

# Tekla Structural Designer

 **Tekla**<sup>®</sup>  
A Trimble Solution

TRANSFORMING THE WAY THE WORLD WORKS

 **Trimble**<sup>®</sup>

# Analyze and design buildings efficiently

Tekla Structural Designer is revolutionary software that gives engineers the power to analyze and design buildings efficiently and profitably.

Fully automated and packed with unique features for optimized concrete and steel design, Tekla Structural Designer helps engineering businesses win more work and maximize profits. From the quick comparison of alternative design schemes to cost-effective change management and seamless BIM collaboration, Tekla Structural Designer can transform your business.

## ONE INTERFACE, ONE MODEL

From scheme design through to detailed design, one single model covers all your structural analysis and design requirements, encompassing both gravity and lateral systems.

Unlike traditional analysis software, with Tekla Structural Designer you can create physical, information-rich models that contain all the intelligence for fully automating the design and managing project changes.

Achieve faster design times and manage changes easily.

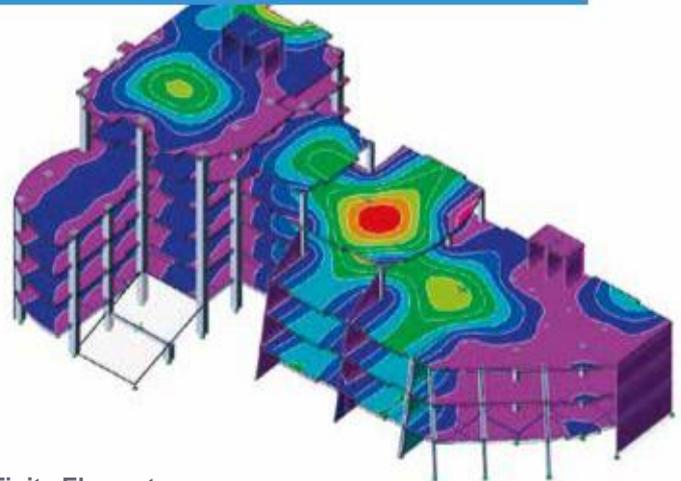
## AUTOMATED LOADING AND ANALYSIS

### Automated wind loading

Full building wind loads are automatically calculated and applied to your model. Tekla Structural Designer also takes care of other lateral loading required by the design code.

## BENEFIT FROM TEKLA STRUCTURAL DESIGNER

- Achieve faster design times
- Quickly establish the best solution
- Manage changes easily
- Maximize profitability and efficiency



### Finite Elements

Whether you are considering an irregular concrete flat plate with openings or a complex core wall system, you will benefit from fully automated FE meshing tools and lightning fast analysis of their behavior.

### Automated seismic analysis & design

One software package covers seismic analysis and design. Response Spectrum Analysis (RSA) is fully automated, saving you time on this complex and tedious task.

### Total transparency

With completely transparent analysis results you can investigate the design forces, explore deflections and view all the calculations. Enjoy complete confidence in the design results.

Save valuable design hours with a unique approach to automated analysis.

## OPTIMIZED STRUCTURAL DESIGN

### Fully automated

Optimize reinforced concrete and steel buildings quickly. Tekla Structural Designer includes all the critical information needed to provide a fully automated design to a range of design codes. Regardless of complexity, you can design all members and consider the overall 3D building design in one seamless process.

### Efficient reinforced concrete design

Instantly achieve an optimized design for all rebar within the beams, columns, slabs, flat plates and walls.

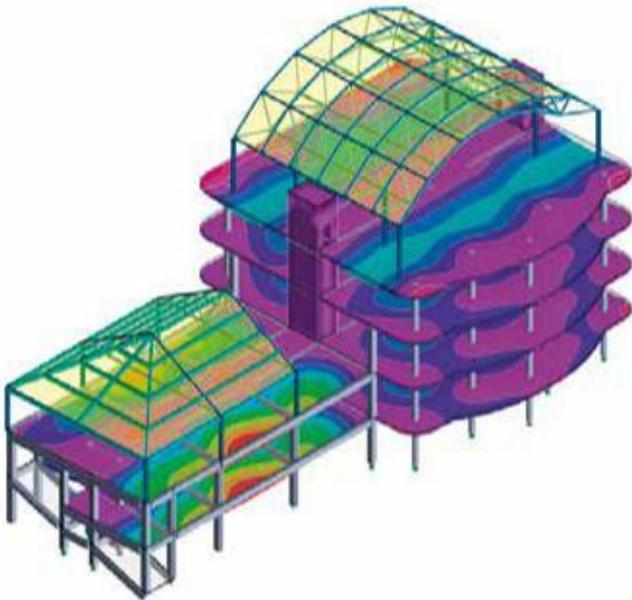
### Optimized steel design

Design all steelwork automatically, including composite beams, columns, US joists, trusses, braces and plated sections.

### Compare design schemes

Quickly create a range of alternative schemes and establish the most cost effective solution for your client. You can become more competitive and bid more effectively with minimal effort.

Improve productivity and become more competitive.



## PROFESSIONAL DOCUMENTATION

### Automated and detailed

Communicating your design is easy. Tekla Structural Designer automatically produces accurate, detailed documentation including calculation reports, material take offs and drawings. Reinforcement drawings for the entire building and tonnages of steel for estimating are available at a touch of a button.

### Real-time information

As a single model contains all the design information, you can generate real-time documentation at any stage of the project.

Manage changes instantly and remove the need to update reports manually.

## DESIGNED WITH BIM IN MIND

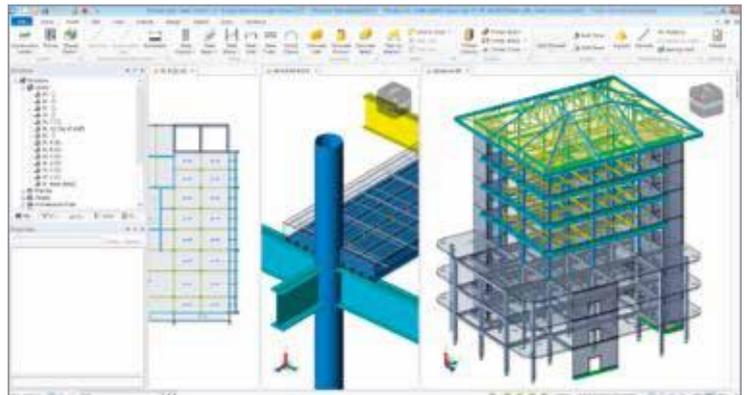
### Collaborate efficiently

Tekla Structural Designer has been developed to help the design engineer maximize collaboration with other project parties, including technicians, fabricators and architects.

### Intelligent synchronization

Synchronize models throughout the project lifecycle without compromising vital design data and see what has been added, changed or deleted using our powerful auditing tools.

Minimize errors and stay informed at all times.



# Together we are shaping a smarter future for construction

## TEKLA SOFTWARE BY TRIMBLE

Trimble is a technology company with a vision of transforming the way the world works. Trimble's construction offering ranges from total stations to advanced software, giving the industry tools to transform planning, design, construction and operation of buildings. The company also has products for trades like logistics and agriculture.

## TRIMBLE BUILDINGS

In addition to Tekla, Trimble Buildings brands include names like SketchUp and Manhattan Software, targeting architects, engineers, fabricators, MEP contractors, general contractors and construction managers, and building owners. The software solutions promote constructible models and collaboration. Trimble Buildings offering blend groundbreaking innovations and practical features, helping the industry achieve transformative results.

## TEKLA SOLUTIONS

Tekla software is at the heart of the design and construction workflow, building on the free flow of information, constructible models and collaboration. It is the people who make the difference, while Tekla gives tools for realizing projects around the world from housing and bridges to factories and skyscrapers. Good communication and elimination of waste make the industry more sustainable and cost effective, improve your projects and in the end your customers' happiness.

- **Tekla Structures** is the most developed Building Information Modeling software on the market. It makes accurate, constructible modeling of any structure possible.
- **Tekla Structural Designer** gives engineers the power to analyze and design buildings efficiently and profitably.
- **Tekla Tedds** automates repetitive structural calculations.
- **Tekla BIMsight** is a free professional tool for construction project collaboration allowing anyone combine models, check for clashes and share information.
- **Tekla Field3D** is an easy-to-use 3D tool for utilizing Building Information Models on mobile devices.
- **Tekla Civil** is a comprehensive, model-based solution for heavy civil engineering design needs.



Please note that some products are not available in all areas.

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