SUN TERRACE

This new eco-district near the shores of Lake Zürich reconceives suburban development as a compact, carbon neutral village, offering multifamily housing designed to support social, spatial, and natural diversity.

In contrast to the sprawl and linear monotony of the existing context, here, a dense aggregation of eighteen two- and three-story buildings form a pattern of clustered triads, resulting in a web of exterior courtyard. Constructed from local cross-laminated timber, the building’s floor plates are stacked and rotated to optimize views, natural ventilation, daylight and passive solar heating. Gently rotating the floor plates produces a sequence of shifted terraces: each spatially distinct with unique views, two exposure, and direct sun for the 126 apartments, which range from 40 to 124m². The uppermost floor plate is folded into a self-structuring roof canopy, like an origami umbrella, that strategically channels sunlight toward the apartments and plant life below.

At the neighborhood scale, these combined gestures—rotated floor plates, shifted terraces, and folded canopies—stimulate cooling summer breezes and mitigate winter winds by increasing the degree of irregularity or texture in the urban fabric. The web of courtyards, as a result, double as networked ventilation corridors. This microclimate allows a suburban oasis of public outdoor space, diverse in both scale and function. Plantlad with native flora, the courtyards suggest a mosaic of restored ecosystems, from expansive meadows to shaded deciduous bower, that further support the passive heating and cooling achieved architecturally. With thirteen perimeter access points, the courtyards carve a porous border, thus, preventing the eco-district from becoming a self-isolated island. Connecting the best of urban life and wildlife, Sun Terrace is a landscape in itself built to support social conviviality and natural sanctuary.

KEY PERSON
Zhe Cao, Weizhong Chen, Andrew Heid, Po-Fen Huai, Agnieszka Grzonka, Cui Li, Naihe Liu, Trezeciksa Salihu, Cynthia Wang, Yijun Wang, Veronica Gertrude Watson, Chong Xia, Wanpeng Zhu

PROJECT
126 residential apartment units

SIZE
12,000 m² (129,167 ft²)

CLIENT
Confidential

LOCATION
Repperewil-Jona, Switzerland

STATUS
Competition, concept, unbuilt