

# PROTA<sup>®</sup>Structure Suite

## Structural Technology to Accelerate Your Project Delivery

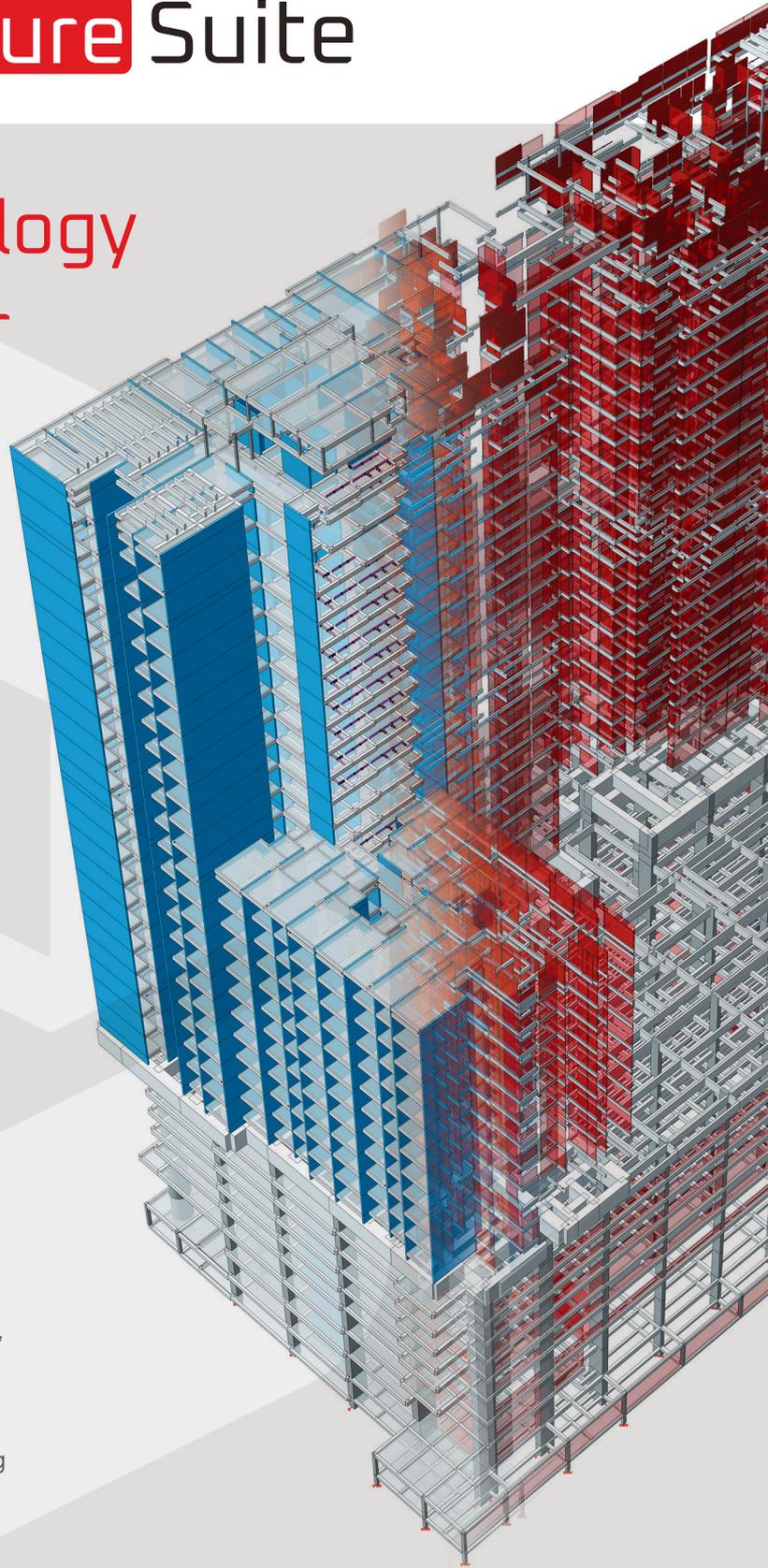
- Fast multi-material building modelling using physical structural members
- State-of-the-art structural analysis methods
- Economical and reliable design
- Fully automated engineering drawings and fabrication detailing
- Complete quantities take-off for costing and comparison
- Leading BIM Integration for project coordination

**ProtaStructure** is an innovative BIM solution for structural engineers to model, analyze and design buildings quickly and accurately.

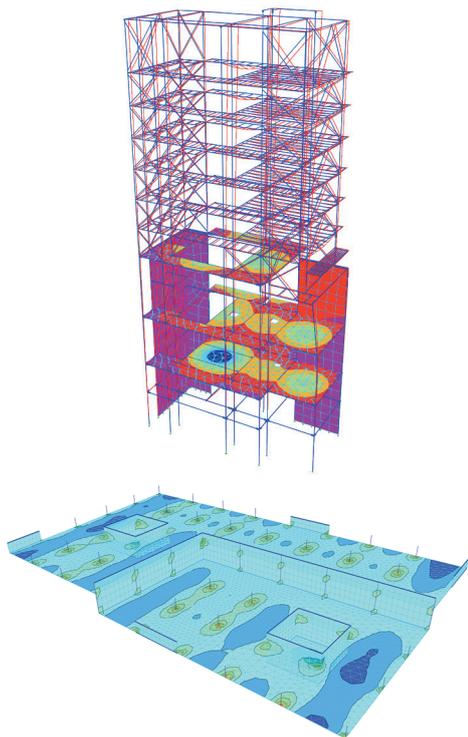
From one central model, easily compare different schemes and automate your steel and concrete design, significantly reducing project delivery time.

Produce high quality drawings and all design documentation from **ProtaStructure** automatically using **ProtaDetails** and **ProtaSteel**. Seamlessly coordinate projects with intelligent BIM integration.

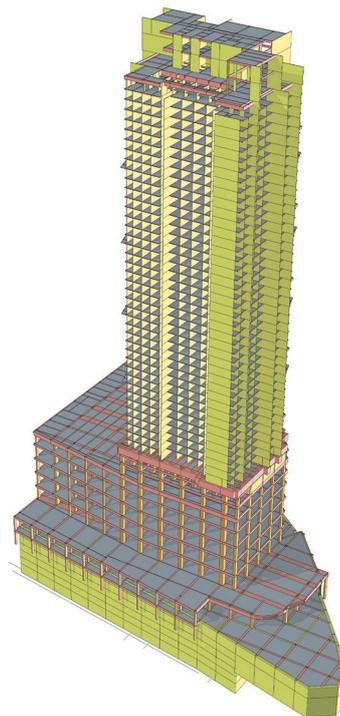
**ProtaStructure** saves time and increases business profitability.



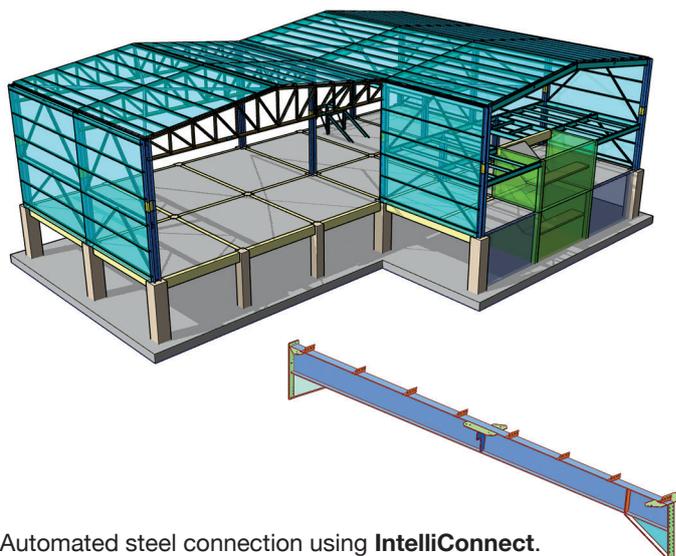
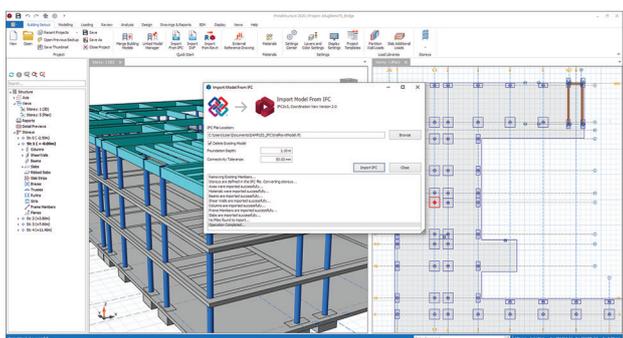
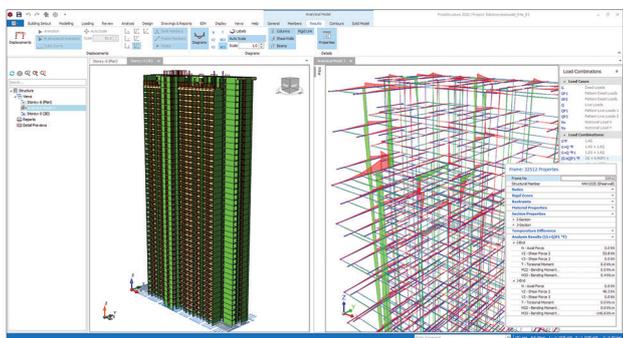
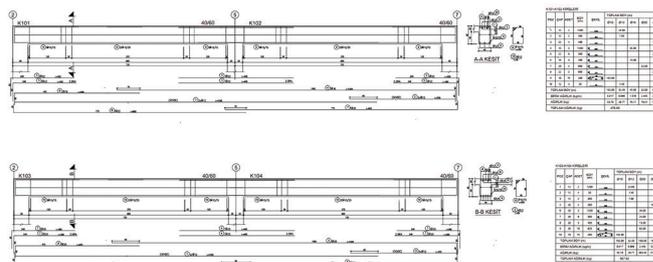
# At First Glance



- Fast project delivery with fully integrated **Concrete, Steel and Composite Slab** design from one central structural BIM model.
- **Easy, quick, and intuitive** physical modeling and review with **Multiple Model Views** and **Dynamic Input**.
- **3D finite element analysis** with **state-of-the-art analytical model** with extensive analysis options and isotropic and orthotropic shell element support for floors and shearwalls.
- **Advanced analysis** techniques including Linear Elastic Analysis, Equivalent Static Earthquake Load, Response Spectrum Analysis, Nonlinear Time-History, Single and Multi-Mode Pushover, Concurrent cracked and uncracked analysis, Staged Construction, P-Delta, Temperature Difference, and Seismic Basement and Nonlinear Seismic Isolator considerations.



- Design to a range of leading **international codes** including **specialist seismic requirements**.
- Seismic assessment methodologies for Performance Based Design or Retrofit of buildings using **Linear Elastic, Nonlinear Single-Mode and Multi-Mode Pushover** or **Nonlinear Time-History** analyses.
- Fully automated **RC detailing** into your drawing sheets. **Manual drafting** using smart rebars. Change management and dynamic quantity tables together with Fast engineering macros including **retaining wall, stair, pool, pile analysis, design** and detailing.
- Flexible unit systematics supporting **SI, Imperial** and **MKS** systems.



- Automated steel connection using **IntelliConnect**.
- Complete steelwork engineering drawings together with comprehensive **part numbering** and **shop detailing for fabrication**.
- **Industry leading BIM integration** for starting, coordinating and sharing models
- **Interactive user experience** with extensive in-product learning, contextual help, live updates and dedicated technical support from Professional Engineers.

# Why Prota Software?

Step into the world of Prota Software and open endless possibilities for your business. For over **40** years, we have been at the forefront of providing cutting-edge structural engineering software solutions to professionals worldwide. Our innovative software solutions have been embraced with open arms by businesses in more than **95** countries, changing the game in the way they operate.



## Designed by Engineers for Engineers

Prota Software is committed to achieving engineering excellence and making a positive impact on the world. Our dedicated team is actively involved in technical research, presenting papers at conferences and global publications, and contributing to the development of codes of practice, particularly in earthquake design. Additionally, our parent consulting firm, Prota Engineering, has successfully completed projects in over 40 countries with a focus on large commercial and infrastructure projects such as airports and metro lines. Utilizing BIM technology, we efficiently handle both traditional and design-build projects, with a focus on optimal design and practical construction methods. Our program, ProtaStructure, is a result of our passion for sharing knowledge and is continuously shaped by our team's expertise and feedback from our users worldwide.



## Leading BIM Expertise

At Prota Software, open BIM collaboration and knowledge sharing are core principles that have been instrumental in successfully delivering some of the world's most demanding infrastructure and transportation projects. The introduction of **ProtaBIM** further solidifies Prota Software's position as a leading provider of advanced BIM technology by incorporating bi-directional links with the latest versions of Revit, IFC, DXF, SAF, IdeaStatica and other recognized BIM and Analysis formats. Through this enhanced capability, models can be seamlessly synchronized and design changes can be tracked, greatly enhancing project coordination and improving workflow efficiency.



## Advanced Analysis Features

Prota Software offers a wide range of analytic approaches for building design. From basic static, dynamic, and finite element analysis to advanced techniques like nonlinear single-mode and multi-mode pushover, nonlinear time-history, construction stage, and P-Delta analysis, Prota Software has the tools and expertise necessary to meet your design needs. Our proprietary analytic approaches are specifically tailored for building design and have been proven effective on a variety of projects. Whether you need to analyze the structural integrity of a small residential building or a large scale commercial development, Prota Software has you covered.



## Code-Based Design Expertise

Prota Software's experience with delivering projects around the world coupled with close collaboration with users and industry experts means we understand structural design. At its core, **ProtaStructure** provides a sophisticated and flexible structural design engine allowing you to optimize your entire building from the roof to the foundations. All the detailed code-based checks are performed and documented to your chosen code of practice. A growing range of international and seismic codes of practice are supported including US, European, Indian and British Standards. Together with numerous, country specific, localizations.



## Friendly Professional Support That Engages

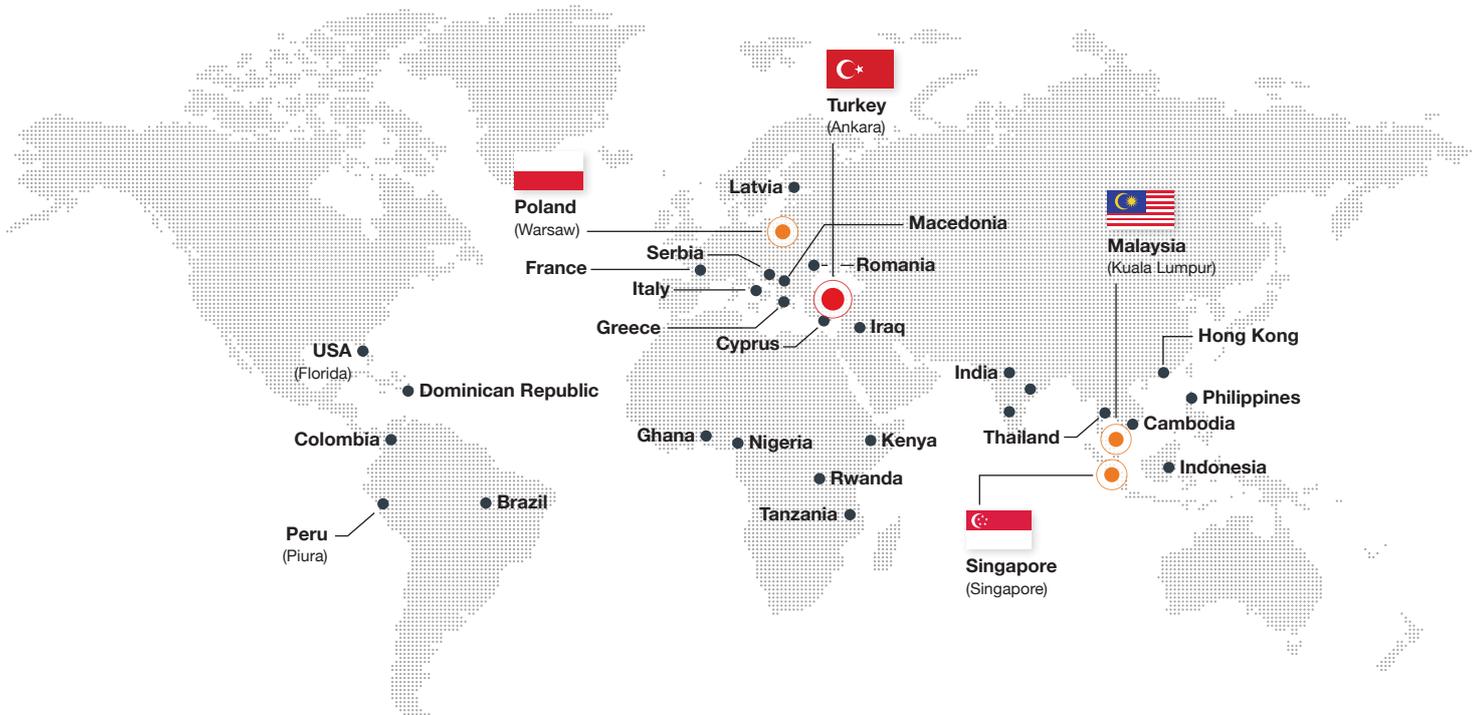
Prota Software is devoted to improving its clients' experience with **ProtaStructure** Suite. Our primary objective is to provide our clients with knowledge and practical, user-friendly assistance. Our comprehensive **Prota Help Center** and in-product learning resources are intended to enrich your understanding. Our team of professional support engineers is enthusiastic about engaging with our clients, whether it be answering technical inquiries or providing hands-on training. Prota Software team is prepared to assist you with any needs you may have.

# Internationality

● Headquarters

○ Branch Offices

● Resellers



Become a

**Prota Software Partner**

Expand your business with Prota's Software Solutions

Please contact us at

[www.protasoftware.com](http://www.protasoftware.com)

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