

# **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 courtyards. 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 exposures, 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. Planted with native flora, the courtyards suggest a mosaic of restored ecosystems, from expansive meadows to shaded deciduous bowers, that further support the passive heating and cooling achieved architecturally. With thirteen perimeter access points, the courtyards carve a porous border, thus, preventing the ecodistrict 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.

## PROJECT

126 residential apartment units

#### SIZE

12,000 m<sup>2</sup> (129,167 ft<sup>2</sup>)

### CLIENT

Confidentia

#### LOCATION

Rapperswil-Jona, Switzerland

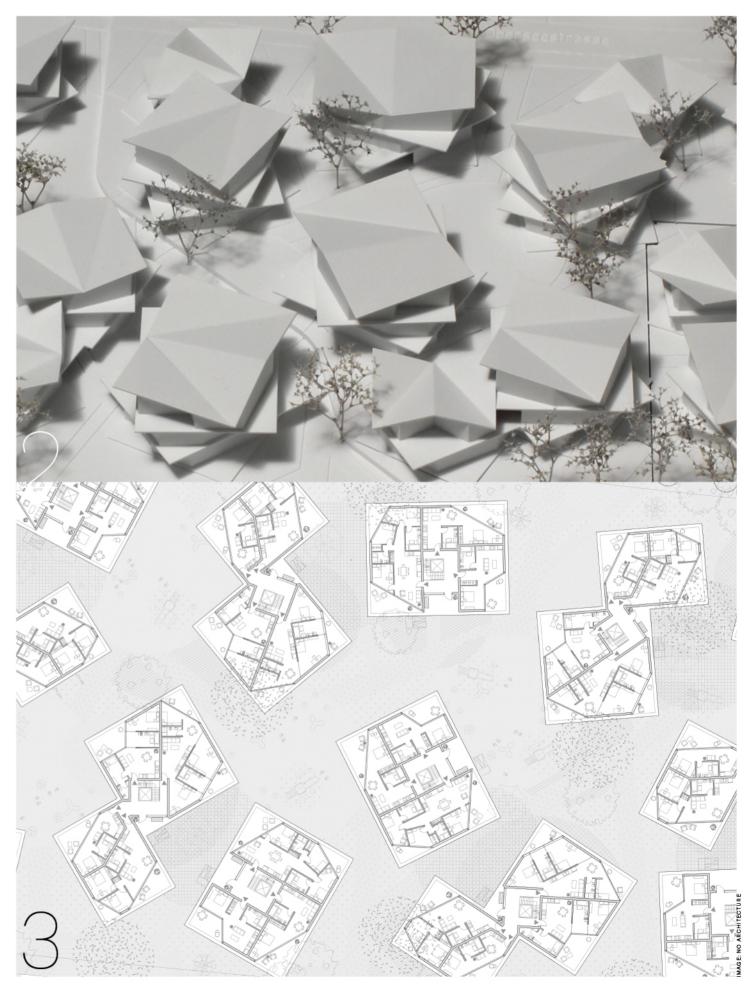
#### STATUS

Competition, concept, unbuilt

### KEY PERSON

Zhe Cao, Weizhong Chen, Andrew Heid, Po-Yen Hsieh, Agnieszka Gronek, Ce Li, Naifei Liu, Trendelina Salihu, Cynthia Wang, Yijun Wang, Veronica Gertrude Watson, Chuqi Xiao, Wanpeng Zu





1. Courtyard cluster. 2. Model. 3. Plan.