

# Top 10 Reasons to move from Robobat analysis solutions to Autodesk® structural analysis solutions

## 1. Help improve your workflow by starting to integrate Building Information Modeling

Building information modeling (BIM) is a process built on digital, coordinated, reliable information about a project from design through construction and into operations. Autodesk BIM solutions for structural engineering—including Revit® Structure 2009, Autodesk Robot Structural Analysis 2009 or Autodesk Robot Structural Analysis Professional 2009, and AutoCAD® Structural Detailing 2009—are tightly integrated to help support industry workflows. For structural engineering firms, BIM facilitates internal coordination between drafters and engineers, as well as external coordination between engineers and architects or other consultants—enabling firms to complete projects faster and more economically. Autodesk Robot Structural Analysis solutions are an important component of the Autodesk BIM solutions, offering analysis and simulation capabilities that aid firms in better predicting performance and project cost. Combined with Revit Structure and AutoCAD Structural Detailing, Autodesk Robot Structural Analysis 2009 and Autodesk Robot Structural Analysis Professional 2009 are powerful integrated solutions that can be used from modeling, to analysis and design, and fabrication.

## 2. Get more capabilities with a versatile solution for multi-material structures

You don't have to choose your analysis solution based on the material you design the most, or the design codes you use. With Autodesk Robot Structural Analysis 2009 or Autodesk Robot Structural Analysis Professional 2009 software, you can now get a comprehensive single application that handles multi-material design and various analysis types. Whether you usually design steel, concrete, or wood structures—or if your projects generally include a multitude of materials—Autodesk Robot Structural Analysis 2009 or Autodesk Robot Structural Analysis Professional 2009 has a comprehensive set of tools to support you in your work.

## 3. Choose the version that's right for you

The Autodesk Robot Structural Analysis solutions are available in two versions: standard and professional. Both versions include the core analysis functionality and design capability of the former

Robot Millennium v 21, as well as Autodesk® Concrete Building Structures (formally known as CBS Pro). Both the standard and professional versions also include the Robot™ Expert tools. The Professional version offers additional advanced analysis capabilities with the ability to handle a very large models thanks to no limitation in number of elements, finite elements and nodes.

#### 4. Subscription Benefits

Optimize your Autodesk Robot Structural Analysis solutions investment and promote an increase in your productivity with the latest product releases, technical support, and access to training by adding Autodesk® Subscription to your Autodesk Robot Structural Analysis 2009 or Autodesk Robot Structural Analysis Professional 2009 software purchase. Your annual fee provides for software upgrades, including all Autodesk Robot Structural Analysis software upgrades released during the subscription term, as well as product downloads that give you access to rich content, extensions, and bonus tools that are exclusive to subscription members. For example, Robot™ Extensions (which includes the former Robobat product known as ESOP) and all its corresponding calculation spreadsheets can be downloaded by all Autodesk Robot Structural Analysis Subscription customers. Subscription customers also benefit from enhanced technical support—getting direct, one-on-one communication with product support specialists.

#### 5. Autodesk Licensing Technology

With Autodesk licensing technology, you no longer have to deal with hard-lock protections and keys that need to be updated at each new release. Instead you can benefit from the simplicity of Autodesk single or network software licensing for quicker deployment. Autodesk licensing technology can help boost the productivity of a single license user, and an Autodesk network license is particularly convenient for large teams or separate teams working in remote locations.

#### 6. Enhanced Usability

Enjoy a more intuitive user interface that incorporates the Autodesk look-and-feel for quick and easy navigation. Key enhancements include a viewer navigation cube common to all 3D Autodesk products. You will also benefit from the story or level-based model definition capability of Autodesk Robot Structural Analysis 2009 and Autodesk Robot Structural Analysis Professional 2009, which streamlines the creation of structural models for buildings by using similar modeling techniques as the BIM application Revit® Structure 2009.

#### 7. Enhanced interoperability

The Autodesk BIM solutions for structural engineering provide enhanced interoperability between your structural design and analysis environments. Improvements to the interoperability between Autodesk Robot Structural Analysis 2009 software (both standard and professional versions) and Revit Structure 2009 include: the transfer of parametric profiles from Autodesk Robot Structural Analysis to Revit Structure; the transfer of offsets defined in Autodesk Robot Structural Analysis to Revit Structure; taking into account in Revit Structure of timber materials and profiles defined in Autodesk Robot Structural

Analysis; taking into account in Revit Structure of Gamma angle for profiles defined in Autodesk Robot Structural Analysis; updating just a portion of your Revit Structure model based on changes from Autodesk Robot Structural Analysis; transferring structural grids/axes from Revit Structure to Autodesk Robot Structural Analysis; and transferring rigid links from Revit Structure to Autodesk Robot Structural Analysis.

8. Improved API for Autodesk Robot Structural Analysis 2009 and Autodesk Robot Structural Analysis Professional 2009 software

The application programming interface (API) for Autodesk Robot Structural Analysis enables the programmatic update of, and access to, the software's data and results, based on Robot™ Extensions spreadsheet calculators.

9. Expanded country-specific design capabilities

Autodesk Robot Structural Analysis provides expanded country-specific design capabilities, including: (for the United States and Canada) seismic design provisions for the US steel code, ACI fire provisions, Canada RC design updates and US RC design code updated to ACI 318/08, and design according to ASCE 7-05; new Indian codes for steel and concrete; additional Eurocodes and NADs for the Nordic countries and the UK Arbitrary parameterization of Eurocode steel coefficients.

10. Enhanced Analysis Capabilities

Autodesk Robot Structural Analysis 2009 and Autodesk Robot Structural Analysis Professional 2009 makes the definition of automatic combinations much clearer and easier, while still maintaining the use of advanced functionality for more experienced users. In addition, when using a non-linear analysis where all the intermediate points are saved – you can access the results of these intermediate points in a tabular form. This feature allows previously existing tabular reports to be updated accordingly. Also, Autodesk Robot Structural Analysis Professional software provides vibration analysis, including frequency response function (FRF) and footfall response, allowing you to quickly analyze the effect of dynamic loading on the velocity acceleration of points in a structure.

For more information about Autodesk Robot Structural Analysis solutions, go to [www.autodesk.com/robotstructuralanalysis](http://www.autodesk.com/robotstructuralanalysis)

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