



Luxury Chalets in Grindelwald, Switzerland

Architecture and Engineering Office GriwaPlan AG, Switzerland

Luxurious rooms inside and out

The majestic peaks of the Eiger, Mönch and Jungfrau mountains rise high into the sky while down below, at an altitude of 1,050 m, sits the glacier village of Grindelwald. Close by, waterfalls up to 400 m high crash down the rock faces, hiking trails covering hundreds of kilometers abound and three ski areas offer guaranteed snow, making this village the ideal base for experiencing nature at its best – and ensuring its popularity as an oasis of calm for lovers of luxury. And the building projects in this beautiful corner of the Bernese Oberland are no less impressive. Indeed, architectural office GriwaPlan has already developed many luxury residences in the area, including two lavish chalets with several apartments and a single-family chalet in the typical, local alpine style.

The Swiss design office GriwaPlan, established in 1987 and currently employing 30 members of staff, used the Allplan CAD platform to design these luxury properties. This software provides designers with an integrated, object-oriented project planning facility that uses a central building model, freeing architects from the constraints of the traditional design sequence: all project-related information is captured in one building model, making it easy for architects to keep tabs on everything throughout the design and construction phase. "This means we can work in 3D right from the outset, enabling us to model with great accuracy," explains architect and project manager Arsenio Pérez. But it wasn't always like this: Mr. Pérez remembers how things were in the early days, before computers replaced the drawing boards in the architect's office. Drawing many different plans meant transferring many modifications too. "Nowadays, our employees are banned from using 2D because we want to be able to keep track of everything throughout every stage of the project," he says. The ability to keep project information up-to-date at all times in an integrated environment guarantees a clear overview. Furthermore, using Allplan also allows the designers to more easily involve their clients and design partners. "Generally speaking, clients are not able to read 2D plans, but they do understand 3D views and visualizations; consequently object-oriented work not only makes a good impression on new customers, it also makes a lot of decisions easier," claims Mr. Pérez. Furthermore, designers can visualize their designs even during the initial draft stage using the Allplan CINEMA 4D solution. To do this, the model data is simply imported from Allplan, materials and textures are added and a photo-realistic representation of the building is generated in no time at all.

Smooth design processes

Allplan, including the Workgroup Manager, is installed on 17 workstations. Hence, different members of the team can all work on one and the same building project and model simultaneously and precisely coordinate all the various design steps. The Workgroup Manager handles the organization of CAD and layout

workstations in the local network (LAN). This central administration of design and construction projects guarantees that all projects on all computers can be accessed and edited directly from every workstation. Teamwork at GriwaPlan has already proved to be a key resource: a core team of six staff is responsible for realization of the luxury chalets. Their tasks range from communicating basic information to supervising construction through to arranging interior fittings. The company has its own real estate department, Griwa Treuhand, to deal with the sale and administration of property – they even offer a hotel service.

For engineering services and building services engineering, the company works with external planning partners. "Our partners receive the CAD data exported from Allplan as a 3D PDF and apply their modifications there. Then we re-integrate all the design data from all the companies involved into the central building model," explains Mr. Pérez.

Since a 3D model can be viewed on any computer regardless of the software being used, being able to link with the various design partners using a CAD system enables an exceptionally efficient exchange of data. Not only that, but automatic synchronization of the company's own plans with the data imported from design partners also avoids design errors, redundant data and, last but not least, unnecessary additional costs.

Sustainable design

The three luxury residences are scheduled for completion by the end of 2011. The result will be two multi-family chalets, each with three to five apartments, and one single-family chalet with its own wellness area. "Our customers usually use the houses as a holiday home or second residence," says Mr. Pérez. Even the construction method is exclusive: "To preserve the mountain village image, we work with wood and natural stone from the local area," he explains. The chalets were built using a mixture of concrete and timber construction. All the rooms are open-plan and spacious. "The roofs are quite a challenge because they have to stay up without supports," he declares. Hence, only 24cm thick, solid wood boards are being used. The design is as

challenging as the construction method is luxurious: "We try to cater for all the clients' wishes from the outset and immediately begin with the implementation planning – on a scale of 1:50," he affirms. Other types of plans are incorporated later as required.

Consistent working method

"We invest a lot of time and effort at the start of a project, which stands us in good stead in many ways later on," explains Mr. Pérez. GriwaPlan has even developed its own Allplan design package over time: numerous personalized components, drawing types, colors, surfaces and layers have been added. "Since our work is object-oriented from the start, it is virtually impossible for us to make any mistakes. Even the construction costs can be easily calculated and controlled," continues the project manager. Consistently working in 3D means the designers work quickly and efficiently and any redundant data is immediately evident". In summary, Mr. Pérez says, "Thanks to Allplan, we can spot problems before they even arise." The designers derive every evaluation directly from the model. This serves to reduce the number of queries from clients, design partners and on-site contractors and enhances design reliability. In addition, Allplan represents a real competitive advantage:

"For us, this platform is the perfect tool for providing our customers with compelling advice and assessing their needs within the shortest possible time," continues Mr. Pérez.

Demanding requirements

The clients' requirements can be as unique as the features of the houses. Every project poses a new challenge and the possibilities are endless," claims the project manager. What furniture is to be installed what kitchen, sauna and Jacuzzi? All decisions regarding the interior fittings of the homes are made on-site if there is a firm buyer. Otherwise, the standard luxury fittings are installed, but these can be changed on request. It is not uncommon for a complete kitchen to be fitted and floor coverings laid, only for these to be removed and replaced with different fittings and coverings later on. At GriwaPlan, there are no limits to the luxury offered. Some customers, for example, want wall and floor tiles from famous designers, while others may have a totally unique request when it comes to interior fittings: "One of our customers is able to control his appliances and utilities with his iPhone," reveals Mr. Pérez, "he has the luxury of being able to preprogram his jacuzzi, heating and lighting while on his way here in his own private jet."

