DAS RAIQA

Building upcycling at Quartier Innsbruck Mitte

As STRABAG, we are taking on the responsibility of climate protection in the construction industry and have already started to rethink the construction of tomorrow. Building in existing structures is a central element of this.

Markus Engerth,

Division Manager STRABAG Austria

The Tyrolean capital will soon be one attraction richer. STRABAG is building a new, multifunctional quarter in the centre of the city for the client Raiffeisen-Landesbank Tirol AG. People will soon be able to enjoy themselves, spend the night, work, play and consult there. Art and culture meet business life and holiday enjoyment.

The centrepiece of the complex is the former "RLB Tower", which has been carefully revitalised and upgraded. Instead of demolishing the building from the 1970s, it was carefully dismantled down to the reinforced concrete skeleton and then transformed into the mixed-use project DAS RAIQA. The result is a prime example of sustainable construction in existing buildings, in which as much of the existing building fabric as possible is reused. It saves CO2 emissions that would be generated by a comprehensive new build using new materials and their processing on the construction site. The ground-breaking ceremony for the RAIQA took place in autumn 2022, with completion planned for winter 2025.

Cover New landmark in the heart of Innsbruck © Patricia Bagienski-Grandits



Factsheet DAS RAIQA 2

Mix of uses replaces mere bank building

Més que un club ("More than a club") is the credo of FC Barcelona; in Innsbruck it is more than a bank. Business premises, bank lobby, advisory area, four-star hotel, restaurants, an art space for art exhibitions as well as seminar and event facilities – all this is offered at RAIQA. At the same time, the approximately 400 employees of Raiffeisen-Landesbank Tirol will have a modern and high-quality workplace. The vault of the new bankconsisting of steel-concrete composite components and an armoured door with a combined total weight of around 33.5 tonnes meets the highest security standards and has an integrated state-of-the-art 24-hour automated safe deposit box system. The architects at Pichler & Traupmann had an open, hybrid urban district in mind when planning the project. It will be brought to life by the more than 10,000 passers-by who frequent this central axis between the main railway station and Maria-Theresien-Straße, Innsbruck's boulevard and shopping mile, every day.

DAS RAIQA stands for the development of a new living space in the centre of the city. Thanks to the hybrid building concept, the bank is no longer the central element, but part of the entire building complex and thus gives urban space back to the population.

Christof Splechtna,

Member of the Managing Board of RLB Tirol AG – responsible for the DAS RAIQA project



1 The reinforced concrete skeleton of the former "RLB Tower" forms the basis of the new city quarter. © STRABAG / Toni Rappersbergers

STRABAG is responsible for all demolition work and the shell construction of the project with a total usable area of 23,000 m², using 30,000 cubic metres of concrete and 4,000 tonnes of steel. An additional contract was also awarded for the planning and adaptation of the neighbouring existing buildings, which will house a kindergarten and several shops, among other things. The heart of the main building is formed by the lobby of the bank and the hotel as well as the Art Space on the ground floor, where various artists will show their work.

Factsheet DAS RAIQA 3

Sustainable shell, environmentally friendly core

Sustainable energy sources ensure that the RAIQA is almost energy self-sufficient. Heating and cooling are fuelled by geothermal energy. Access to geothermal energy is obtained via an existing groundwater well. A photovoltaic system supplies additional electricity. According to the principles of urban social mining, it is not only the building fabric of the old Raiffeisen building that is being reused, but also the furnishings and interiors in many places in Tyrol are being given a new lease of life. Glass panes and cables as well as door handles and even a cleaning machine can now be found in the Neuwirt culture and community centre in Wattens. The Foodsharing organisation received the fridges, which are now used to store food for homeless and low-income people throughout Innsbruck. Refugees learn German on former office furniture from Raiffeisen-Landesbank Tirol at Diakonie in Telfs. And props are stored in the compartments of a heavy-duty shelving system at the Tyrolean State Theatre.



- 2 Greenery and sustainable construction characterise the project. © Patricia Bagienski-Grandits /
- 3 Proud of wood a large part of the hotel is being built using innovative timber construction methods

 © STRABAG / Toni Rappersberger



Green biotope instead of urban concrete jungle

Whether a lushly planted staircase with seating, a natural oasis on the 6th floor or the vertical greenery on the walls of the hotel, the RAIQA is not stingy with its abundant planting. It is not only a feast for the eyes in the urban, stony space, but also ensures more pleasant temperatures in the neighbourhood. The Central Institute for Meteorology and Geodynamics (ZAMG) even certified this benefit for the client, Raiffeisen-Landesbank Tirol, in a separate report. It analysed the temperature conditions, wind conditions and sunlight conditions, all of which were found to have a positive effect. Accordingly, DAS RAIQA acts like a cooling island in the heat of the city.

Building on wood

However, it is not only the utilisation of the RAIQA complex that can be described as hybrid; a carefully coordinated mix of building materials is also used. In order to limit the weight load on the reinforced concrete skeleton and minimise the CO2 footprint, wood is used as a building material from the fourth floor upwards. Special treatment and assembly allow the supporting and floor elements to also be made of wood. The rooms of the four-star hotel are prefabricated boxes made of glulam, which only had to be integrated into the building structure. A special architectural highlight of the RAIQA is the so-called hammerhead. This component on the north side of the building, which cantilevers to a height of around 20 metres, does not require any supports and therefore appears to float in the air. The hammerhead is based on a reinforced concrete floor slab, which will bear the total weight of the structure of 1,800 tonnes when completed. 16 of the total of 161 hotel rooms will then be located there.

Yes, we can do that

STRABAG already has a lot of experience in the field of building in existing structures, but each project also presents its own special challenges. DAS RAIQA is located in the centre of Innsbruck and is surrounded by many buildings, which makes for difficult logistics when it comes to accessing and leaving the site. The construction cranes used were located directly in the flight path of Innsbruck Airport.

When replacing parts of the building on the lower floors, 8,000 iron pillars, which supported the floors above weighing several tonnes, provided additional stability. The dismantling work always had to be carried out with as little vibration as possible so as not to damage the existing structures. The basis for this was precise and thorough

structural planning as well as a detailed analysis of the existing structure in order to decide which parts needed to be replaced and which could be left as they were. The 20,000 tonnes of reinforced concrete resulting from the demolition were completely recycled.

As the dismantling of the Raiffeisen Tower took place at the same time as the construction of the new elements, coordinating the processes on the construction site itself proved to be extremely challenging. Five building construction teams were working simultaneously, each with their own plans to realise. During the 20-month shell construction period, around 130 construction workers were involved at the same time and their activities had to be coordinated.



At RAIQA, we not only mastered numerous construction challenges, but also created a sustainable model project in the centre of Innsbruck.

Bernhard Preiner.

STRABAG project manager RAIQA

4 The location of the construction site in the centre of the city required sophisticated logistics planning.

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5 The "outstanding" construction gives the hammerhead its name.

© STRABAG / Toni Rappersberger



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