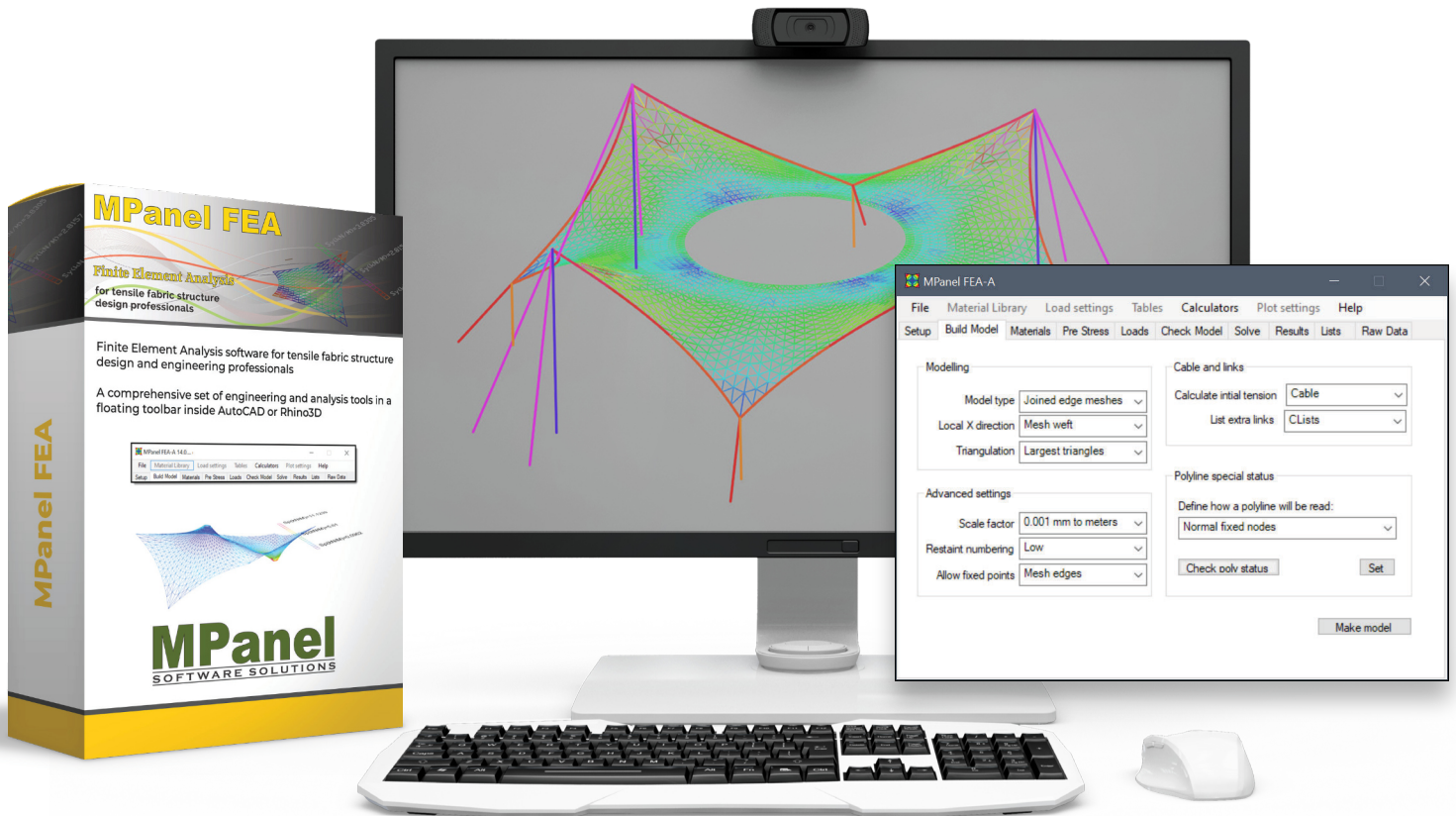


**SOFTWARE FOR TENSILE FABRIC STRUCTURE
DESIGN PROFESSIONALS**



What is MPanel FEA software?

MPanel FEA software is a comprehensive set of engineering tools that assist a user with the design and analysis of tensile fabric structures and industrial fabric materials under environmental conditions such as wind and snow. It acts as a floating application inside AutoCAD or Rhino 3D.

MPanel FEA connects a powerful Finite Element Analysis engine with an easy to understand user interface, to provide a robust solution to non-linear large displacement FEA. The MPanel interface reads a standard Mpanel drawing and builds an FEA model ready for analysis. Next, the solver is run to determine the model displacements for the load conditions, such as wind effects and snow cover.

MPanel & MPanel FEA work with AutoCAD and Rhino3D CAD platforms



MPanel FEA-A

File Material Library Load settings Tables Calculators Plot settings Help

Setup Build Model Materials Pre Stress Loads Check Model Solve Results Lists Raw Data

Membrane Properties (kN/m)

Elements	Type	Ex	Ey	G	Vxy	UTSx	UTSy
All	Generic Type 1	300	300	30	0.3	56	56

Cable and Link properties (kN)

Links	Type	Ea	UTS	Behavior
All	Generic 10mm	8000	75	Normal

Cantilever properties (kN m)

Poles	Type	EA	EI	Z	End fixing
All	Generic 150mm n...	6.2895E+05	1611.5	0.00010744	

Point Properties (kN/m)

Points	Type	Spring Rate	Ref length	Z

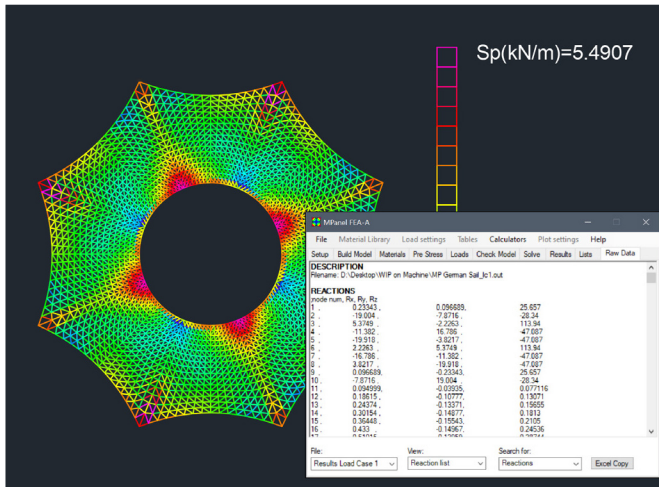
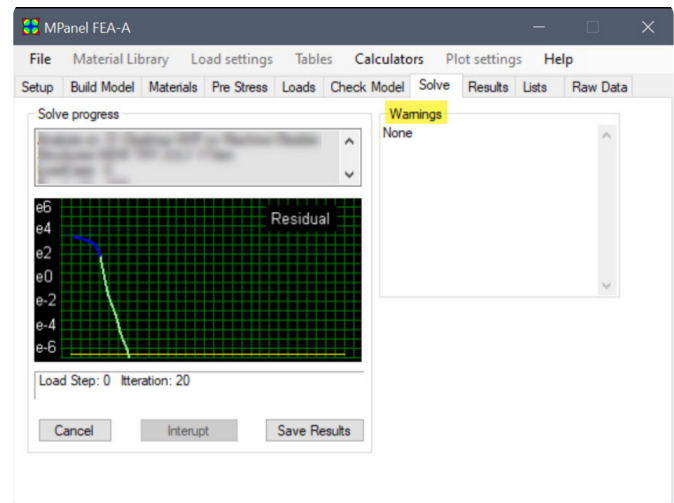
Define Materials

Specify the type of fabric and cable diameters along with a Pre-Stress to determine initial reactions.

Add environmental factors such as Wind and Snow to determine stresses, reactions and test loading capacity.

Robust Solver

The powerful industry leading non-linear solver is fast and robust. Able to solve models with loose fabric and zones of zero stress and provides feedback of problems.



Plot or export to Excel

Results are provided in both graphical on the screen as well as in raw tabular data for use in MS Excel or import into other structural applications.

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