre- and post-processors on the data files

Detailed Description

General purpose finite element analysis (FEA) software can be complex and difficult to use. Software complexity either leads to time lost learning the software or many costly errors. **Frame** is easy to learn, simple to use and has been the analysis workhorse of structural engineers worldwide for over three decades.

Various analysis modes are available to aid the engineer in accurately predicting structural behaviour in every situation.



Analysis Modes

Static

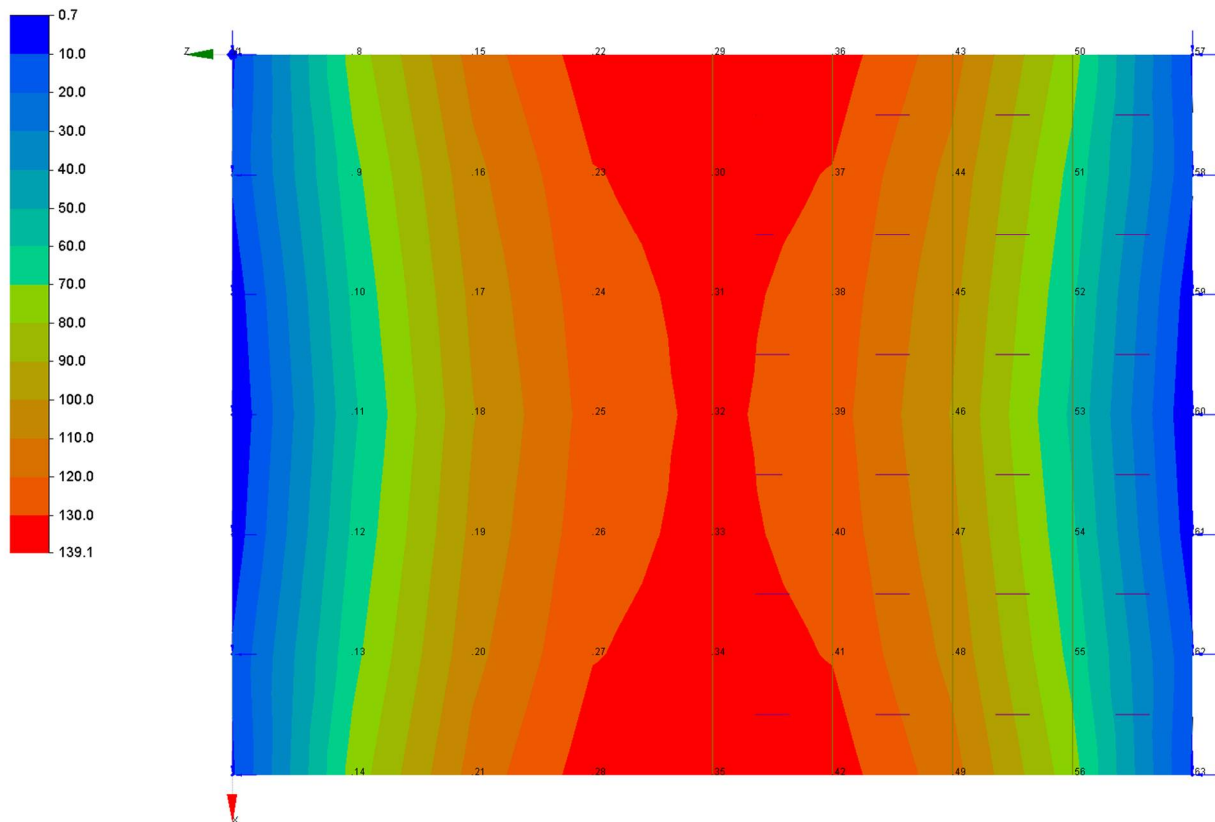
- Linear
- Second order
- Non-linear
- Buckling
- Stage

Dynamic

- Modal
- Seismic
- Harmonic

Design planar reinforced concrete elements modelled with shells. Out-of-plane moments are combined with in-plane effects through the Wood-Armer theory to specify reinforcement. The contours can be exported to **Padds** or **Probar 2D** for detailing.

Rebar bot y direction (mm²/m)

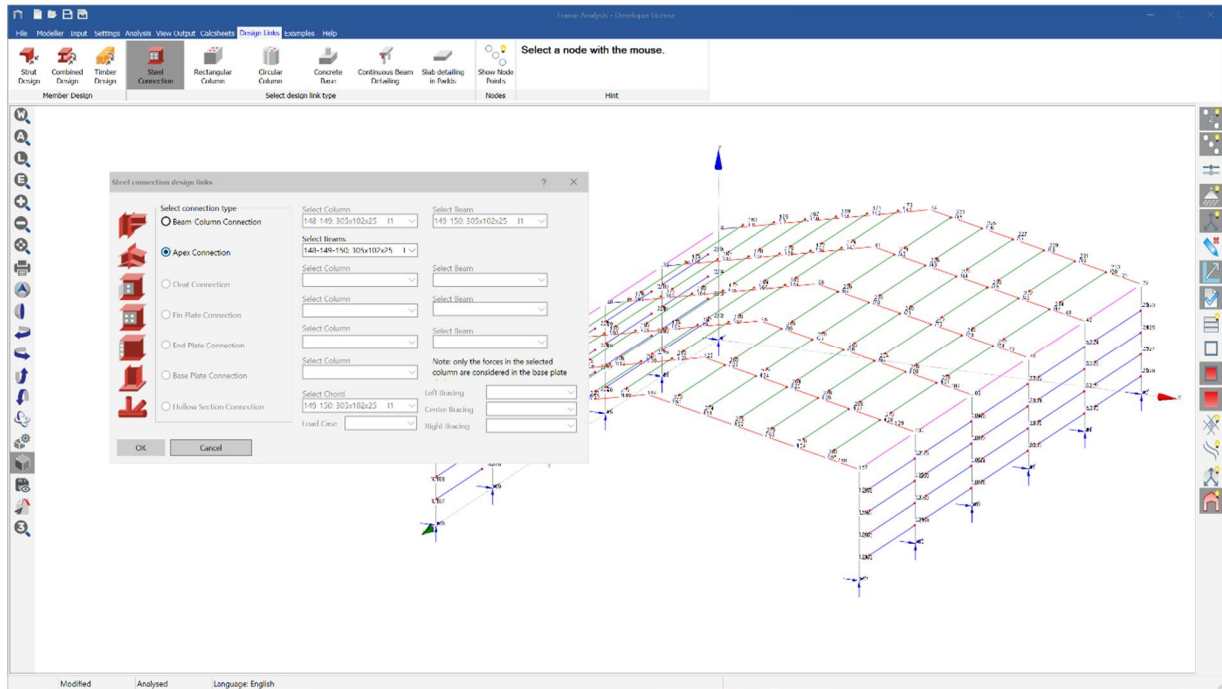




FRAME

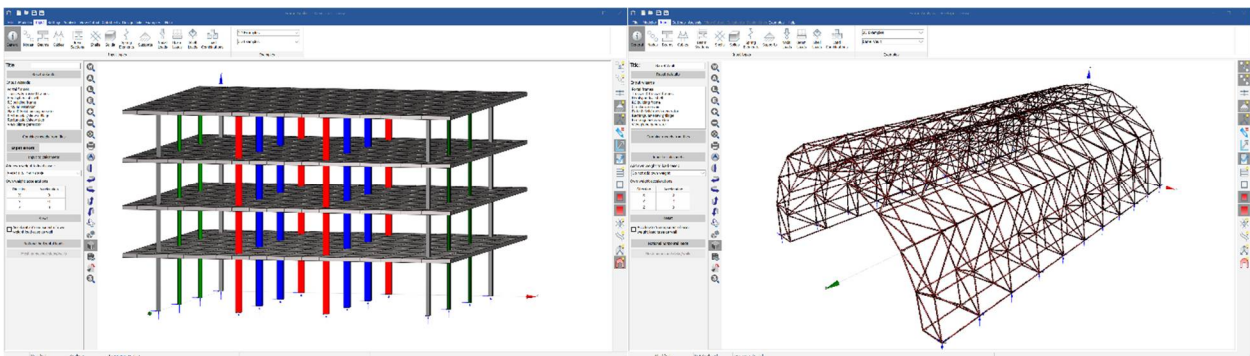
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Design members and connections using one of the many **PROKON** design modules. Results can be viewed and added to a Calcsheet, both in graphics format and analysis reports.



Workflow

Models can either be created in **Frame** or imported from **Revit** using **Prodesk**. Detailed design can be accomplished by using design links to other modules.



For more information contact info@prokon.com



Key features

- Beam, shell, and solid finite elements
- Linear, second-order, non-linear, buckling, and stage analysis
- Modal, harmonic, and seismic analysis
- Reinforced concrete design
- Design links
- Input link from BIM tools

Supported Design Codes

Concrete Design Codes

- ACI 318 – 1999
- ACI 318 – 2005
- ACI 318 - 2014
- ACI 318 – 2011
- ACI 318 – 2019
- AS3600 – 2001
- AS3600 – 2009
- AS3600 - 2018
- BS8110 – 1985
- BS8110 – 1997
- CP65 – 1999
- CSA-A23.3:1994
- CSA-A23.3-04 – 2010
- Eurocode 2 -2004
- HK Concrete – 2004
- HK Concrete – 2013
- IS:456 – 2000
- NZ 3101 – 2006
- SABS 0100 - 2000
- SP 63.13330.2018

Seismic Response Spectra

- TMH7 – 1981
- UBC – 1994
- SABS 0160 – 1989
- IS 1893-1 – 2002
- SANS 10160
- Eurocode 8
- NZS 1170.5 - 2004