

A Spatial Laboratory











Building in nature conservation areas

Purbach am Neusiedlersee is part of the Neusiedlersee/Fertő cultural landscape, which is a UNESCO World Heritage Site. On the north-eastern edge of Purbach, at the foot of the Leitha Mountains, a “spatial laboratory” has been developed as a creative retreat for a musician, a scientist and their preconditions, built in strict compliance with the requirements for construction building in a nature reserve.

The building forms a symbiosis with the surrounding natural landscape through its appearance and the chosen materials.

The site is bordered by vineyards on the south-west, forest on the north-east and with a view over Lake Neusiedl eastwards to Hungary. This symbiosis is achieved through the natural appearance of the materials in combination with natural surfaces (such as wood greying, controlled metal rusting and stone erosion...) and a clear, restrained modularly changeable design requirements (such as generous glass surfaces and weather-related sliding shutter positioning).



The spatial laboratory

The building is designed as a flexibly usable cuboid, proportions golden ratio, with a second level on the ground floor, connected by a staircase. It is used as a spatial laboratory in which the complexity of the interaction of nature, house and music on the human condition will be professionally explored by the users. While in the hall the boundaries to the outside are permeable and flexible, the studio below is a closed space on three sides, which meets the requirements of a musical practice room and for the performance of small concerts in a private setting.

Both levels can be expanded and adapted for future additional settings.

A separate entrance on the lower level (ground floor) leads to the studio with corresponding ancillary rooms.

The studio is built on solid foundations; the interior is made of solid wood. This creates an acoustic space comparable to a resonating body. Additionally, the studio's compact design and the opening exclusively to the north create a stable climatic zone that stays cool in summer and is easy to heat in winter.



Use and installation

The level above is covered with a hall of 6 meters high, as an open space, all necessary uses for cooking, sleeping gallery, etc. are integrated. An internal staircase connects this platform level with the ground floor. The hall and the studio can be separated with a horizontal flap.

On the north side, the hall is extended by a big terrace with an open fireplace and a long bench in front, inviting you to linger in the shade outside in summer.

The hall opens to the surroundings on all sides with floor-to-ceiling glazing. A system of sliding, full-surface wooden elements, with a walkable, evenly connected intermediate space, is running around at the outside and connected to the terrace and provides view, sun and weather protection and filter. This filter works as a double skin accessible wall for guiding and modulation the light. This flat intermediate connected space creates inside the hall an impression of floating.

Furthermore, these external flexible wooden elements provide shade and act as an additional thermal insulation at night and in winter. This ensures an optimum indoor climate through all seasons and weather conditions, despite the large glazed areas throughout the building, without any technical effort.

Additional space heating and cooling are provided by a heat pump and heat dissipation surfaces in the form of integrated low-temperature floor heating, operated by a solar system on the roof, a hot water tank serves as a battery buffer. Due to its location in the nature reserve, the building was planned with minimal changes to the terrain and with consideration given to the surrounding flora and fauna. This creates the impression that the ambience with this building has always been manifested and coexists without impact.



Info

Category Private Home	Technical structural analysis: Harrer & Harrer ZT GmbH Krems / Wien office@harrer-ing.at http://www.harrer-ing.at/	Copyright driendl*architects ZT GmbH
City Purbach am Neusiedlersee, Austria		
Commissioner Private	engineering and energy system: Neue Bauphysik und Energiedesign GmbH https://www.neubau.energy/index.html	
Period 2021–2026		
Type direkt	Details site area: 7 500 m ² gross floor area: 250 m ²	
Status built		