



SKY Tower
Bietigheim-Bissingen,
Germany

Allplan in practice

SKY-HIGH

The "SKY" residential and commercial building is one of the highest construction projects the town of Bietigheim-Bissingen has ever seen.

The building will have 18 stories, and as a result, will soar above most of the buildings in the district capital on the Neckar and Enz rivers. Even the designers at the architecture office responsible, KMB in Ludwigsburg, were somewhat surprised that this huge building project, which at 67 meters high does justice to its name, has actually come about. Initially, the building client, Bietigheimer Wohnbau GmbH, had far more modest intentions.

In 2007, the town purchased the freight depot site between the Carl-Benz-Straße, Bahnhofsstraße

and rail tracks from the government for 940,000 euros. The marketing of the site initially proved difficult, which is why mayor Jürgen Kessing suggested the construction of a single building with an attractive recognition value. Bietigheimer Wohnbau GmbH therefore commissioned architecture office KMB to develop a five-story office building. KMB put forward the idea of a high-rise building. There were initial doubts as to the financing of such a project, but as the first tenant immediately wanted to use five floors, KMB was asked to pursue the idea.



In the pre-design phase, ten different three-dimensional high-rise models were produced, all of which were created with Allplan. Ultimately, a decision was made in favor of the current tower option, the construction of which is already under way. Surprisingly, the concept design in its original form was directly accepted by the town authorities and the full 18 stories were approved. The first 10 floors are intended for commercial units from 95 m² to 345 m², and the top eight for condominiums. The 24 two- to four-room apartments measure between around 70 and 170 square meters. The average price per square meter is approximately 4,200 euros. Two penthouses, each covering around 200 m² over two levels, are the "pinnacle" of residential comfort.

Bietigheimer Wohnbau GmbH is marketing the SKY Tower under the "BW individual" brand, which sets high standards with regard to location, architecture, space allocation plans, materials and equipment solutions. Consequently, size isn't the only thing that matters at SKY. The facade design makes the building a real eye-catcher. White, dynamically curved projections, which permit balconies that extend around the entire building, are incorporated between the darker, fully-glazed sections in a sandwich design. Residents in the upper floors are therefore guaranteed a fantastic view across the Enz valley, not to mention fresh "mountain air".

PROJECT INFORMATION AT A GLANCE

- > **Focus:** Residential and commercial building
 - > **Software used:** Allplan Architecture
 - > **Project data:**
 - > **Client:** Bietigheimer Wohnbau GmbH
 - > **Architect:** KMB
 - > **Construction start date:** August 2014
 - > **Completion:** July / August 2016
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With real wood parquet flooring and underfloor heating, aluminum windows with triple glazing, high-quality plumbing installations and large tiles, the SKYinterior is just as good as the exterior.

The design of this striking and upscale giant posed particular challenges for KMB, and made partnerships with new engineers necessary. For example, a wind expert was needed to ensure the secure attachment of the floor coverings for the balconies, which are subject to huge forces at high wind speeds. In addition, acceleration surveys had to be drawn up for the movements of the high-rise tower. A further challenge was the noise control against rail traffic from the adjacent rail station. The height of 60 meters also required the integration of a second elevator and an additional emergency exit staircase for fire protection reasons.



"We used Allplan from the very first draft right through to the working drawings. In the design phase, the building was drawn in 3D to show the building client and building regulation department the effect of the tower with its differently shaped balconies on each floor, which ultimately helped to convince all concerned of the quality of the design."

Mike Geer, Architecture and Urban Planning, KMB

The foundation for the tower was laid in August 2014. Building work began in the same month. With an estimated construction time of two years, Bietigheim-Bissingen will probably have a new, imposing landmark by July / August 2016. And the various users of the SKY Tower will then be able to enjoy a high-quality residential and office building with spectacular panoramic views.

ABOUT THE CUSTOMER

KMB PLAN | WERK | STADT GmbH was founded on 1 July 1995 by architect and city planner Dipl.-Ing. (Uni) Michael Kerker, surveyor Dipl.-Ing. (UAS) Uwe Müller and architect Dipl.-Ing. (UAS) Jürgen Braunbeck.

ABOUT ALLPLAN

ALLPLAN is a global provider of BIM design software for the AEC industry. True to our "Design to Build" claim, we cover the entire process from the first concept to final detailed design for the construction site and for prefabrication. Allplan users create deliverables of the highest quality and level of detail thanks to lean workflows. ALLPLAN offers powerful integrated cloud technology to

support interdisciplinary collaboration on building and civil engineering projects. Around the world over 500 dedicated employees continue to write the ALLPLAN success story. Headquartered in Munich, Germany, ALLPLAN is part of the Nemetschek Group which is a pioneer for digital transformation in the construction sector.

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