

CASE STUDY: LIVING IN TIVOLIGASSE**A GREEN OASIS IN URBAN SURROUNDINGS****PROJECT OWNER:** PALMERS IMMOBILIEN SE**PROJECT LOCATION:** 1120 WIEN, TIVOLIGASSE 11
GESCHWISTER-SPITZER-WEG 2, VIENNA, AUSTRIA 1120**COMPLETION DATE:** FEBRUARY 2, 2023**ARCHITECT/DESIGNER:** FREIMÜLLER-SÖLLINGER
ARCHITEKTUR ZT GMBH**MASS TIMBER ENGINEER/MANUFACTURER:** THEURL AUSTRIAN
PREMIUM TIMBER**GENERAL CONTRACTOR:** HOLZ MEISSNITZER GMBH**STRUCTURAL ENGINEER:** HOLZ MEISSNITZER GMBH

LOCATED IN VIENNA'S 12th district of Meidling, Tivoligasse is a perfect example of how urbanization and green spaces are not necessarily mutually exclusive. For Palmers Immobilien, the team from the local architecture studio Freimüller-Söllinger designed an ensemble of 4 loosely positioned buildings on a green deck. This led to the construction of 103 apartments, a supermarket, a bicycle garage, a community room, an underground car park, and an open-air deck right in the middle of the city.

In terms of area densification, an attractive living environment based on a balanced mix of function and free space was created for the residents and their neighbors. The solid timber-frame platform, upon which the preexisting supermarket and its parking spaces are located, forms the central element of the quarter, freeing up the potential of formerly monolithic urban structures in an otherwise dormant inner-city landscape.



TIVOLIGASSE, VIENNA, INCORPORATES GREEN SPACES IN AN URBAN AREA

Source: Kurt Hörbst

To integrate the new building organically among the preexisting structures, the architects opted for an airy design. On the upper levels, residential buildings evolve into a green deck with playfully positioned wooden superstructures. The result is an unusual ensemble, specific to the site, that establishes identity while remaining considerate of the existing visual axes of neighboring structures. The buildings were deliberately rotated slightly into one another to preserve visual corridors from west to east.



TOP — THE BUILDINGS WERE DESIGNED TO RETAIN EXISTING VISUAL CORRIDORS

LEFT — CEILINGS WERE MADE OF VISUAL-QUALITY CLT

Source: Kurt Hörbst



The central element is a flexibly designed wooden structure that enables a wide range of options for residential concepts and free use within the axis setting and subsequent adaptation. THEURL supplied 2,000 cubic meters, or 40 truckloads, of CLTPLUS (Cross-Laminated Timber) elements for ceilings (visual quality) and walls (industrial quality) for the 2 5- and 6-story buildings. Access to the construction site was via a one-way street

and, because of the lack of parking, all trucks had to be unloaded as quickly as possible.

One challenge was provided by the unusual vertical loading of all the wall elements and the horizontal loading of the ceiling elements. They had to be delivered overnight to the construction site by 5:00 a.m. because of their protruding width of 2.95 meters. From a structural point of view, the statically required interlocking of the load-bearing wall elements at the rear of the building presented an additional tricky task for Team THEURL. But it was accomplished as confidently as the precision manufacturing for the statically loaded steel elements.

This case study has not been fact-checked, but it has been edited for length, clarity, grammar, and style. 🟢