

MANITOBA HYDRO PLACE

ARCHITECTS: KPMB Architects

PROJECT YEAR: 2009

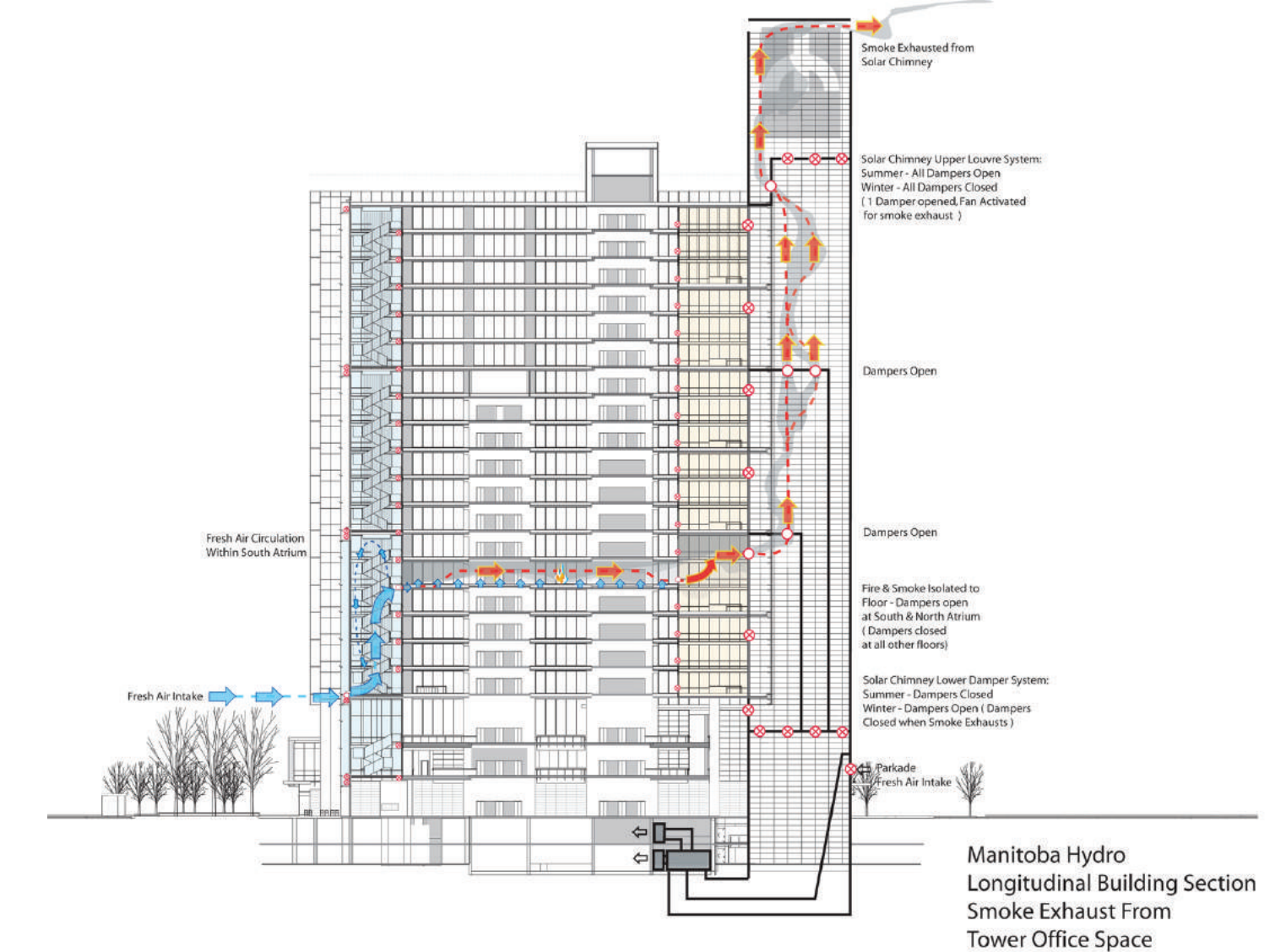
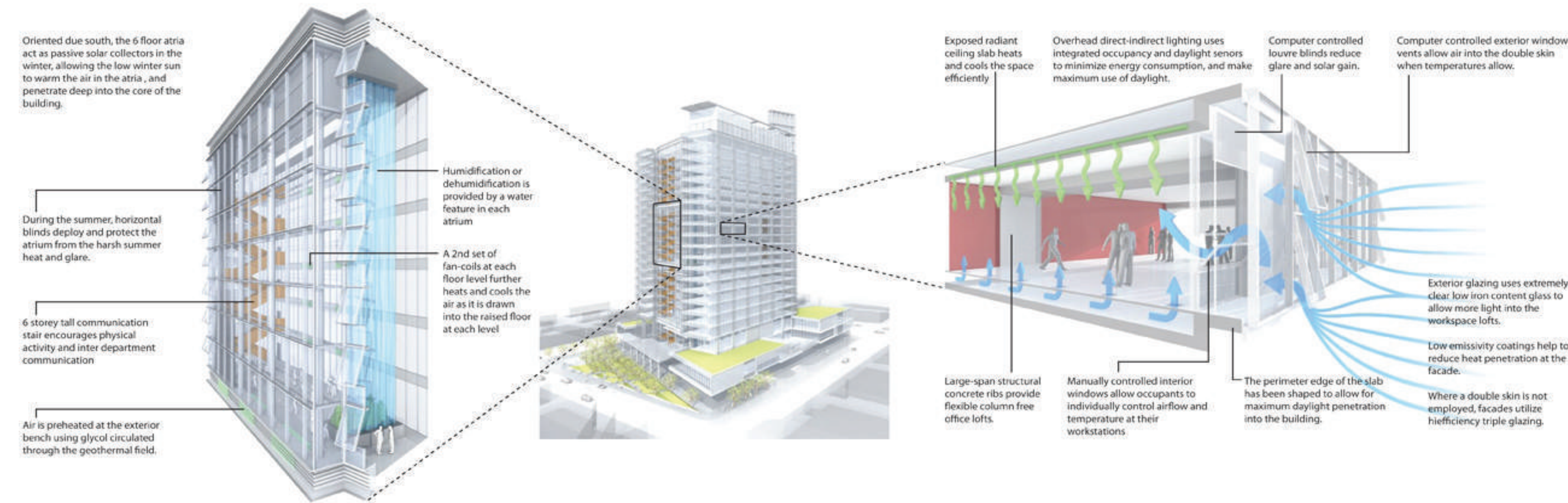
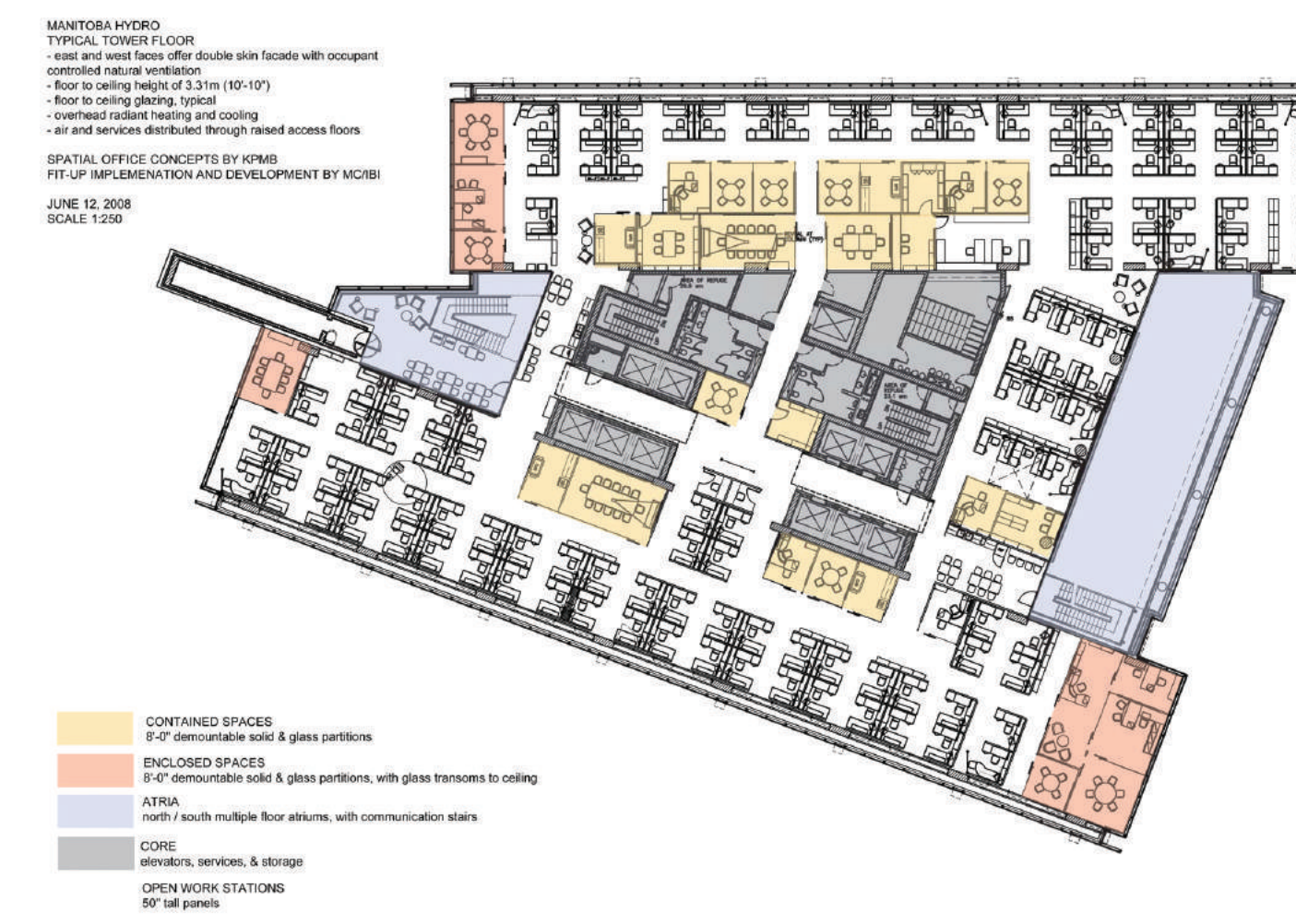
LOCATION: Winnipeg, MB, Canada

CLIMATE: Humid continental climate zone

SIZE: 695240.97 SQ FT

COST: 278 Million

NET pEUI: 28 kBtu/sf/yr



Manitoba Hydro Longitudinal Building Section Smoke Exhaust From Tower Office Space



MEASURE 1: DESIGN FOR INTEGRATION

The towers converge at the north and splay open to the south for maximum exposure to the abundant sunlight and consistently robust southerly winds unique to Winnipeg's climate.

MEASURE 2: DESIGN FOR COMMUNITY

- Over 95% of the bus routes pass this address.
- It created various incentives, including corporate participation in the Transit EcoPass program to encourage employee use of public transit.
- Six months after moving into the new building, more than 50% of relocated employees are leaving their cars at home. As a result Manitoba Hydro has been able to reduce its parking spots and has observed a five-fold increase in employee use of public transit compared to the previous year.

MEASURE 3: DESIGN FOR ECOLOGY

Green roofs at the base of the building are an excellent way to harmonize with the environment. The ecological value lies in the reversal of the buildings footprint by returning vegetation.

MEASURE 4: DESIGN FOR WATER

Green roofs at the base of the building use plants to reduce stormwater runoff and minimize the building's heat-island effect, including such native prairie plants as sweet grass.

MEASURE 5: DESIGN FOR ECONOMY

Although the building was expensive to build, the long term value of the building methods offers savings mainly in the area of temperature control. Intelligent siting and use of prevailing winds, along with efficient use and control of the sun are the core. Intelligent computer systems within the building elevate the level at which these systems operate.

MEASURE 6: DESIGN FOR ENERGY

- Nearly all of its electricity comes from self-renewing water power.
- It is comprised of a double-glazed outer wall and a single-glazed inner wall which insulates the building against heat and cold
- The solar chimney is a key element in the passive ventilation system which relies on the natural stack effect. The chimney draws used air out of the building during the shoulder seasons and summer months. In winter, exhaust air is drawn to the bottom of the solar chimney by fans, and heat recovered from this exhaust air is used to warm the parkade and to preheat the incoming cold air in the south atria
- Water is circulated through the heat exchanger and distributed through thermal mass of the concrete structure which in turn heats or cools the space consistently.
- Winter gardens, form the lungs of the building, drawing in outside air and pre-conditioning it before it enters the workspaces through adjustable vents in the raised floor.

MEASURE 7: DESIGN FOR WELLNESS

- The dynamically controlled aspects of the building coupled with a perfect location for the use of public transportation, make this building a proponent of a better lifestyle for the working class.
- In sharp contrast to the majority of building which recirculate air, Manitoba is filled with %100 fresh air 24 hours a day.

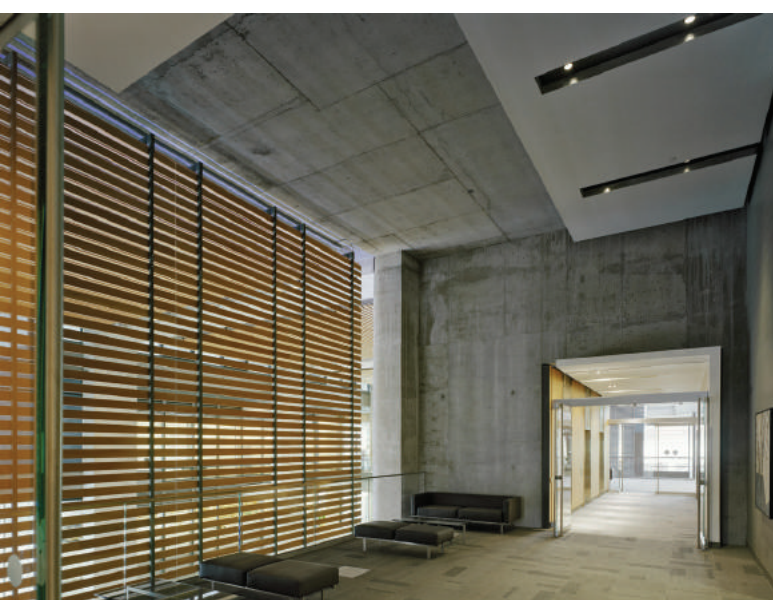
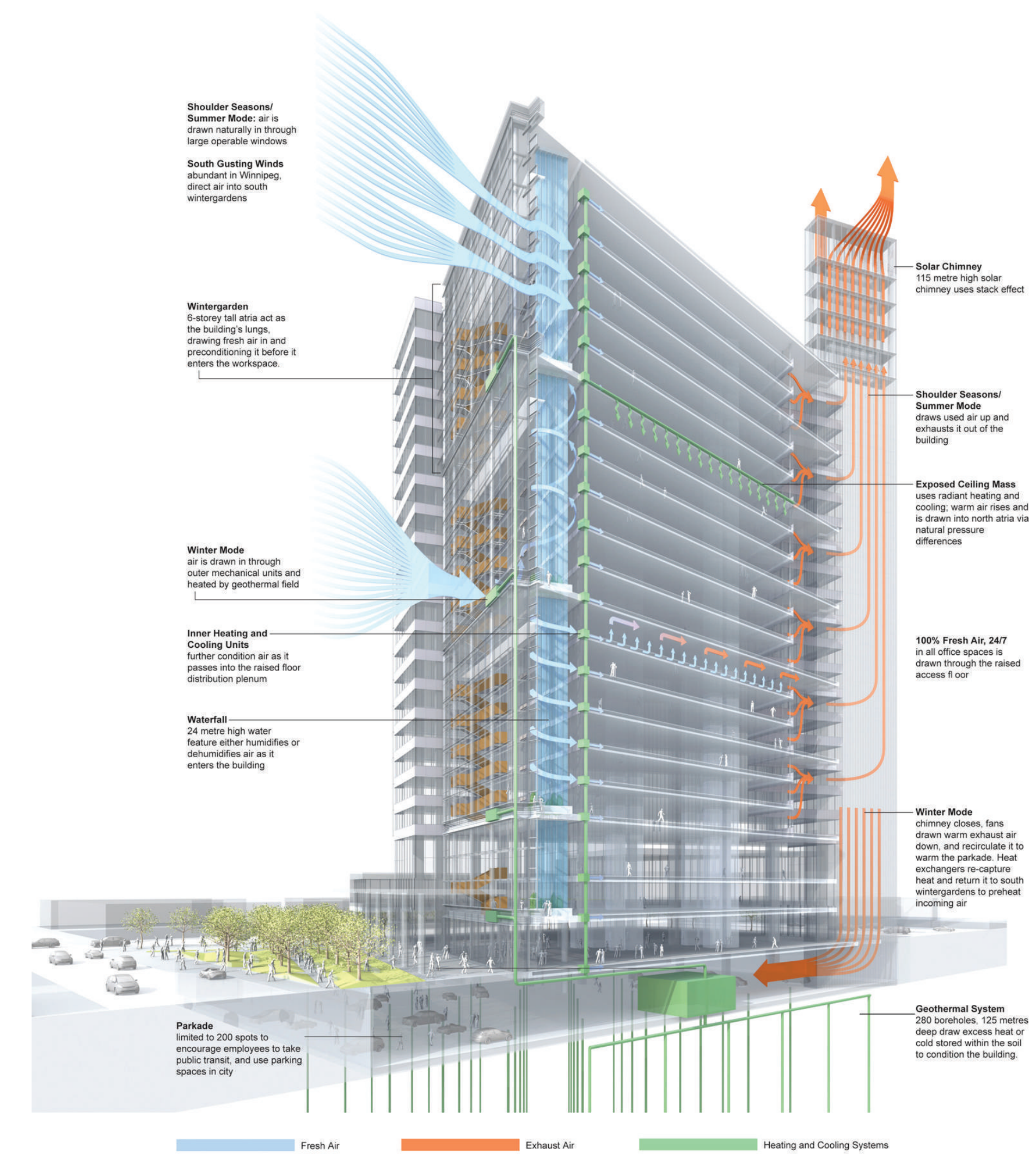
MEASURE 8: DESIGN FOR RESOURCES

Manitoba applies green technology in as many forms as possible, making it a very resourceful building.

MEASURE 9: DESIGN FOR CHANGE

- The innovations in the building are already setting an example for future construction and development.
- Promotes a healthier lifestyle
- Businesses around Manitoba have flourished as a result of the received attention.

MEASURE 10: DESIGN FOR DISCOVERY





HUALIEN RESIDENCES

ARCHITECTS: BIG

PROJECT YEAR: 2009

LOCATION: Hualien County, Taiwan

CLIMATE: Warm and temperate
The rainfall is significant,

SIZE: 1,292,009 SQ FT

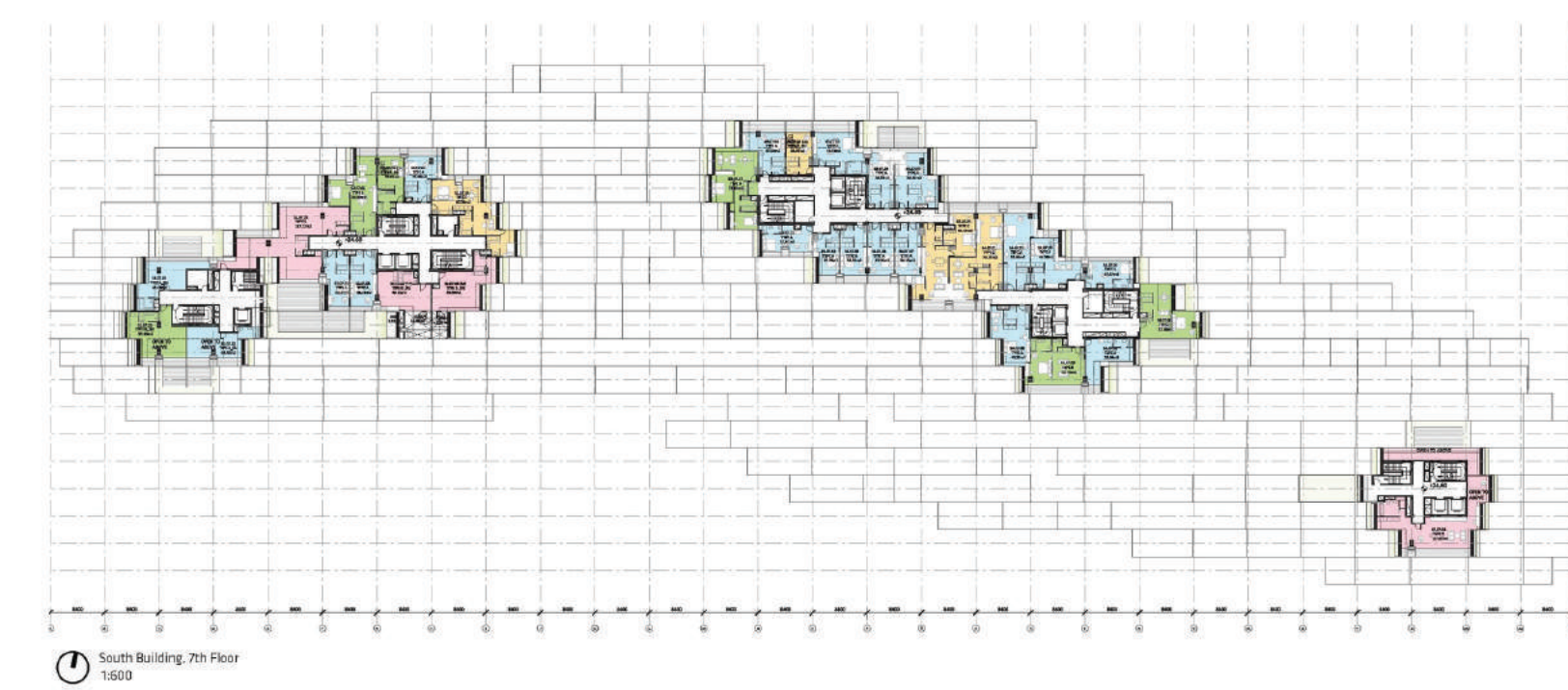
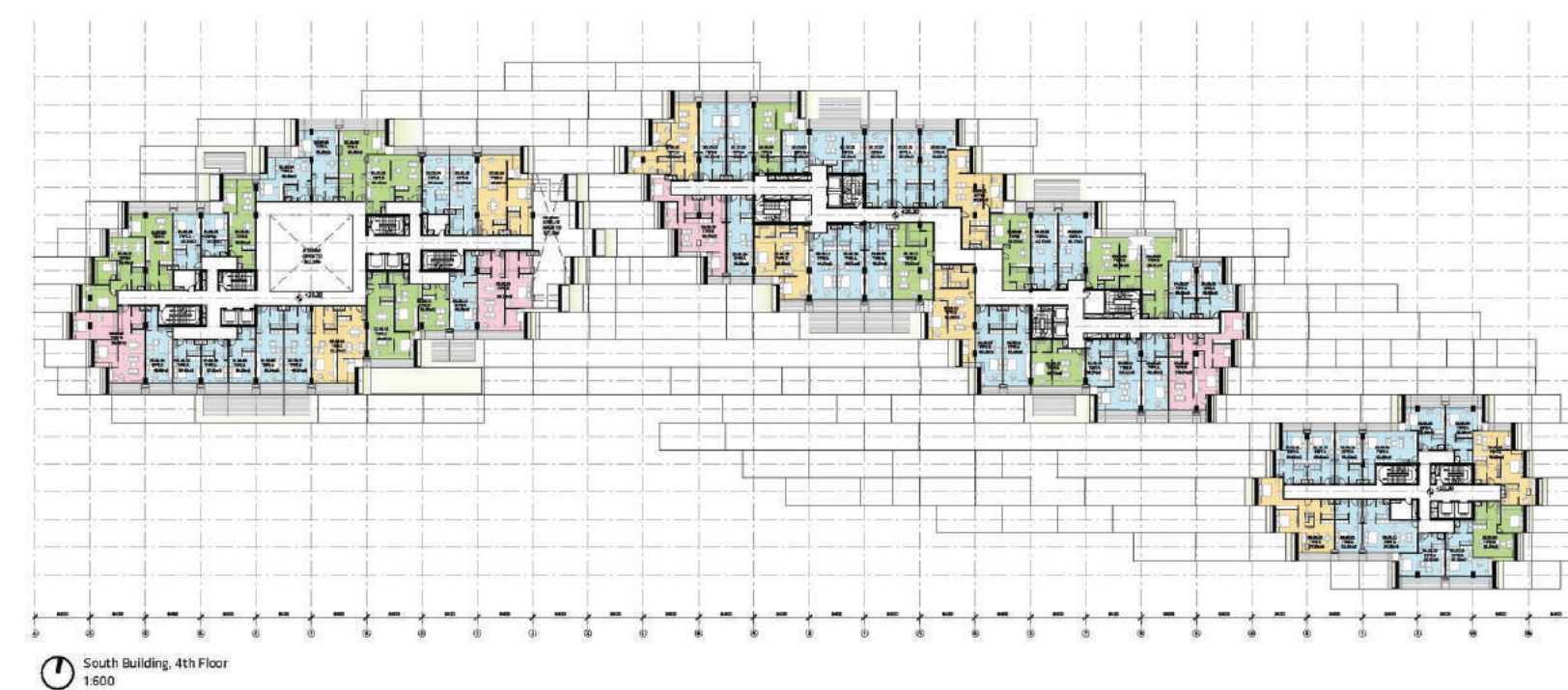
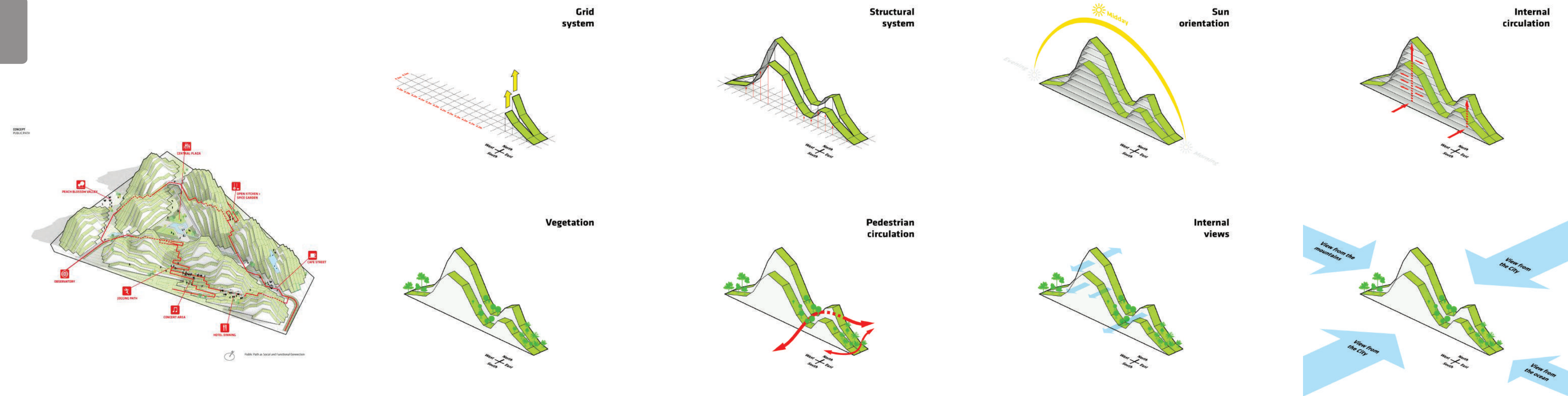


BACKGROUND:

Still in progress it is a beach resort complex in Taiwan
Primarily for older people Was one of the finalist in 2014
IMPIM Award First residence was completed in 2015

GOALS & STRATEGIES:

Of this project is to encourage healthy and active lifestyle so it incorporates walking paths and underground jogging paths. The stripes run East and West because of the views and it works as shading systems. Also, it allows the North and South light to enter deep the residences. It has green roof to prevent heat gain



TEIUS SKY CALGARY

ARCHITECTS: KPMB Architects

PROJECT YEAR: 2009

LOCATION: Winnipeg, MB, Canada

CLIMATE: Humid continental climate zone

SIZE: 750,000 SQ FT



BACKGROUND:

Located in the middle of Canadian City.
277 meter high and considered one of the tallest buildings
It is 58 storey 40,000 sq.m. of offices and 341 appartements
shops are located on the ground floor.

It is LEED Platinum signature

GOALS & STRATEGIES:

Recycle rain water for washroom toilets and outdoor irrigation
Use local materials it has a central campus plant for cooling
and heating. They control daylight

