Bentley®

Product data sheet

Structural WorkSuite™

Structural engineering analysis and design software bundle

Structural WorkSuite is a trusted, comprehensive portfolio of structural analysis and design applications. The software gives engineers access to virtually all of Bentley's structural analysis software, including the specialty, purpose-built applications that comprise the Bentley STAAD®, RAM®, and ADINA® product lines.

Applications you can count on

Structural WorkSuite is a software license that consolidates numerous individually priced applications into a single, cost-effective package. Structural WorkSuite allows organizations to simplify their software portfolio and leverage Bentley's multiproduct interoperability capabilities at the same time. By combining the strengths of multiple products, organizations can take advantage of complete design workflows, from foundation design to connection design and everything in between. And, with the inclusion of ADINA, engineers can perform dynamic nonlinear analysis of structures built from scratch or imported from RAM or STAAD.

All the capabilities a structural designer needs

Structural WorkSuite allows organizations to design in virtually any infrastructure sector. Examples of project types that are well-suited for Structural WorkSuite include:

- Industrial structures and facilities
- Multistory concrete or steel buildings
- Pre-engineered metal buildings
- Water, wastewater, and environmental structures

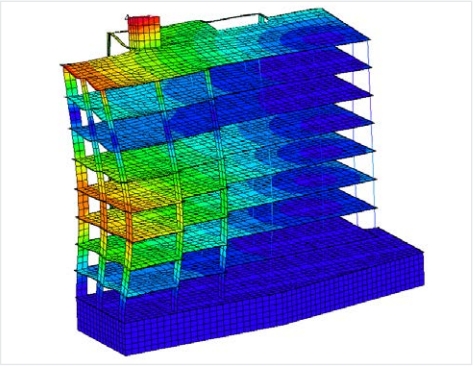
Whether your project consists of multiple structural materials or requires an advanced analysis, such as buckling analysis, construction-stage analysis, energy analysis, nonlinear concrete deflection analysis, or even blast analysis, Structural WorkSuite has you covered. The portfolio also includes access to the high-powered design and optimization features that are available through Bentley's Analytical Cloud Services. STAAD's Scenario Services allows users to compare the performance of different design alternatives built in different models and validate results in individual models using multiple versions of STAAD.Pro®. RAM Concept PT Optimization saves post-tensioned concrete designers hours of engineering time by using intelligent search algorithms that converge to an optimal design that satisfies design criteria and minimizes material and labor costs.

Simplified access to software

Structural WorkSuite helps eliminate concerns about product-by-product license availability. Each Structural WorkSuite user can employ all applications within the software package, including multiple instances of applications. There are no extra fees or licenses required for sharing data between Bentley's structural products. Using Structural WorkSuite, designers can create custom design workflows by selecting specific applications that are best suited for a specific project, design responsibility, and user skill set or preference. The Structural WorkSuite Hub application provides an easy way for users to install, update, and launch all products included in Structural WorkSuite. The Hub ensures users are always using the latest released versions of each product and are taking full advantage of Structural WorkSuite.

Value in multidiscipline design

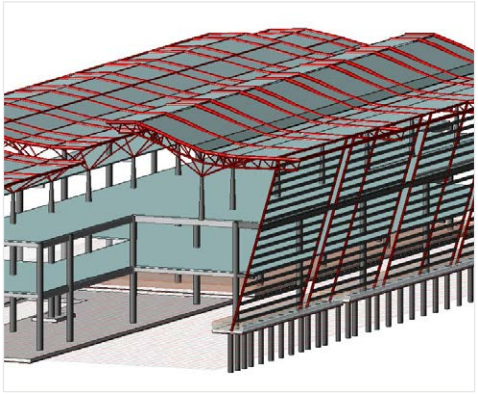
The value of Structural WorkSuite extends beyond the structural design team. Through Bentley's iTwin® Analytical Synchronizer, designers can transfer data among Structural WorkSuite applications, integrate with modeling applications—such as Bentley OpenBuildings® Designer and Revit—and even link with other industry applications, including Bentley AutoPIPE® for pipe stress and Bentley SACS™ for offshore design. iTwin Analytical Synchronizer also gives users the ability to compare, merge, and revert to previous model iterations over the course of the project.



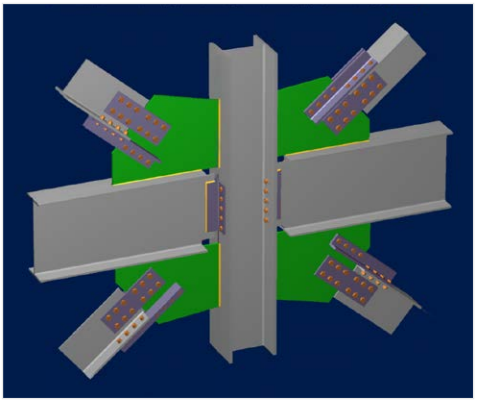
From linear static to nonlinear structural dynamic analysis, ADINA covers all possible types of analyses.

System requirements

Minimum: Windows 10 64-bit, Intel or AMD processor 2.0 GHz, 1 GB memory, 2 GB free hard disk space, GPU with 256 MB RAM
Recommended: Intel processor (highest affordable processor speed), 16 GB memory or higher, Discrete GPU with 128-bit bus and 1 GB RAM, 4k monitors not supported
Browser compatibility: Microsoft Edge, Google Chrome, Firefox



Integrated foundation design created in STAAD.Pro and then imported into STAAD Foundation Advanced for the design and detailing of the foundation system.



Connection detailing with multiple framing members such as Column–Beam–Brace joints

Structural WorkSuite at-a-glance

Business benefits

- Access to virtually all STAAD, RAM, and ADINA applications
- Complete design workflows, including multidiscipline solutions
- Improve interoperability to streamline efficiency
- Simplified billing
- Unlimited product access for each user

Analysis and design features

- Extensive design code coverage for virtually all types of structures, materials, and national standards
- Advanced analysis capabilities: response spectrum, time history, pushover, construction stage analysis, and buckling
- Specialty analysis capabilities: nonlinear cable analysis, drift control for building structures, long-term load history deflection of concrete floors, vibration of steel and concrete floors
- Design of steel, concrete, timber, masonry, and cold-formed steel structures
- Design and detailing of steel connections
- Design and detailing of specialty concrete components, such as water tanks, concrete stairs, and tilt-up concrete walls
- Detailed analysis and design reports
- Exported CAD drawings of framing plans, elevations, and schedules
- Compatible with the Bentley iTwin platform
- Compatible with OpenBuildings Designer, Revit, AutoPIPE, SACS, and others

Included application	Description
STAAD.Pro Advanced	Steel, concrete, cold-formed steel, and timber structures for a variety of project types (plant, water/wastewater, transportation, civil, and more)
STAAD Advanced Concrete	Design, detailing, and material takeoff of reinforced concrete components
STAAD Foundation Advanced	Concrete footings, pile caps, and mat foundations
RAM Structural System	Steel and concrete building structures (low-rise to high-rise)
RAM Concept	Conventionally reinforced and post-tensioned concrete floors and mat foundations
RAM Connection	Steel connections (shear, moment, brace, truss, and base plate)
RAM Elements	Steel, concrete, masonry, cold-formed steel, and wood components using toolkit modules
ADINA	Advanced finite element analysis for dynamic, nonlinear analysis of structures under severe loads
iTwin Analytical Synchronizer	Exchange structural model, analysis, and design data among applications and track/manage project changes

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Find out more at **Bentley.com**
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