SOFiSTiK

Working with SOFiSTiK
A user interview

Stefano Colombelli

Architect

Position: BIM Manager

Responsibilities: BIM Implementation and Development

Company: Plan Team GmbH; Bozen

Mr. Colombelli, your company PlanTeam from Bolzano has been using SOFiSTiK Software in the area of CAD Detailing and FEA for many years. Could you please tell us something about the introduction of SOFiSTiK in your company and the changes of projects demands and the software over this time?

SOFiSTiK has been a partner of PlanTeam for more than 15 years, and once introduced we have never abandoned it. Design is becoming more demanding every day, we need to design more in detail, and standards and the number of checks have increased. In the past, many details and problems were solved on the construction site, now we try to save not only the amount of material but also working hours, for greater optimization.

„We work with more precise models that include a higher level of details, with the target of removing the unexpected on site.“

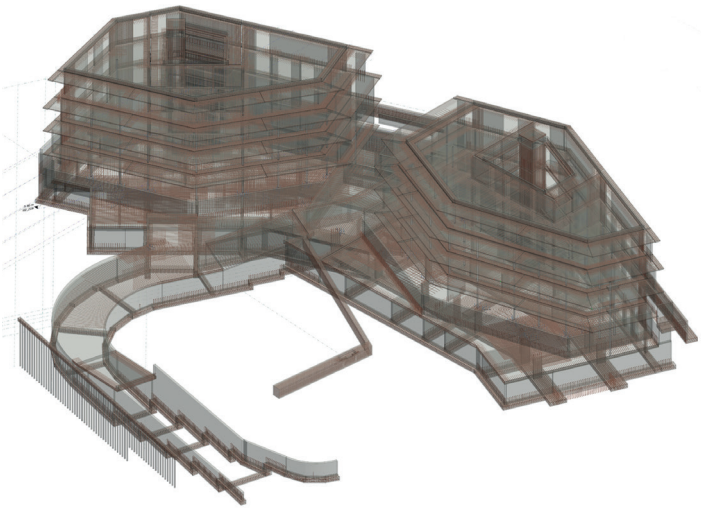
In the same way, software, and especially SOFiSTiK, have adapted to this constant „hunger“ for detail and virtual design.

Some time ago, you have transitioned from classical 2D AutoCAD and SOFiCAD detailing to a BIM workflow with Revit® and SOFiSTiK Reinforcement Detailing (RCD). What was the reason for this step?

We are facing a revolution in the world of design, that is the transition from CAD to BIM systems. Therefore, to adapt to the new standards, PlanTeam is investing heavily in converting the entire company to BIM methodologies.

For which significant projects have you used the formwork and reinforcement detailing with Revit® and RCD so far?

After a period of „running in“ on small pilot projects, RCD was then used for all our projects. The most important ones are: the Urban Park Apartments in Merano, the Petit House of a private client, the new production facility in Valfiemme Legnami and the new Biogas Wipptal plant.



Urban Park Appartaments in Merano - Reinforcement view

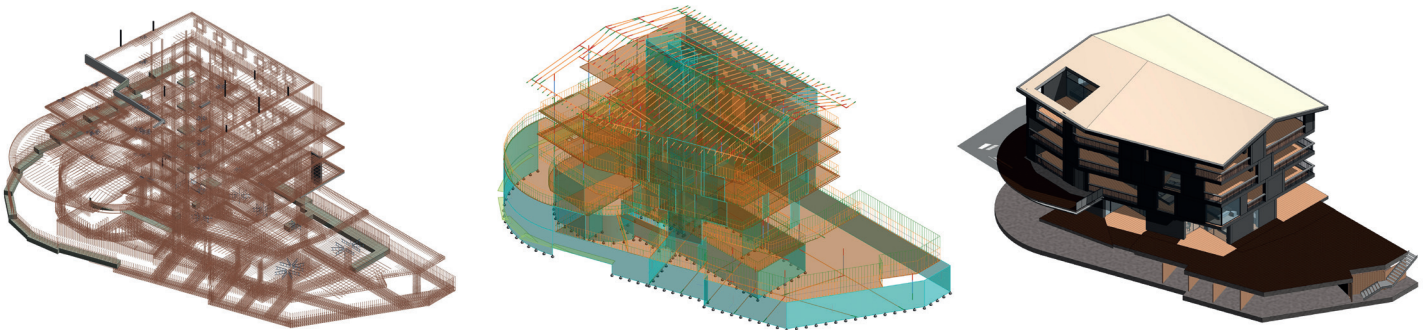


Image 2: The Petit House - 3D rebar model - 3D analytical model - 3D structural model

What were your experiences with the new BIM workflow in comparison to the traditional AutoCAD-based workflow? In which way has it changed or affected your working process?

The transition from AutoCAD to Revit® has radically changed the way we design, CAD is much more cumbersome, slow and limiting. 3D design introduces automatisms that free the mind of the designer who can concentrate on the design, with a greater and effective understanding of the project and the reduction of errors. As a result, our product has changed, too, that is our design is now richer in views and details. Finally, the way the designer thinks has changed into thinking and making considerations in 3D and looking beyond his role or the single design phase. The BIM workflow forces the designer to have a global vision of the project and the design process needs detailed cross-disciplinary models.

„A BIM workflow is not easy to implement, but once you've started working like this, it's impossible to go back."

Are you still using SOFiCAD for the traditional way of detailing?

SOFiCAD is less and less used, only for some structural projects, but it can open sheets exported from Revit® and created with RCD. Sometimes this can be useful. As BIM Manager, my intent is to focus on innovation.

Have you already combined the BIM workflow with the FEA calculation workflow of SOFiSTiK? How are your experiences?

Yes, we also use SOFiSTiK FEA and my experience has been quite positive, even if full of questions regarding the need to dictate a clear and effective modelling protocol in Revit®, as well as regarding staff training. A „BIM" model itself is not enough to make all the figures involved in a project work together, but coordination is needed if you want to get architectural views, reinforcement drawings and calculation reports without inconsistencies.

Where do you see the next steps of BIM detailing in the building and infrastructural sector? In which way does software development have to be improved to fit the clients' and project demands in the future?

In the future, BIM design will be increasingly standardized and automated. It is time for the construction industry to equalize with all other sectors, such as manufacturing. Therefore, I expect to see designers reducing repetitive manual operations and focusing more on the design issue. I also hope for an increase in the standards in the technical drawing process and the elimination of printing on paper. Otherwise, the whole process fails, and digitization stops.

Dear Mr. Colombelli, thank you very much for the pleasant and informative interview. We wish you and your team all the best and a lot of success with your projects.

Thank you, I wish you a continuous and close cooperation with Autodesk without losing contact with your customers.

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