



Residential Building in Bucharest, Romania

Architecture Firm Arcsett, Bucharest

Four Homes under One Roof

A very special kind of house will be unveiled in a residential area 12 km north of Bucharest in 2009. The spacious, open architecture follows the structural principles of the “house-within-a-house” design, with a living space of 2,000 square meters. The main aim was to implement the requirements and individual preferences of a four-person family as closely as possible. With the help of 3D planning and design courtesy of Allplan and highly realistic visualizations of the construction project created with CINEMA 4D, the architecture firm Arcsett was able to turn the design plans into reality, without any of the usual stumbling-blocks.

Arcsett, with 18 employees, has been involved in construction projects of all kinds since 1996. Specializing in cost management, project management and interior design, the firm also has extensive international expertise in the area of exhibition planning. While designing the house near Bucharest, Romania, the experienced design team relied on software by Nemetschek to help them fulfill the project brief.

“The family wanted an aesthetic overall look, as well as the highest possible quality when it came to the design, planning, execution and the choice of materials. Working with customers like these, who knew exactly what they wanted, was a great experience. It also meant that we really had to put all we had into the project,” explains Andrei Mihailescu, managing director and owner of Arcsett.

Architecture and Interior Design from a Single Source

The house was designed to provide plenty of space for a four-person family with two grown-up children. At the same time, the idea was also to provide each person the option to live separately from the others in individually designed living areas all under one roof. Thus, in order to create an architecture that was appropriate to each of the different personalities, the interior design, as well as the architecture itself, had to be a central component of the project. “We worked on both the plans and the interior design right from the start. The goal was to create a logical continuity between the architecture and the interior of the house,” says Andrei Mihailescu.

Both the building client and the architects regularly attended exhibitions and trade fairs, and took every opportunity to communicate directly with manufacturers, in order to select all the details of the interior design on-site. They even collaborated with an Italian manufacturer to create special wood flooring for the house. The house’s private swimming-pool, too, was to have an interior and an exterior area, as well as a sophisticated design, without compromising on the requirement for a shared element. “From the word go, the guiding principle of this project was aesthetics. For us, this meant a consistent focus on

creativity. The details took up over a year of planning time in total, but it was worth it,” says the architect.

Working in 3D all the Way

For Arcsett, a good relationship with the building client is central to the success of their work. “The client has to trust us completely, but also has to be involved in decisions and their consequences. This is the only way to avoid misunderstandings and difficulties, and to arrive at the best result together,” says Andrei Mihailescu. To fulfill the client’s brief as accurately as possible, but to keep a careful eye on costs at the same time, the architects always work in 3D throughout all of their projects. This allows them to make optimal use of construction data and to work in an object-oriented manner. “We now use 3D planning in all our projects. This enables us not just to plan perfectly, but also to monitor quantities and costs. Allplan is the ideal support in this process,” explains Andrei Mihailescu.

As well as excellent cost control, the clients of the architecture firm benefit first and foremost from the highly realistic animated models that are created with Allplan and then transferred to CINEMA 4D for further processing. These professionally visualized designs are a powerful form of reassurance for the client, and guarantee that he or she is directly involved in all the planning processes. Thanks to the transparency and traceability that this creates throughout the entire planning phase, discussions and decisions can be much more direct.

As Andrei Mihailescu says, “Visualizations are an important tool for us in ensuring customer satisfaction, as without them, clients often find it difficult to grasp relative sizes and ratios. With 3D, everyone is reassured quickly and effectively.”

Everything under Control with CINEMA 4D

Visualizations have also become an indispensable part of the architects’ daily design work. As a visual design monitoring tool, 3D animations reveal how lines, colors, dimensions and even pieces of furniture can be best coordinated with each other. The design professionals thus always have a crystal-clear picture



of the progress of the building. As the director of the firm says: "When it comes to interior design, visualizations enable us to ensure the overall composition is in accordance with the client's vision. In addition, we see how the high-quality materials and innovative lines appear and if they are visually pleasing."

In the large-scale project near Bucharest, visualizations were also of great benefit when it came to cooperating with manufacturers and design partners. "Our partners were really impressed by the look and the level of detail of our animations. The animations were really useful in the collaboration process, as they meant that we didn't have to spend a lot of time on explanations and sketches," concludes Andrei Mihailescu.





To what extent were Allplan and CINEMA 4D of benefit to you in this project?

In spite of the challenges that this project posed, we were able to design, plan and complete the house in just four years. This was largely thanks to the consistent but flexible planning options of the 3D design software, Allplan and the professional animations of CINEMA 4D. Without the software, we would definitely have had to schedule in more time and allow for additional communication loops.

In your opinion, what is the value of visualizations and 3D animations in planning?

First and foremost, they help us to secure customer satisfaction. Visualizations enable me to help clients understand relative sizes

and ratios much more easily than two-dimensional plans. The animations, for their part, help us architects to maintain a clear overview of lines, colors and dimensions and thus of the overall composition of the project. Not to mention that the animations also save us a lot of time in meetings with manufacturers and design partners.

What are the benefits of BIM for you?

Allplan enables me to clarify queries on design, the construction process, quantities and costs at an early stage. With the new building structure, I can organize my data in a way that reflects the building itself – with projects, construction stages, floors and rooms. This makes the project structure simpler and more logical, and makes collaborating with all the parties involved so much easier.

Why has cost management become so important in working with clients these days? What do you do to deal with this trend?

Yes, this topic is becoming more and more important in the current economic climate. In these times of huge energy costs and increasing prices, our building clients are monitoring costs more sharply than ever. Now, clients are demanding a fixed price and detailed calculations, and justifiably so. Therefore, at Arcsett we pay particular attention to the cost-effectiveness of our buildings. Working with Allplan enables us to minimize the risk of error, and to plan and build buildings cost-effectively and on schedule. That's a major competitive advantage at the moment.