

ÚJKERT COMMUNITY GARDEN

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00. Subject

How can the alienation and architectural monotony of Socialist-era housing estates be dissolved through a contemporary micro-intervention?

In my thesis project, I reimagined a municipal community garden located in the heart of the Újkert housing estate in Debrecen. As an extension of the gardens, I designed a community pavilion that not only hosts urban agriculture but also serves as a generational bridge, actively integrating the gardening community into the residential fabric.



01. Background

The Újkert housing estate in Debrecen was established in response to housing shortages, following the housing policy aspirations of the 1970s and 80s. Replacing a low-density zone once characterized by spacious gardens, the neighborhood - comprising four-story strip houses and 8-10 story tower blocks - was considered a symbol of modern life in its time. The expansive interstitial spaces between the prefabricated panel blocks represent significant green space value today; however, due to the gradual functional obsolescence, the atmosphere of the built environment is now dominated by monotony.

Over time, the sociological composition of the residential community has also transformed. Interviews conducted on-site highlighted a duality: while Újkert's basic infrastructural provision is excellent, younger generations long to leave, and community life is limited to formal interactions between neighbors. Although an actively maintained community garden - which even organizes its own events - operates on the site, most nearby residents are unaware of its existence due to its spatial seclusion, or they remain excluded from integration by closed gates.



The basis of the design program was established through the study of international precedents such as the [R-Urban initiative](#) by the French atelier d'architecture autogérée, which is a textbook example of local food processing and self-sufficiency, or WorkAC's ['Edible Schoolyard' project](#) in Brooklyn, which links education with horticulture.

02. Location

The project site is located within a building block interior at 91 Bőszörményi Road. The surrounding blocks, along with the dense internal stands of trees – typically maple, linden, and cypress species – form a natural acoustic barrier against transit motor vehicle traffic and the resulting noise pollution.



The exact position of the pavilion was determined by the intersection of pedestrian traffic between Borbíró Square and Cívus Street. In this area, the potential of the existing garden is immense, but current facilities are limited for accommodating more open programs requested by residents, such as picnics, communal cooking, and seasonal tastings. The aim of the intervention is therefore the spatial reinforcement of an existing, active garden community and its integration into the wider residential environment.



03. Concept and positioning

The building, characterized by a strong longitudinal axis, bisects the site in a North-South direction. At its ends, open wall structures connect perpendicularly to the main axis in a 'tentacle-like' manner, forming visual and physical boundaries toward the points of arrival.

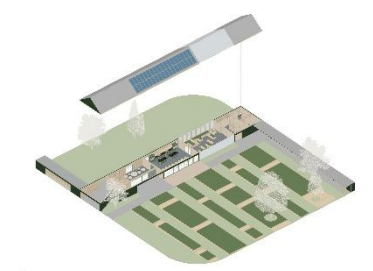
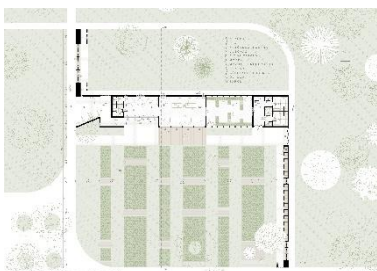
This gesture creates a contrast between the two sides of the mass:

- On the Eastern side, there is a human-cultivated garden divided by raised beds organized in a grid.
- On the Western side, an informal, grassed leisure park unfolds.
- Due to the building's positioning, the cultivated area and the park are never visible simultaneously from any single vantage point, thus presenting a unique face in every direction.



04. Spatial planning

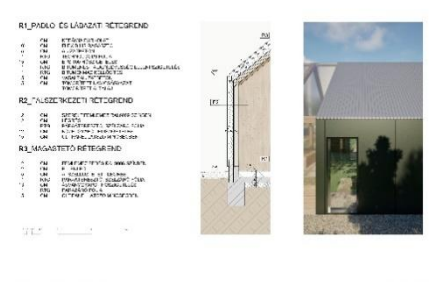
The 438 m² internal sequence of spaces follows a functional order. At the southern end, a covered-open passage and bicycle storage welcome visitors, serving as a transitional zone between the park and the garden.



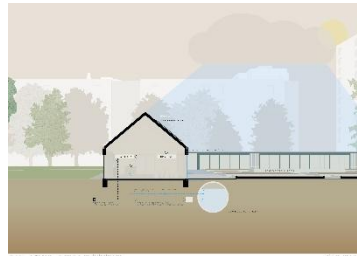
The central core is formed by a 76 m² community kitchen. This is intended to host the processing of locally grown vegetables, communal cooking, and gastronomic workshops. Directly connected to the kitchen is a greenhouse, also 76 m², where seedling propagation and year-round herb cultivation take place.

05. Structure and sustainability

The load-bearing structure of the pavilion is constructed from Cross-Laminated Timber (CLT) panels. This appears in an exposed finish within the interior. Externally, the timber panels and the thermal insulation layer are enclosed by a rainscreen metal cladding in RAL 6009 Pine Green. The final roof covering is standing seam metal roofing in RAL 9006 White Aluminum.



A photovoltaic system mounted on the southern slope of the pitched roof provides the electricity supply. During rain, precipitation runoff from the roof directed through hidden gutters reaches an underground rainwater harvesting tank. This feeds the garden's irrigation system and the building's greywater system. Organic waste produced is placed in the garden composter, eventually returning to the topsoil as nutrients.



06. Summary

The pavilion, designed as an expansion of the Újkert Community Garden, seeks to answer how the monotony of monolithic housing blocks built with industrial technology can be broken by a human-scale, sustainable architectural intervention. The project aims to dissolve modern urban isolation through shared agriculture and gastronomy.

