



Autism Center, Dubai

Koschany + Zimmer Architekten KZA

Calming Architecture

Professional 3D visualizations enable you to virtually “enter” a building long before construction work starts and to integrate it into the existing surroundings. The visualizations can give you a clear advantage when consulting for construction companies and help you to make a strong sales pitch. Koschany + Zimmer Architekten KZA used Allplan and CINEMA 4D to create highly realistic animations that were crucial elements for the architectural planning of the Autism Center in Dubai.

“Designing a building where autistic children can feel at ease and that is fully tailored to their needs is a particularly big challenge,” explains Christina Maas, project manager at Koschany + Zimmer Architekten KZA (KZA). Having been awarded first prize in the preceding competition in 2005, KZA as the structural planner worked with the Dubai International Financial Centre (DIFC) to develop a therapy and education center for autistic children in Dubai. The client is the Dubai Autism Center under the patronage of Sheikh Bin Rashid Al Maktoum. Construction work on the 16-million-euro project started in August 2008 on a generously-proportioned and centrally-located site right in the middle of the traditional school district, Al Garhoud. Completion is forecast for 2009/2010.

“The construction of this center is in response to the need in the Arabian metropolis for therapeutic and educational facilities,” says Christina Maas, the KZA architect responsible for the design. KZA was founded in 1959 with 50 employees in Essen, Germany. Since 1995, the second generation, in the form of Axel Koschany and Wolfgang Zimmer, has been at the helm. The Dubai office was opened in 2005 and, like the German office, specializes in architecture, construction

consultancy, general planning and construction management. “Today, we are increasingly faced with the challenge of providing a fast and economical planning service and ultimately, of delivering a creative design that is cost-optimized and tailored to the individual user’s requirements,” says Maas. “That’s why it’s so important to us to use intelligent software solutions. For more than ten years now, we have relied on Nemetschek programs to support us in our day-to-day work.”

Soft Architectural Lines for Autistic Children

The construction challenge – to design a building for autistic children that was both functional and visually attractive – was no small challenge for KZA. In the building, the children are taught about elements of everyday life, such as social behavior, perception and communication. The aim is to actively work against any significant impairment of the autistic person’s daily life. An intensive examination of the needs of autistic children formed the basis of a clearly-structured and balanced architectural concept. Large spatial structures, curved lines and colorful, child-friendly accents set the tone of the architectonic concept. “It was really important to us to do justice to the needs of autistic children. We achieved this by using soothing, almost soft architectural lines, as many private “retreat” areas as possible, and green, very shaded outdoor spaces,” summarizes Christina Maas.

The experienced KZA team entrusted the professional implementation of their design to Allplan from Nemetschek. The organizational structure of the latest version of Allplan enables architects to leverage the various usage types of CAD software. From simple 2D drafting to 2½-D input to creating object-oriented building models, these usage types can be combined in whatever way the architect requires, even within a single project. To manage and organize their project data, drawings and plans in a unified manner, KZA used the Workgroup Manager in Allplan. This approach guarantees fast access to the project from any work station, and thus creates a solid basis for a well-functioning collaborative process. What is more, parallel team work means great convenience and huge time gains.

All parties involved in the planning process are therefore always up to date – without the awkwardness of copying and updating data or time-consuming consultation processes.



"This consistent data basis is a huge advantage for us in our daily planning activities," says Lilian Panek, architect at KZA. "The project structure, too, makes our work easier, as it automatically organizes our projects in a meaningful way."

The curved lines posed a particular challenge to the visual communication experts in the process of creating an animation of the autism center: "Curved shapes always require very thorough preparation, because more often than not, changes are made in the design phase. Since we are using free modeling rather than working with architectural components, curved components can sometimes stretch the limits.

With CINEMA 4D, though, free modeling always works well, even when changes are made."

The detailed visualizations enabled the KZA architects to implement every idea accurately and quickly, and thus to gain the client's trust. "We are always pleasantly surprised by the results we get from working with Allplan and CINEMA 4D. For us, the highly realistic animations are an indispensable tool for eliminating any lingering doubts in the client's mind and thus help us to lay the foundations of a successful collaborative process," explains Lilian Panek.

Why did you choose Allplan Architecture from Nemetschek?

With Allplan, we had a transparent planning system right from the start that supported us even with complex tasks. So there are very good reasons why we have been using Nemetschek software for more than ten years now – and we will continue to do so for all our upcoming projects in the future.

Why are professional visualizations so important today when working with customers?

Visualizations are usually created these days for competitions or as marketing material. They are also very useful in important client presentations for removing any lingering doubts the client may have. And when the visualizations are incorporated into actual photos, for example photos of the existing surroundings, they give a realistic overall impression. That convinces virtually every potential customer.

What current and future trends do you see in the architecture sector?

Today more than ever, sustainability is very important in the architectural world in particular. In these times of increasing costs for energy and building maintenance, the topic of "sustainable building" is on everyone's mind. The buildings of the future have to be energy-optimized and fulfill all the relevant sustainability criteria. The classification "green building" is a new aspect that will someday be considered as important a quality criterion and unique selling point as successful urban architectural characteristics or outstanding design are today.

