

# ***Pasona Urban Farm***

*[Pasona HQ Tokyo]*



## *Project Data*

### 1] PROJECT DATA

Designation:	<b>Pasona Group Urban Farm</b>
Year [of completion]:	2010
Author:	KONO Designs
Function:	<b>Office + Urban Farm</b>
Structure:	Reinforced Concrete + Steel [existing envelope and superstructure]
Number of floors:	9[above ground]
Owner:	Private
Environmental Assessment:	.
Rating:	.

### 2] LOCAL CONTEXT

Country:	Japan
Location:	Tokyo, Otemachi
Context:	<b>Urban</b> [high density central city districts]
Site [characteristics]	flat area, in the vicinity of the Imperial Palace Gardens, and adjacent to an artificialized water canal and express way

### 4] PROJECT AREAS

Site area:	~ 2700 m <sup>2</sup>
Total floor area:	20000 m <sup>2</sup>
Constructed area:	~ 2250 m <sup>2</sup> 83% [of Site Area]
Number of users:	~ 2000 employees

## *Project Description*

Located in downtown Tokyo, Pasona HQ is a nine story corporate office building for a Japanese recruitment company. Instead of building a new structure from ground up, an existing 50 years old building was renovated, keeping its building envelope and superstructure. The project consists of a double-skin green facade, offices, an auditorium, cafeterias, a rooftop garden and most notably, urban farming facilities integrated within the building. The green space totals over 4 000 m<sup>2</sup> with 200 species including fruits, vegetables and aromatic herbs that are harvested, prepared and served at the cafeterias within the building.

The double-skin green facade features seasonal flowers. Partially relying on natural exterior climate, these plants create a living green wall and a dynamic identity to the public. The balconies also help shade and insulate the interiors while providing fresh air with operable windows, reducing heating and cooling loads of the building during moderate climate. The entire facade is wrapped with deep grid of fins, creating further depth, volume and order to the organic green wall.

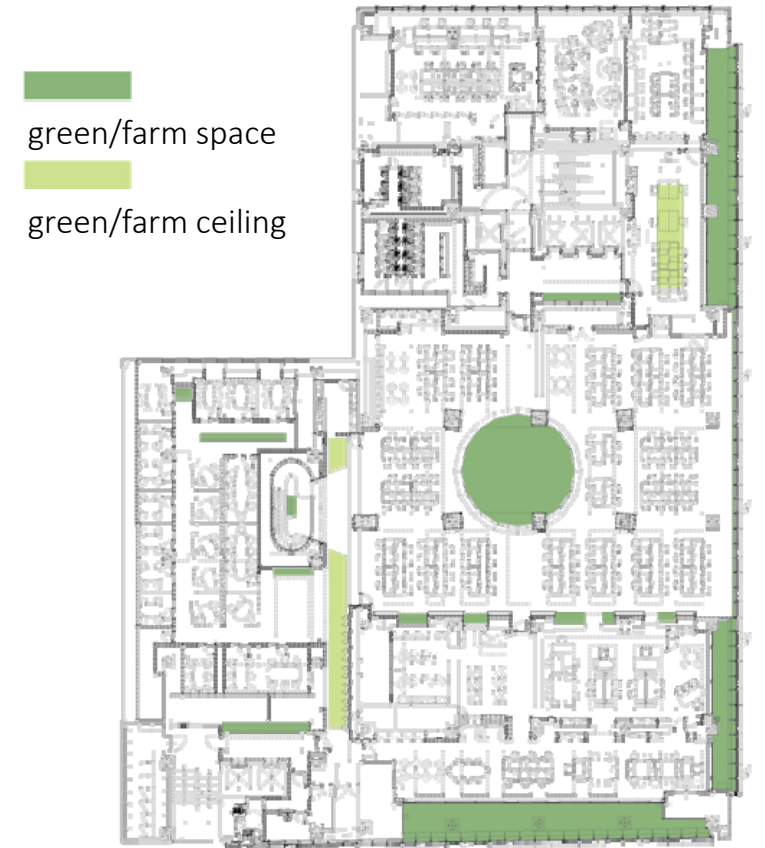
Pasona focuses on educating and cultivating next generation of farmers by offering public seminars, lectures and internship programs, to promote both traditional and urban farming as lucrative professions and business opportunities. As the crops harvested in Pasona HQ are served within the building cafeterias, it highlights 'zero food mileage' concept of a more sustainable food distribution system that reduces energy and transportation cost. Pasona HQ is highly efficient urban arable land, stacked as a vertical farm with modern farming technology to maximize crop yields.

Despite the increased energy required in the upkeep of the plants, the project believes in the long term benefits and sustainability in recruiting new urban farmers to practice alternative food distribution. Using both hydroponic and soil based farming, in Pasona HQ, crops and office workers share a common space. For example, tomato vines are suspended above conference tables, lemon and passion fruit trees are used as partitions for meeting spaces, salad leaves are grown inside seminar rooms and bean sprouts are grown under benches. These crops are equipped with metal halide, HEFL, fluorescent and LED lamps and an automatic irrigation system. An intelligent climate control system monitors humidity, temperature and breeze to balance human comfort during office hours and optimize crop growth during after hours.

Pasona HQ's urban farm exposes city workers to growing crops and interaction with farmland on a daily basis and provides improvement in mental health, productivity and relaxation in the workplace. A sampling on the air at Pasona HQ have shown reduction of carbon dioxide where plants are abundant. Such improvement on the air quality can increase productivity at work by 12%, reduce symptoms of discomfort and ailments at work by 23%, absenteeism and staff turnover cost. Employees of Pasona HQ are asked to participate in the maintenance and harvesting of crops with the help of specialists, encouraging social interaction and teamwork. Pasona Urban Farm is a unique workplace environment that promotes higher work efficiency, social interaction, future sustainability and engages the wider community of Tokyo by showcasing the benefits and technology of urban agriculture.

**KONO Designs (adapted)**

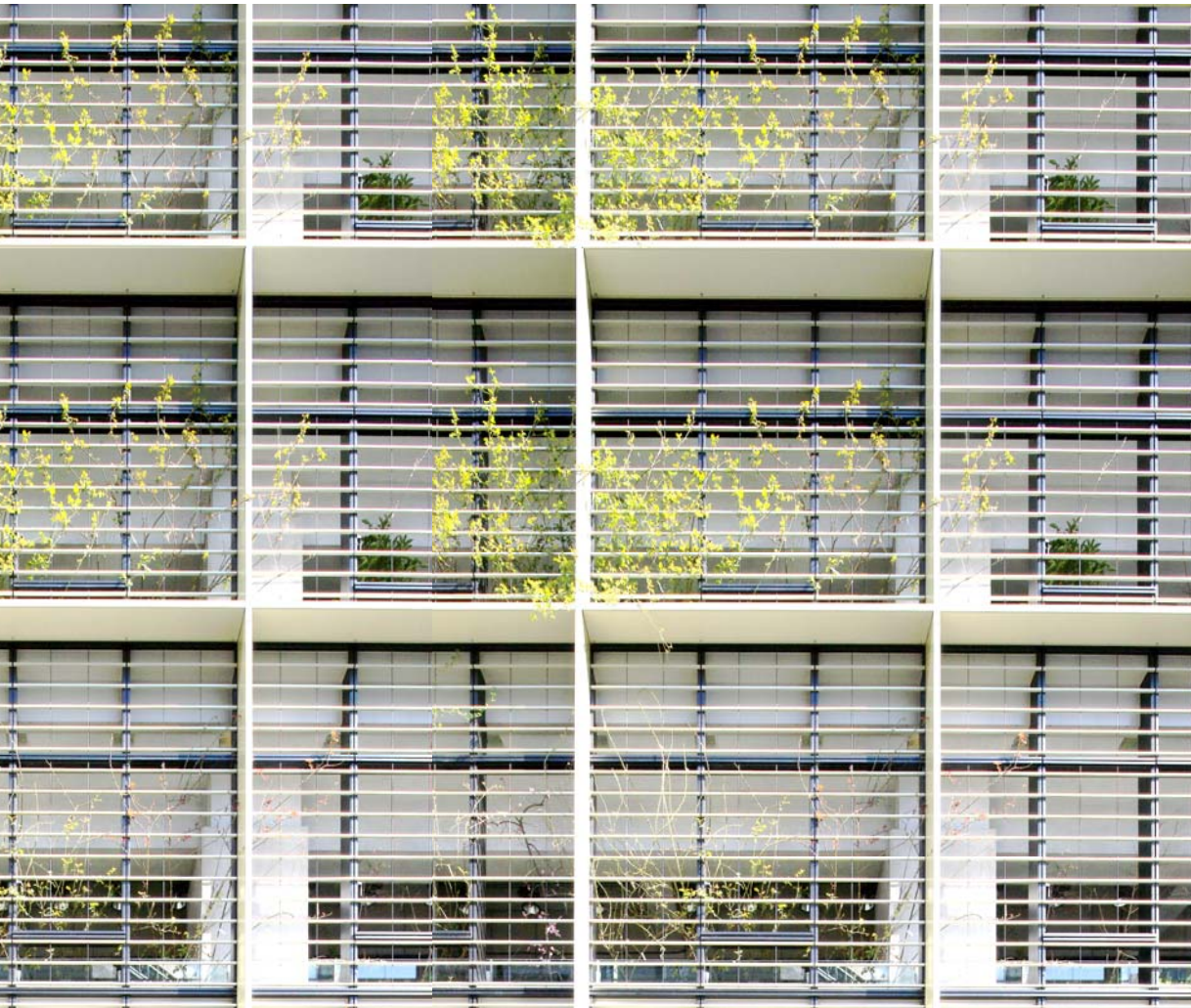
## Technical Drawings: Plans, Sections and Elevations



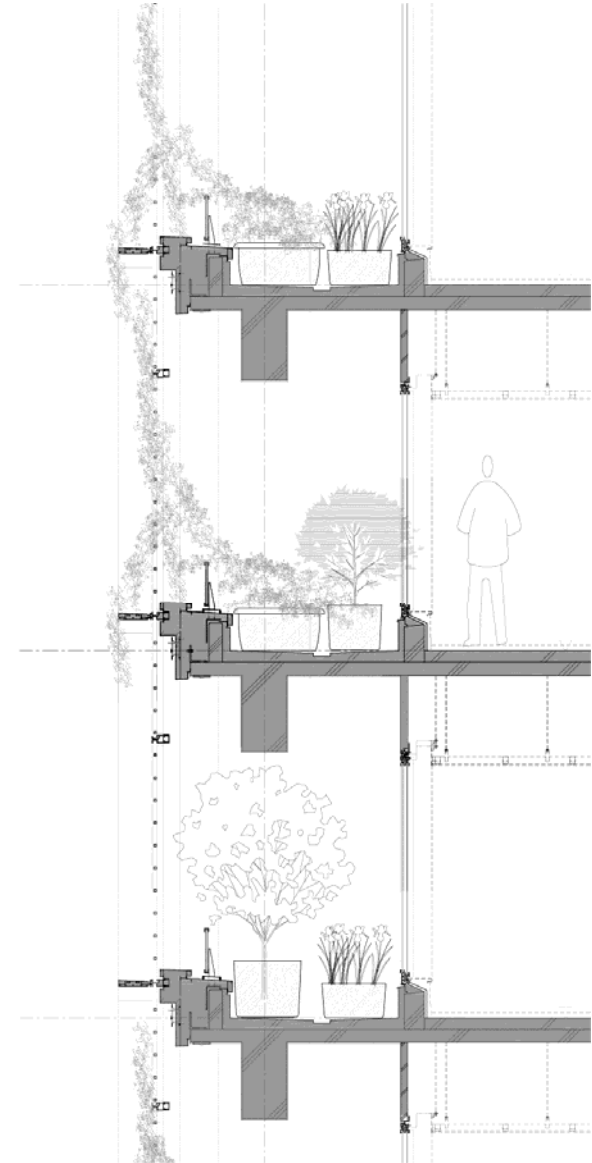
TYPICAL OFFICE FLOOR PLAN



## *Technical Drawings: Plans, Sections and Elevations*



TYPICAL BALCONY SECTION:



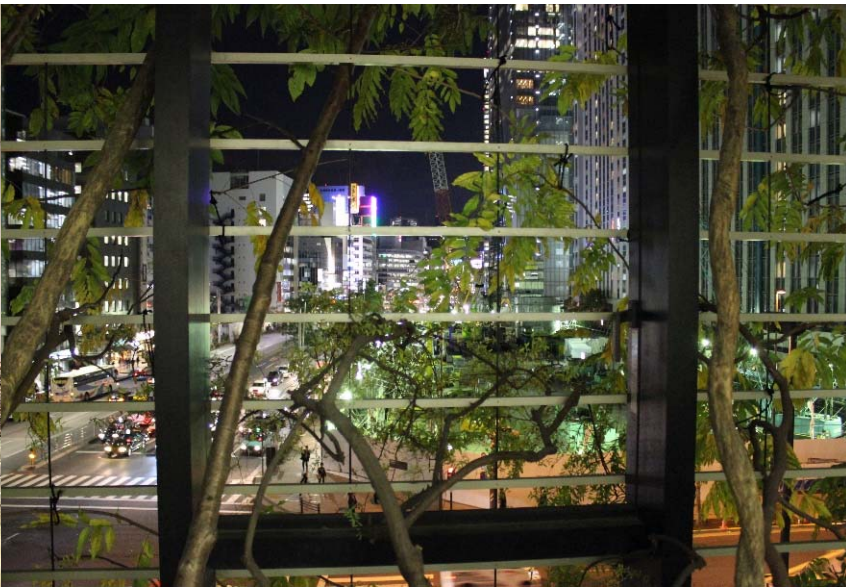
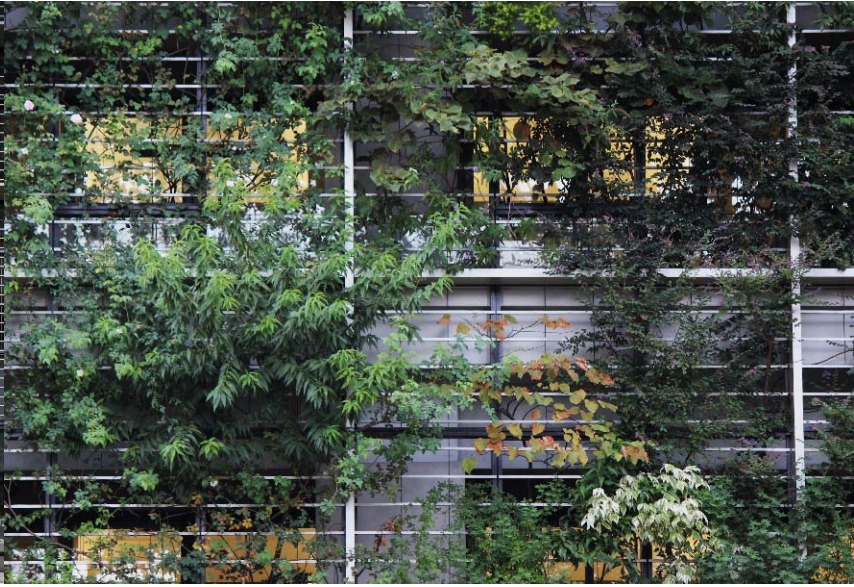


## Photos

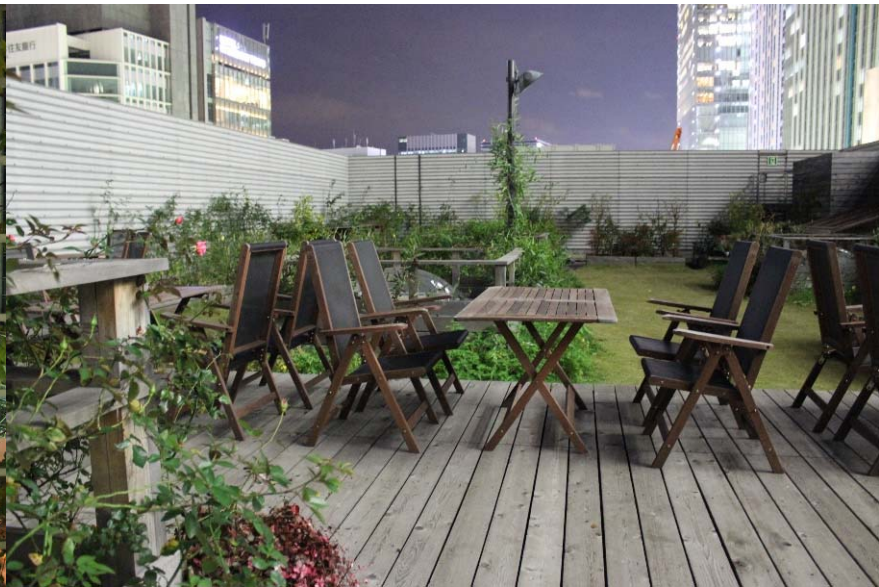
street views ↵



detail of green facade ↵



green façade view from the balconies ↵



rooftop garden ↵



## Photos

main lobby ↙



urban farm exhibition on 1F ↙



cafeteria ↙



urban farm exhibition and meeting spaces on 2F ↙



office passageway ↙



## *Ecosystem interpretation options [digest]*

- 1 Preservation and renovation of existing building structure
- 2 Green rooftop with leisure areas
- 3 Promotion of traditional and urban farming, knowledge and environmental education opportunities
- 4 Local food supply provision within the building with ~200 diverse vegetal species, for consumption on cafeterias for employees and general public
- 5 Green wall balconies with seasonal flowering climbing plants, towards South, providing microclimate and environmental modulation
- 6 Indoor vegetation improvement on working environment, quality of space and air quality
- 7 Iconic urban design and influence on corporate identity
- 8 User participation in the maintenance and harvesting of crops, and envelope control through operable windows
- 9 Interaction of urban population with farming activities and boost of agriculture economic dynamics
- ...

