**MEDIA INFORMATION** September 2023

**Casals Forum, Kronberg:**

# Concert hall with a view

***A foyer with glazed exterior and interior connects the chamber music hall of the Casals Forum with its surroundings. This all-round "joint" is made up of a structural glazed façade and two internal fully-glazed panels; one curved, the other folded. Jansen steel systems were used to realise the various glass constructions.***

The Kronberg Academy is one of the world's most important training centres for violinists, violists, cellists and pianists. In the third decade of its existence, it was able to move into its own premises with the construction of the so-called Casals Forum. The building complex consists of the chamber music hall with foyer and an adjoining study centre; Staab Architekten also included the hotel at the opposite end of the newly created Beethovenplatz in the planning, as well as two extension buildings - but these are still dreams of the future.

The rising terrain is divided into terraces, steps and paths, which are bordered by roughly hewn natural stone walls. These natural stone walls also form the base of the buildings, and serve as the foundation for the lighter parts of the building. Thus, from the highest point of the site, the chamber music hall building has the appearance of a transparent pavilion: Only an full-glass façade separates the roof from the stone base. This apparent pavilion houses the upper foyer, which surrounds the concert hall with a double-skin glass wall. "Making music should radiate as an event and invite people to become part of it," says architect Volker Staab, explaining the design idea. “The glass façade offers the possibility of looking into the foyer from the outside, to watch the musicians from the foyer, and to look out of the hall during the concert. So the concert and the environment always remain connected to a certain extent.”

**Foyer as a “glass joint”**

The three glass façades all boast large-scale glass formats, some of which border on the technically feasible. The panes of the room-enclosing structural glazed façade are 6,235 millimetres long and 3,208 millimetres high - with a glass band dimension of 3,210 millimetres! The VISS Semi SG steel system from Jansen was chosen for the full-glass façade, reinforced by the metal fabricator – Radeburger Fensterbau – with a substructure specially

developed for this purpose and mounted at short intervals. With VISS Semi SG as the load-bearing profile for the glass construction, tolerances of the primary supporting structure were balanced and an absolutely flat façade plane was achieved.

The real challenge of the project, explains Erik Langner, Project Manager at Radeburger Fensterbau, was to install the glass panes, weighing around one and a half tonnes, between the unfinished floor and the ceiling: "The upper edge of the steel profile was virtually flush with the prefabricated floor and at the top our leeway was limited by the cantilevered ceiling construction." In addition, the structural access was very difficult: "It could only be delivered from one side and the panes had to be transported horizontally from there over long distances. We can handle pane weights of up to 600 or 750 kilograms ourselves, but for the assembly of this façade we worked with a company specialising in lifting and transporting heavy loads." Using a lifting system on a crawler crane with four-sided support, the company Heavydrive transported the panes parallel to the façade to the respective assembly position; where they were "pushed in rather than swivelled in", says Langner. All you can see from the outside now that the work is complete is a 20-millimetre-wide silicone joint. One advantage of VISS Semi SG is the wide range of possible combinations with other Jansen systems: for example, the two-and-a-half-metre-high all-glass doors from the Janisol door system could be incorporated into the façade in an appealing design.

**Glass partition wall with high acoustic requirements**

Behind the all-glass façade and serving as a thermal building envelope, a second, double-skin glass wall runs inside the chamber music hall building, separating the foyer from the concert hall. Its curved shape was created with the aim of finding a structural solution that would satisfy both the architects' desire for a communal musician's life and the need for suitable reflection surfaces required by the acousticians: The outer glass surface facing the foyer carries the curved form of the hall into the foyer. This too is characterised by large-scale glass formats: The curved panes, with radii of 6.45 metres and 9.25 metres, have arc lengths for the individual panes of up to 7.00 metres. Concave and convex glass from the Döring glass bending company in Berlin was used. The inner glass surface facing the concert hall is made up of a large number of flat panes varying in width between 300 and 1,200 millimetres; the lengths and positions were determined by the acoustician on the basis of the desired reflections into the concert hall. "Both the curved panes in the plan and the flat panes of the inner glass wall lie horizontally on the Jansen-Economy 50 steel system," explains Langner. The double-skin interior wall is an extremely effective structure for protecting the concert hall

from noise from the foyer. The "best chamber music hall in Europe", according to the founder and artistic director of the Kronberg Academy Raimund Trenkler, has space for an audience of almost 600 people. For anyone who does not close their eyes while listening to music, the "concert hall with a view" also offers an impressive visual aspect.

**Study and administration centre**
In this self-styled "companion of young musicians on top of the world", the Kronberg Academy has built a study and administration centre in the immediate vicinity of the chamber music hall. Underground, the two structures are connected, but at the level of the square, they are separated. In addition to the entrance and reception area, the study and administration centre houses a rehearsal and audition room with gallery, office and meeting rooms as well as various practice rooms for the students. The all-round glazed façade of the roof pavilion opens on the south-western gable end with a huge lift-and-slide door leading to the roof terrace beyond. The 7,060-millimetre-wide and 2,565-millimetre-high construction was realised using the Janisol HST steel system from Jansen. The large-scale elements made of the robust steel profile system can be easily pushed aside. The interior and exterior spaces then merge into a single unit that offers students much more than "just" an extension of the interior space in terms of area: namely, sweeping views over the city to the surrounding landscape, which would remain "outside" without the large-scale sliding elements. There is no question that this area has quickly become the favourite meeting place for young musicians!

**Project details:**
**Client:** Kronberg Academy Foundation, Kronberg near Frankfurt/Main
**Architects:** Staab Architekten GmbH, Berlin
**Acoustics:** Martijn Vercammen, Peutz Group, Düsseldorf
**Façade manufacturer:** Radeburger Fensterbau GmbH, Radeburg
Steel profile systems used: VISS SG Façade, Janisol, Janisol HST, Jansen-Economy 50
**System supplier:** Schüco Stahlsysteme Jansen, Bielefeld
**System manufacturer:** Jansen AG, Oberriet, Switzerland

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