

**MEDIA INFORMATION**

June 2023

**Sluishuis (“Lock House”), Amsterdam-IJburg:****A building in the harbour, with a harbour in the building**

**What Bjarke Ingels says about the joint Sluishuis project by BIG and Barcode Architects reflects the multiple layers of relationships at the shimmering residential building, with some of its 442 apartments overhanging the IJ. The basic structure is a reference to the traditional courtyards seen in many cities, including Amsterdam. The VISS fire roof glazing from Jansen AG meet the very highest safety requirements.**

Except that here, a stand-up paddler gliding in the evening light through the opening formed by the iconic building, erected on an artificial island in the IJ, can catch a glimpse inside the rooms of certain apartments. This opening is created by two cantilevers, connected at the narrow front, which are designed so that some of the apartments protrude over the water and are spectacularly elemental; the residents can see boats sailing directly below them through a large window in a section of the floor that merges with the sloping façade. The cantilevered apartments are equipped with AGC Pyrobel walk-on fire protection glass, designed and planned according to EI60 specifications. The metal manufacturer M.C. Kersten bv, who together with the experts from Jansen AG Netherlands and Belgium had proposed a structurally robust but aesthetically convincing fire protection for roof glazing for the highest safety requirements, conscientiously recorded that the oven had been switched off after 93 minutes – meaning that the facto EI90 values had been achieved. The walk-on Jansen VISS Fire roof glazing projects out onto the water at an angle and was all custom-made by metalworker M.C. Kersten.

The special thing here – keyword reciprocal references – is that the VISS Fire roof glazing, pre-registered for inclinations of ten to 75 degrees and with a Uf value of 1.33 W/m<sup>2</sup>K, not only has to be fall-through-proof for the users of the residential units with panoramic views over the water. It also has to meet overhead requirements because of the boats passing underneath; the

Jansen profiles are made of bright steel or hot-dip galvanised strip steel and can be powder-coated or stove-enamelled. In the Bjarke Ingels Sluishuis property, created in collaboration with the Dutch Barcode Architects, they also contribute to the building's distinct materiality. With untreated aluminium in the façade and terraces clad in wood and arranged in the form of stairs pointing towards the so-called 'Steigereiland' (an urban district and the first of the three IJburg islands), the result is a contrasting typology. Covering 46,500 square metres at the top, the building includes duplex penthouses, premium apartments and the aforementioned apartments at the lower ends of the cantilevers, as well as a restaurant with a large sun terrace, a sailing school and a water sports centre.

### **Sun, no fire**

Speaking of sun: Along the terraces rising up on the city side, two steep staircases lead to an inviting, green roof terrace that is open to the public. The special building geometry ensures plenty of light in the apartments without neglecting efficiency. The structural solutions around the Jansen VISS Fire, installed as overhead glazing for the Sluishuis, were extensively tested at Efectis in Rijswijk - and not, as is customary, in vertical installation. Some 74 mm thick in total and consisting of Pyrobel T EI60 35H on the outside and a specially hardened pane on the inside, the glazing is installed in the apartments at the lower end of the cantilever at an inclination of around 30 percent. Accordingly, the tests were carried out for horizontal installation. Generally speaking, the assembly of the 42 prefabricated frames incorporated by M.C. Kersten was anything but trivial. In the end, the 600-kilogram elements with the fireproof glass packages were lowered from the ceiling through the façade into the apartments, to be lifted safely into the building opening.

But why the particular focus on fire-resistant glazing? In the event of a fire, the fire brigade has difficulty reaching the apartments projecting over the water. Filled with argon, the glazing has a Ug-value of 1.1 W/m<sup>2</sup>K, with the overall component measuring 1,250 x 3,000 mm. In functional terms, the Jansen VISS fire roof glazing also plays a decisive role with regard to their accessibility. And it doesn't stop there. The building developed and realised by VORM, BESIX Real Estate Development and BESIX Nederland is highly sustainable, with an energy performance coefficient (EPC) of 0.00: The heating requirement is minimised by a combination of effective insulation and tri-

ple glazing; above all, ventilation systems and showers (!) provide considerable heat recovery. Energy-efficient district heating and heat pumps for hot water and cooling must also be priced in, but the 2,200 square metres of solar panels cover the energy consumption for heating, heat pumps, ventilation and LED lighting.

### **Life on the water**

The water is therefore not only reflected in the aluminium of the façade, creating a changing image depending on the time of day; the steel profiles of the VISS Fire roof glazing, which were used for the window constructions because of the boats passing underneath, also fit in with the natural materials chosen. The landing stage around Sluishuis offers space for 34 houseboats, and the landscaped grounds – planted with native plants and equipped with moorings, seating areas and floating gardens – fosters contact with the water. Residents and visitors alike enter the building via this courtyard, which also provides space for boats or SUPs that have been brought in; the result is a building that is both on and in the water, whose façade design – regularly broken up by balconies – is just as important for the connection with the surrounding nature as the central, waterfront courtyard, the premium terraced apartments with wood cladding and the stairway to the roof of the Sluishuis, offering spectacular panoramic views over the water and the IJ.

Bjarne Ingels says the development is designed as a block in the city centre, with all aspects of urban life. And Dirk Peters, of Barcode Architects, adds: “Its iconic architecture, new building typologies and wonderful outdoor spaces, as well as the breathtaking view over the IJ, make Sluishuis the new landmark for IJburg and Amsterdam.” What undoubtedly contributes to this perception is the openness – towards the water as well as towards the neighbouring residential areas. Instead of creating exclusivity through demarcation, everyone is welcome to visit the inner courtyard or climb to the top of the lock house. As if the creators of the complex wanted to say: what has been created is too valuable to be made accessible to owners, tenants and restaurant patrons alone. Life on the water is celebrated here, because it is a constant companion on and in this building – and is responsible for some of the high structural (safety) requirements,

Ultimately, however, it is the natural materiality of light metal, steel and wood that matches the edgy physicality of the building and ensures that it will retain a rich, vibrant appearance.

## **Captions for Sluishuis, Amsterdam**

### **201b.jpg**

The Sluishuis is the new landmark of Amsterdam – living on and with the water is the motto for the residents of the 442 apartments.

### **270.jpg**

The highest fire protection requirements are met by the VISS fire roof glazing from the Swiss company Jansen AG, as fire-fighters can only reach the apartments projecting over the water with difficulty in the event of a fire.

#### **Project details:**

**Client:** VORM Ontwikkeling en Besix RED

**Architecture:** Bjarke Ingels (BIG), Copenhagen, and  
Barcode Architects, Rotterdam

**Metalwork:** M.C. Kersten, Amsterdam

**Area of application:** windows, façade

**Date of completion:** 2022

**Profile system used:** Jansen VISS Fire roof glazing

**System supplier:** Jansen AG, Oberriet, Switzerland

**Text:** Reinhold Kober / Book Your Video GmbH & Co. KG, Bad Wörishofen

**Photos:** © Ossip van Duivenbode

**Photo credits:** Jansen AG, Oberriet

#### **About Jansen AG**

Jansen AG was founded in 1923 and is based in Oberriet, Switzerland. The Group develops, manufactures and distributes steel profile systems and plastic products for various sectors of the construction industry. Since 1978, Jansen has been the exclusive Swiss sales partner of the German company Schüco International KG and distributes its aluminium profile systems within the construction sector. In January 2021, Jansen AG acquired the subsidiary RP Technik GmbH, which is also a provider of steel solution systems for façades, windows and doors, from the Welser Profile Group of Companies. Jansen handed over its automotive supply business to Mubea on 1 April 2021. To this day, the Jansen Group remains a wholly family-owned company and employs around 600 people worldwide.

**Media contact partner for Swiss editorial offices:**

Jansen AG  
Anita Lösch  
Industriestrasse 34  
CH-9463 Oberriet SG  
Tel.: +41 (0)71 763 99 31  
E-mail: [anita.loesch@jansen.com](mailto:anita.loesch@jansen.com)