



*"Using traditional CAD software, it takes us more than three weeks to identify each hospital room with its own unique label. But with Revit Architecture, that same task takes less than a week."*

Jacques Lévy-Bencheton  
Architect and Computer Manager  
Brunet Saunier Architecture

## Work the way you think.

Using Revit® Architecture software, Brunet Saunier Architecture completes projects more easily, improves accuracy, and spends more time doing what really matters—designing masterful, award-winning buildings.

### Project Summary

Founded in 1981, Brunet Saunier Architecture is one of France's leading architectural firms. In particular, the firm is known for its simple, almost minimalist, style and the incorporation of transparent building materials, such as glass beams, into its designs. Some of the firm's better-known creations include the research laboratories of Renault's Techno Center, the National School of Music, Dance, and Dramatic Art of Chalon-sur-Saône, the Administrative Center of Saint-Germain-en-Laye, and the Laboratories of the French Museum at the Louvre in Paris. And although Brunet Saunier entered the computer age relatively late with its adoption of CAD software in 1992, it is now one of the first architectural firms in France to begin using Revit Architecture software. Purpose-built for building information modeling (BIM), Revit Architecture enables architects to easily create a single digital model that contains all project information—sections, elevations, floor plans, 3D models, schedules, and more. Brunet first made the transition to the new software—

and to a new approach to building design and documentation—on a major hospital project.

### The Challenge

Many of the contracts currently managed by Brunet Saunier and its 45 architects are in health care. In fact, the firm has recently been selected for the restructuring or construction of more than 10 major French hospitals, including two 70,000-square-meter projects, one in Toulon and one in Lagny.

### A Demanding Design Style

Over the years, the firm has also conducted many in-depth studies in this field. These studies led the firm to develop a unique design concept known as "Monospace." Based on maximizing design flexibility from initial bidding through project construction, this approach enables the architects to quickly and easily change the location of entire hospital wards—even at the last minute. However, it also places significant demands on the firm's design software.



*Using Revit Architecture software, the architects at Brunet Saunier are able to*

- *Easily determine the impact of sunlight in hospital rooms and design accordingly*
- *Produce 3D ambiance perspectives using the direct link to Autodesk® VIZ software*
- *Communicate with customers and the reprographer using Autodesk® Design Review*
- *Publish designs to the DWF™ file specification for easy review*

### The Solution

Fortunately, Revit Architecture and its single, integrated database was built to handle this kind of challenge with ease. “When a ward is reassigned, you can see the effects of the change immediately,” says Jacques Lévy-Bencheton, architect and computer manager at Brunet Saunier. “For example, you see how modifying the circulation of the fluid networks or the smoke extraction ducts affects the floor slabs and the walls. As a result, you can avoid many of the collisions usually observed at a later stage. In addition, after the slightest modification, the areas are recalculated in real time.”

### Make Better Planning Decisions

And because all of this data is found in one integrated model, the architects can easily use the updated information to create the materials—such as initial bill of quantities and material takeoffs—necessary to validate a project’s financial feasibility. As a result, Brunet Saunier can now better plan, and stay within, an accurate budget from the initial bid to project completion.

### Shorten Production Time

And once work has begun, Revit Architecture makes it happen faster. Recently, Jacques Lévy-Bencheton compared a traditional CAD-based workflow and a Revit Architecture workflow on two similar projects. “We found that there was virtually no difference between the end results—the quality was as good as usual,” says Jacques Lévy-Bencheton. “But fewer designers for the Revit project were needed than in our previous CAD-based processes.”

### Take Advantage of Connections

As the project proceeded, the architects discovered other advantages. For example, using

Revit Architecture and its single, integrated database, Brunet Saunier was able to quickly print 250 documents from a detailed preliminary project plus an additional 500 contractor consultation files. “If the files had not been linked, we would have had to open them one after the other to start each printout,” says Jacques Lévy-Bencheton. “With Revit Architecture, we simply select the sheets and print everything with just a click.”

### Easily Make Changes

Architects appreciate that speed when changing parametric components within the model or proposing different types of façades covered with curtain walls, for example. “You can modify the drawing of the façade directly from a panel contained in the item library,” says Jacques Lévy-Bencheton. “All drawings and cross sections are then updated automatically.” This approach virtually eliminates coordination mistakes, rework, causes of wasted effort and materials, and other sources of human error.

### The Result

“Problems hidden during the design phase often arise on work sites,” says Jacques Lévy-Bencheton. “These errors and omissions generate work, and therefore extra costs, at the worst possible time during the project. With Revit Architecture, projects can be studied more seriously and more exhaustively. It makes the work more comfortable and, consequently, we have more time to dedicate to the architecture.”

To learn more about Revit Architecture, visit [www.autodesk.com/revitarchitecture](http://www.autodesk.com/revitarchitecture).