

SUSTAINABLE TREEHOUSE

Architects Mithun

Location 2550 Jack Furst Dr,
Glen Jean, WV 25846, United
States Executive

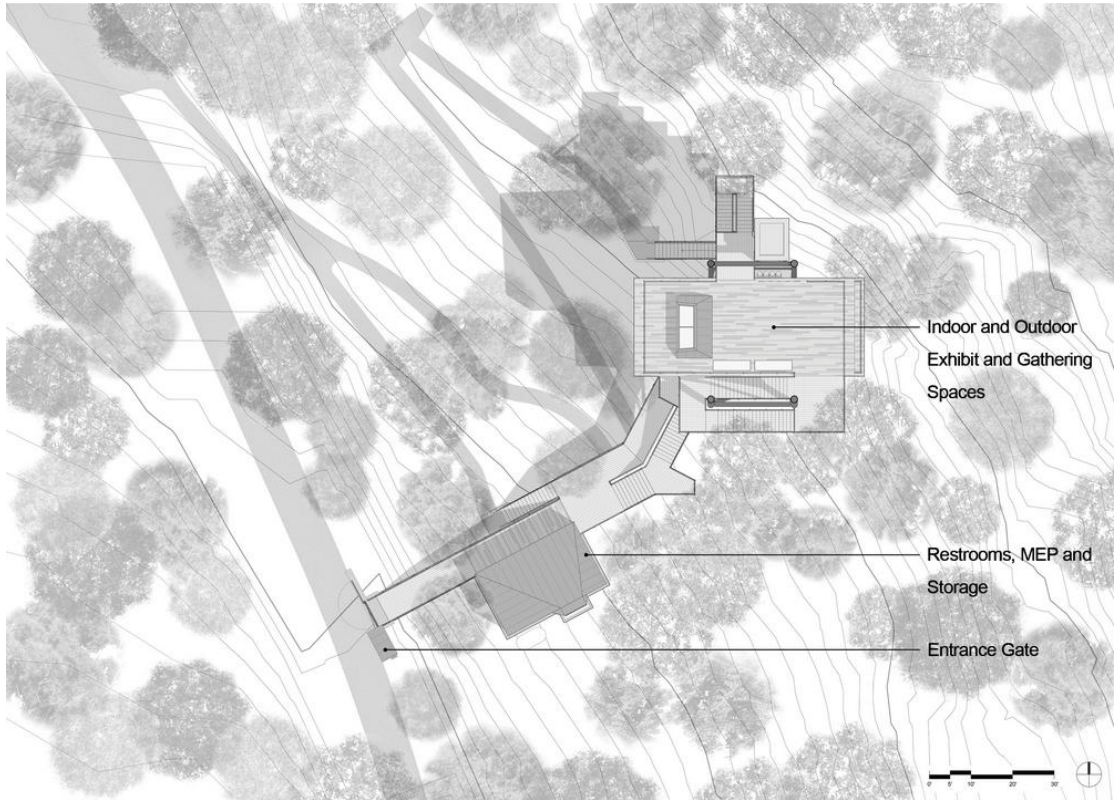
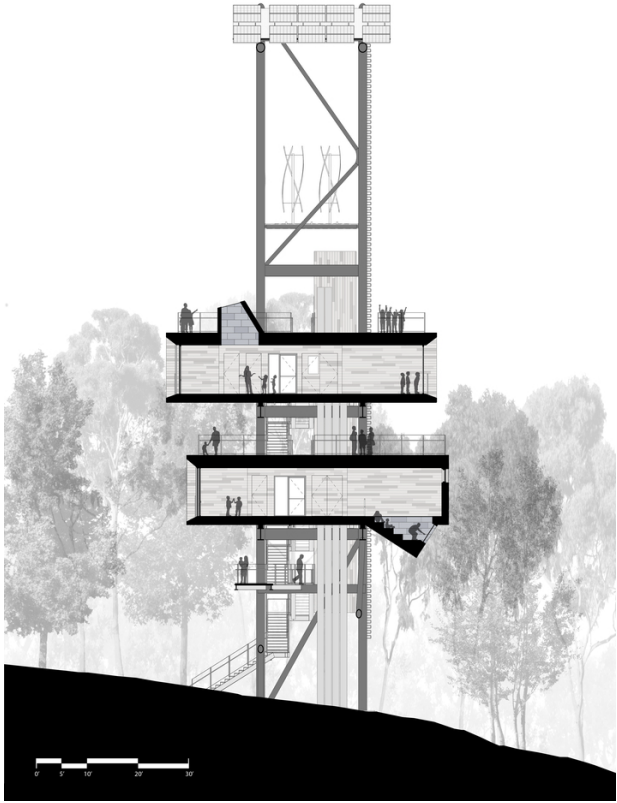
Architect/Architect of
Record BNIM

Area 3357.0 ft²

Project Year 2013

Photographs Joe Fletcher

Manufacturers B-K Lighting,
Selux, Spectrum Lighting

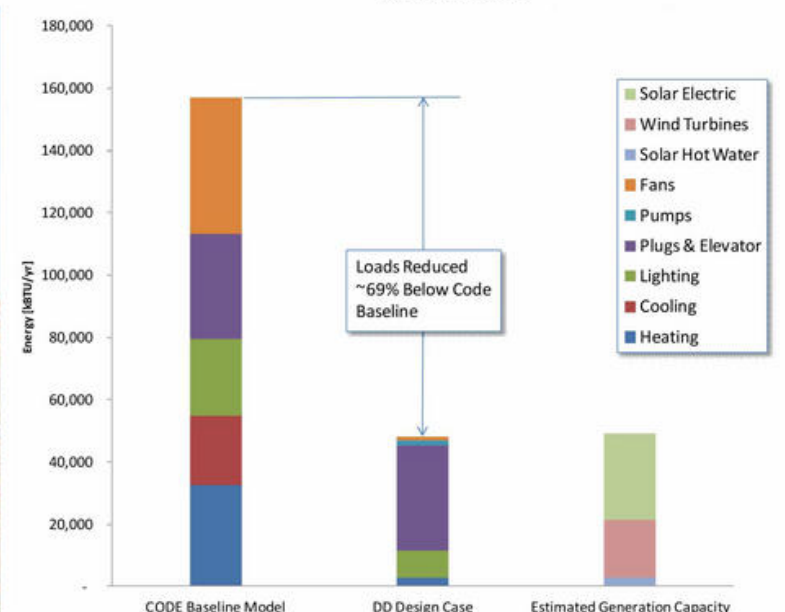
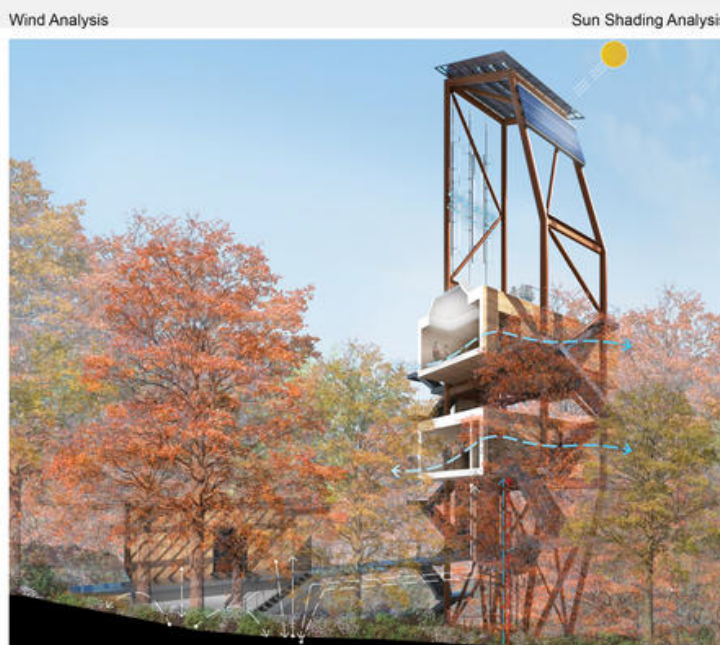
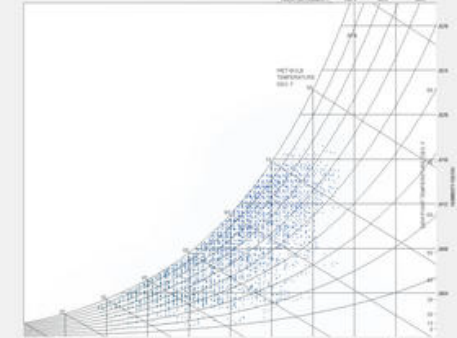
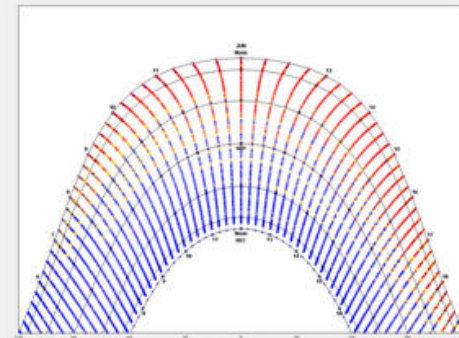
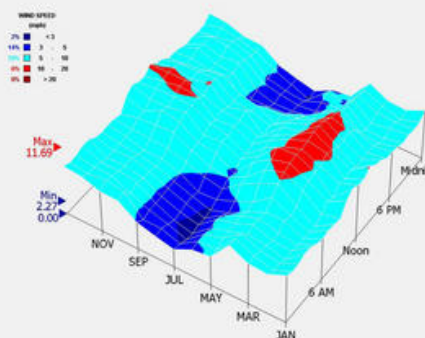




Sustainability Treehouse

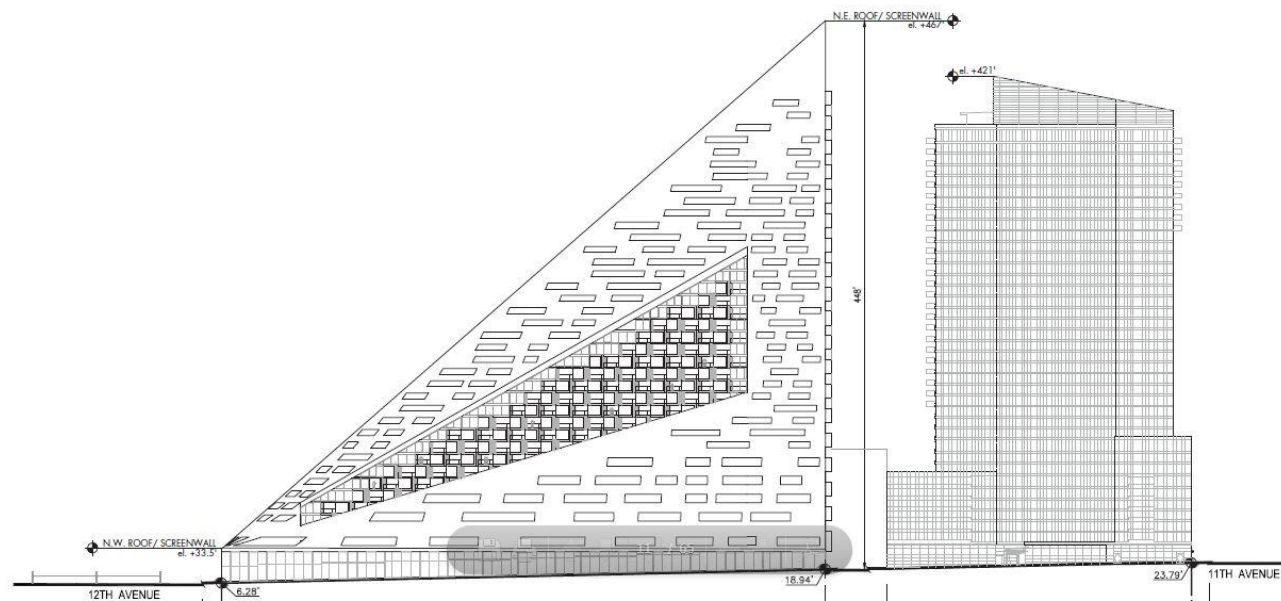
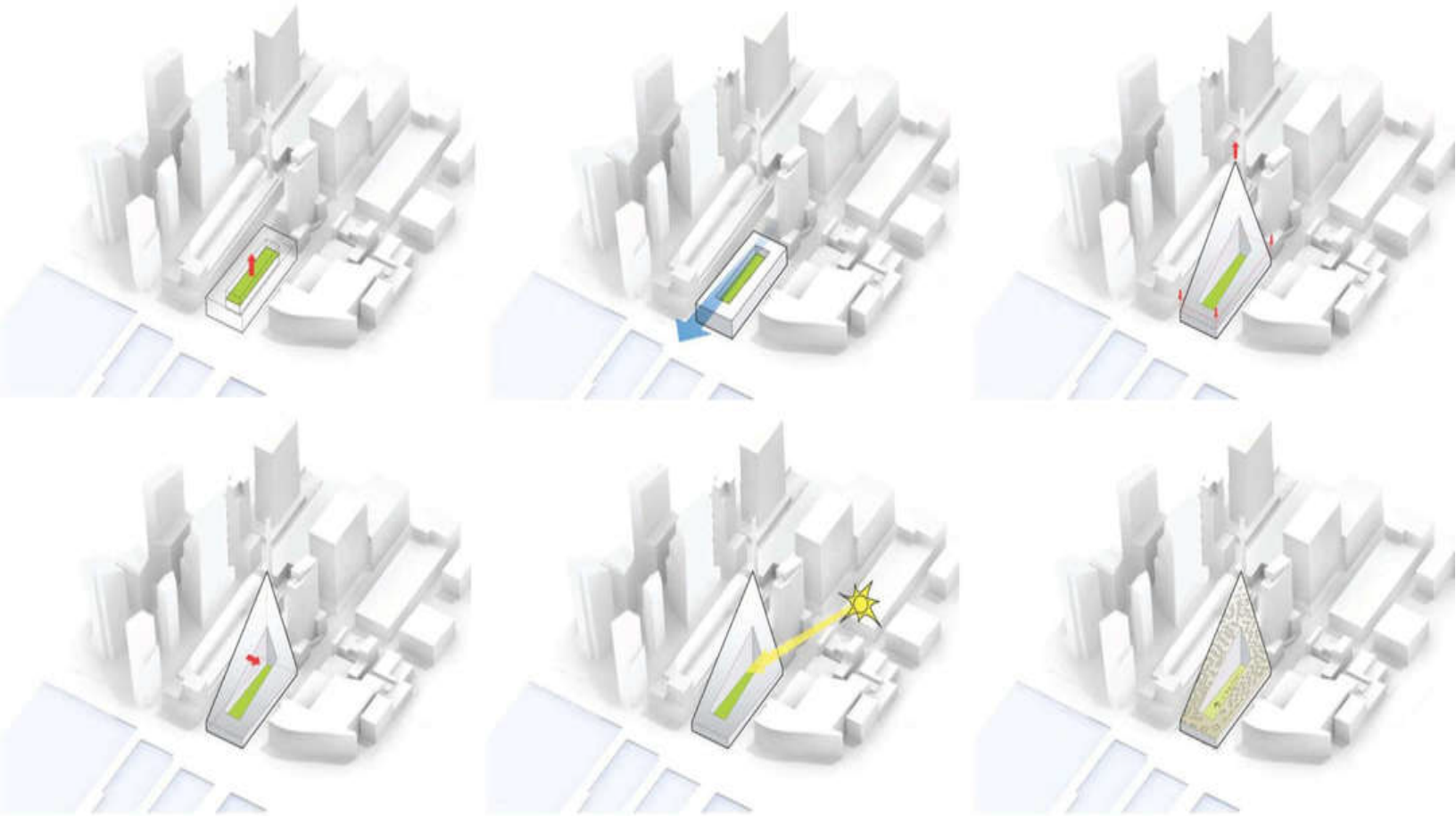
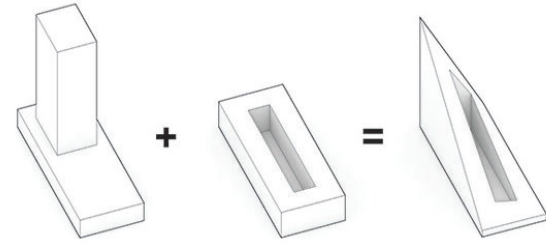
Key Performance Design Features

- 1 Solar Mast: BIPV Photovoltaic Panel Array + Solar Thermal Collectors
- 2 Recycled Content Corten Steel Frame
- 3 Vertical Axis Wind Turbine
- 4 Rooftop Classroom / Constellation Observation Platform
- 5 High Performance Building Envelope
- 6 Zero-VOC / Red List Compliant Building Finishes and Materials
- 7 Hydronic Radiant Heating / Natural Ventilation
- 8 LED / Energy Efficient Lighting and Display Equipment
- 9 Forest Stewardship Council Certified Wood Framing and Cladding
- 10 Sky Portal: Flexible Indoor Interpretive and Educational Program Space
- 11 Canopy Room: Adaptable Educational Space and Forest Viewing Platform
- 12 Ground Portal: Forest Floor Observation and Interpretive Space
- 13 Deciduous Solar Screen: Strategic Site Orientation to Optimize Daylight Harvesting and Solar Screening
- 14 Elevated Accessible Canopy Walk
- 15 Compost Toilet Comfort Station
- 16 Closed Loop Rainwater Harvesting Cistern
- 17 Central Plant Geothermal Collection
- 18 Edible Forest Garden
- 19 Net Zero Energy
- 20 Water Conservation and Re-use



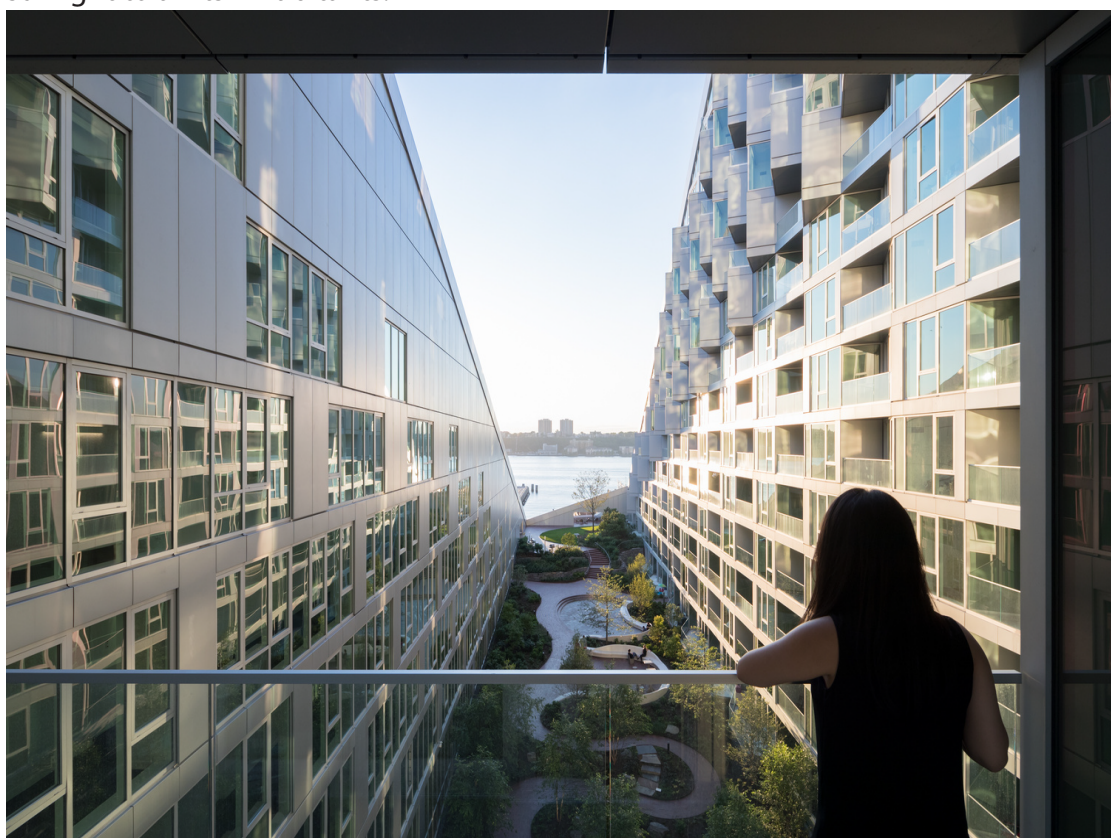
COURTSCAPER W57

Architects: BIG
Location W 57th St, New York, NY, United States
Partners in Charge Bjarke Ingels, Thomas Christoffersen, Beat Schenk
Project Architect David Brown
Height 450 ft
Area 830,000.0 ft²
Project Year 2016





W57 is a clever union of the courtyard building and skyscraper that guarantees sunlight to all its inhabitants.



TEHRAN TOWER

Honorable Mention

2012 Skyscraper Competition

Mahdi Kamboozia, Alireza Esfandiari, Nima Dehghani, Mohammad ashkbar sefat

Iran

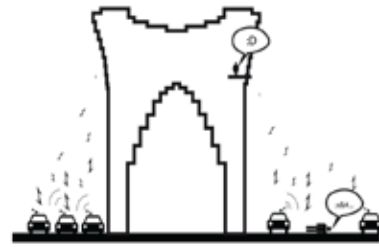


WINTER/ Building needs mor daylight and sun heat

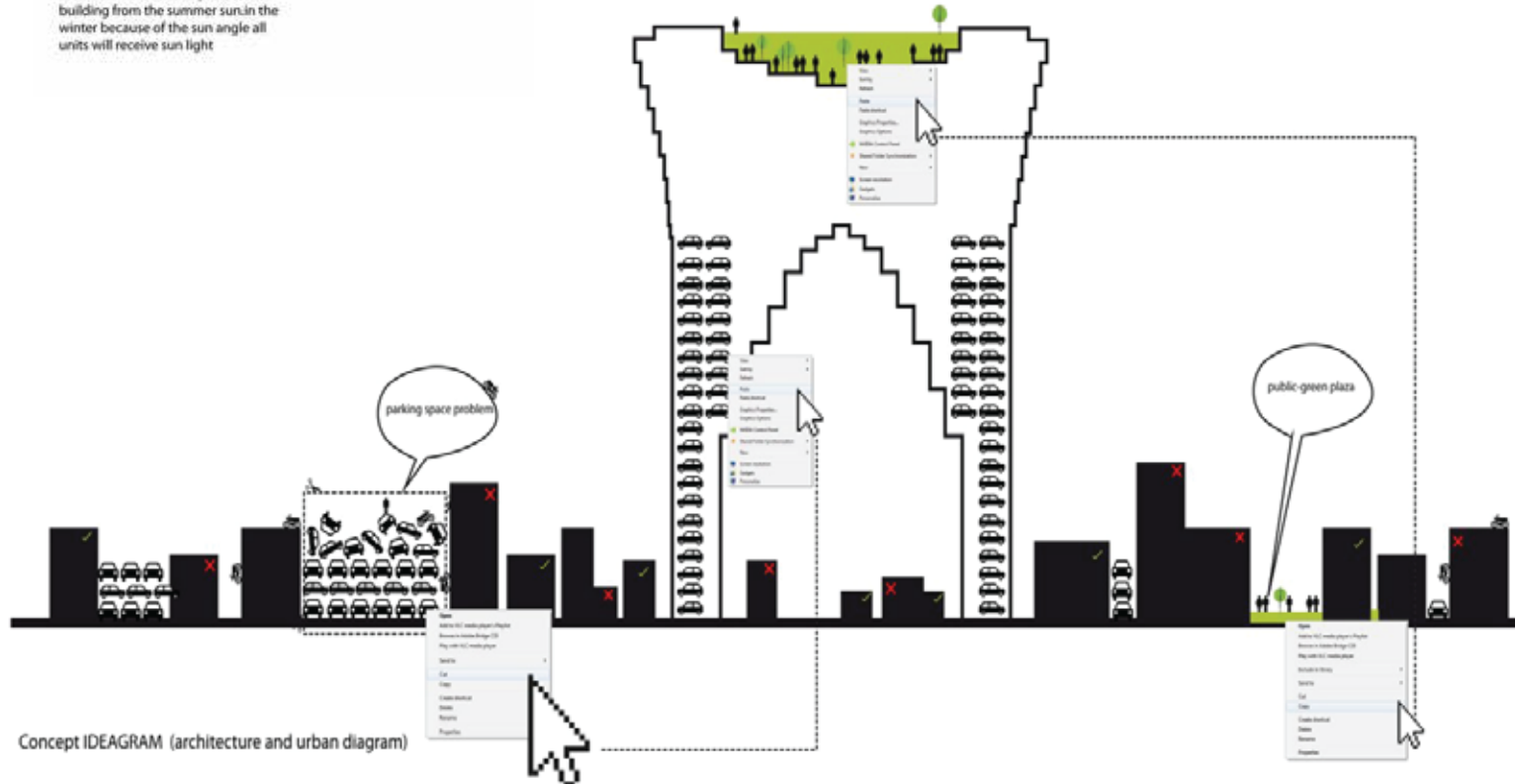
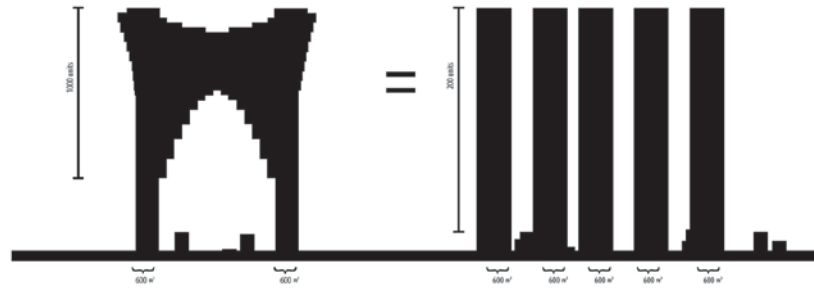


SUMMER/ Building needs shadow on openings to reduce energy consume

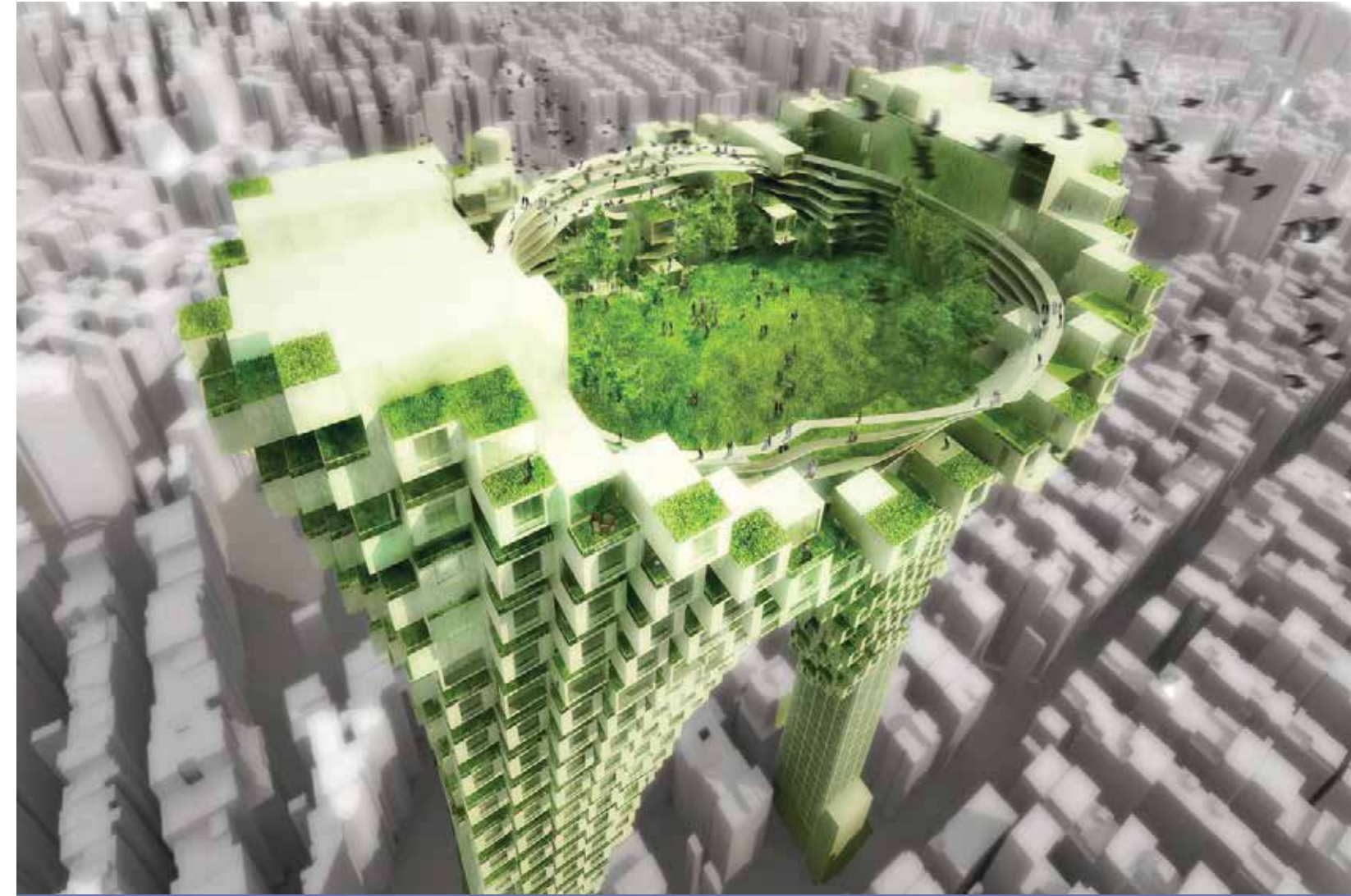
In order to make the building sustainable we have to protect the building from the summer sun. In the winter because of the sun angle all units will receive sun light



Noise pollution is one of the problems of cities like Tehran, in order to avoid it we will assemble the units from the 50 meters above the earth.

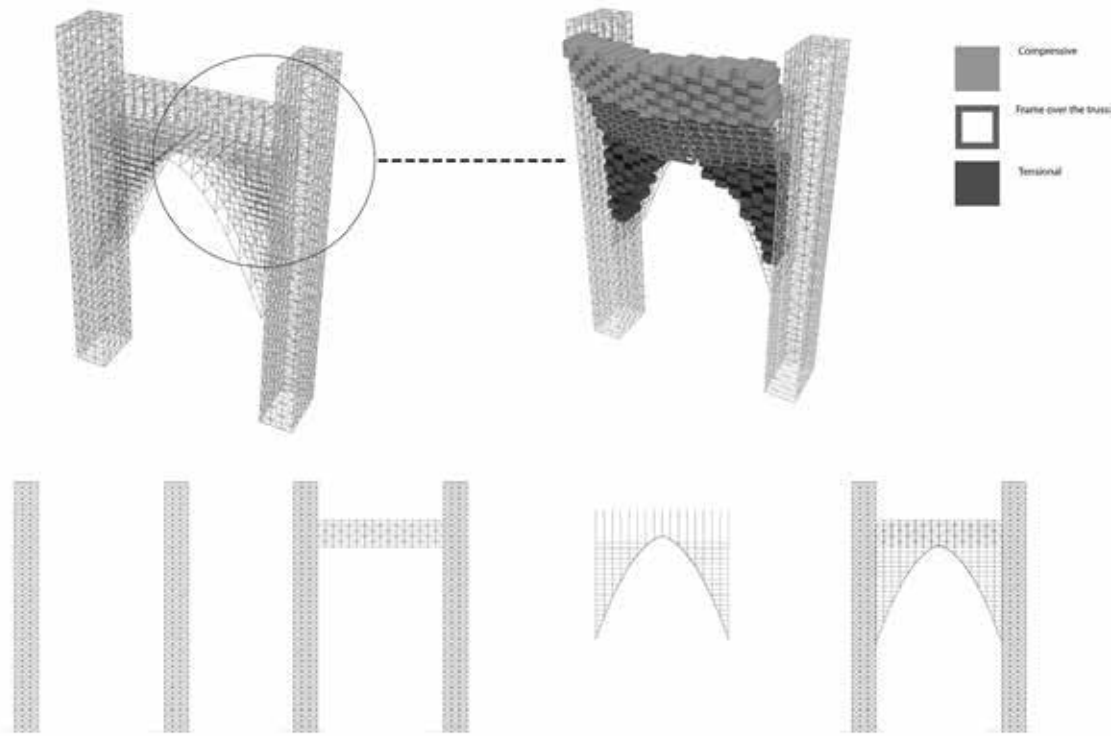


Concept IDEAGRAM (architecture and urban diagram)





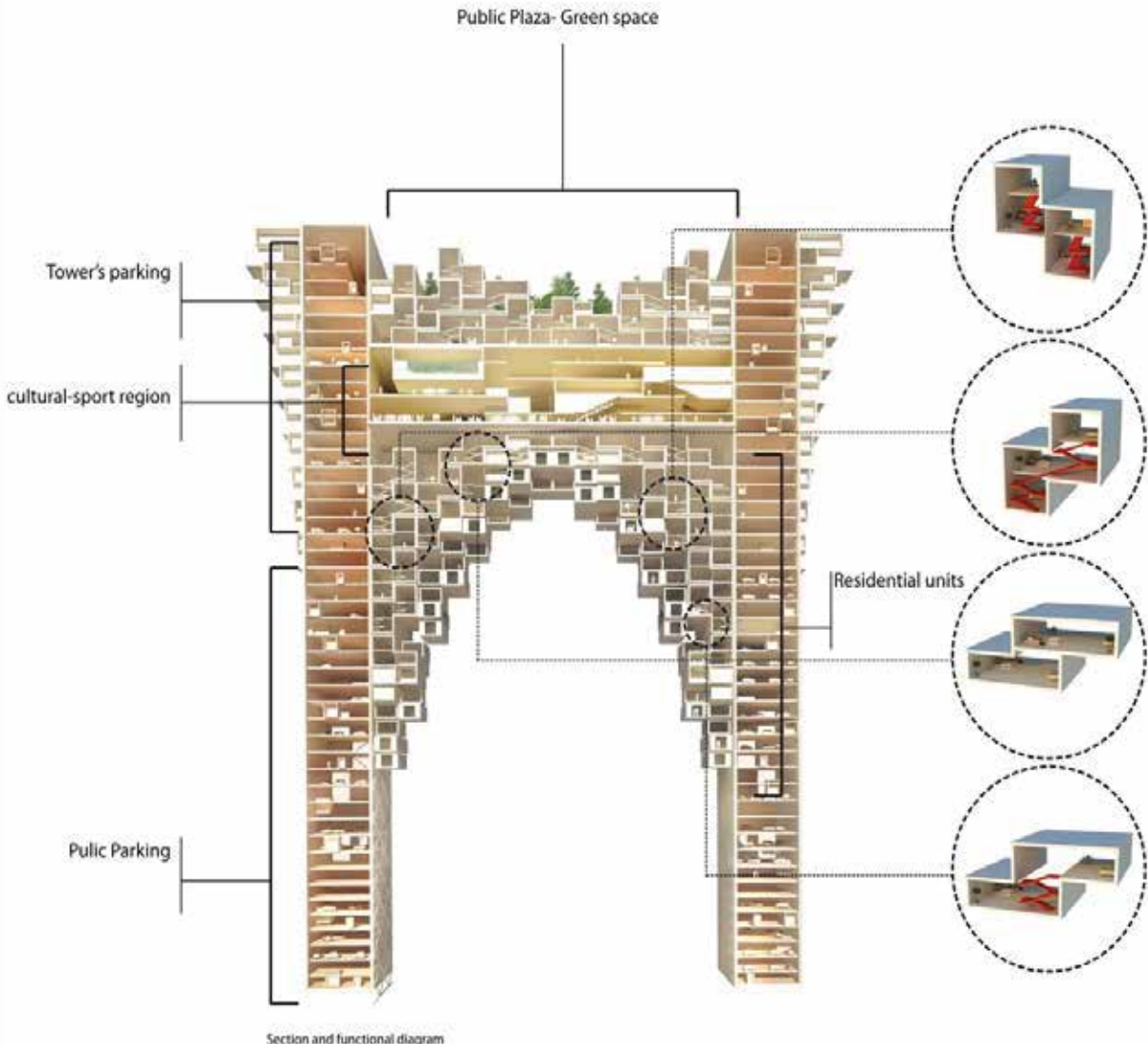
Structural Concept



Parking cores, the structure of these two columns is trusses. A simple and light structure which reduce weight of structure.

Reducing earth quake unpredictable energies to concret columns and to make horizontal beam which units can be hanged from, this structure based on trusses should be added to columns.

Inspired by "Mogharnas" structure, we have to have some hanging intensive structure to hold units from.



ONE MADISON AVE

Architects: Daniel Libeskind
Location One Madison Avenue, New York, NY, United States
Height 937 ft
Project Year 2008 (Not Built)

