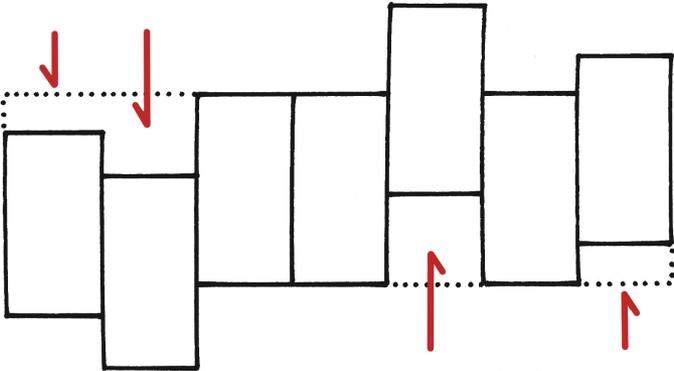
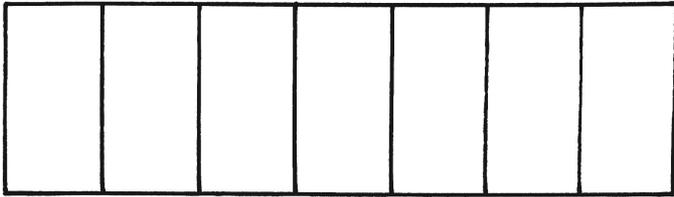
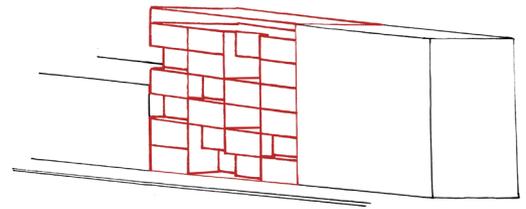
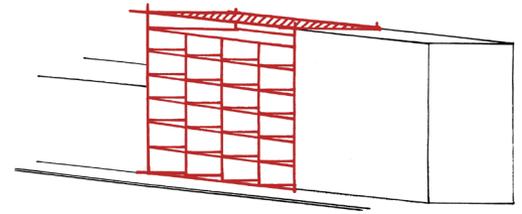
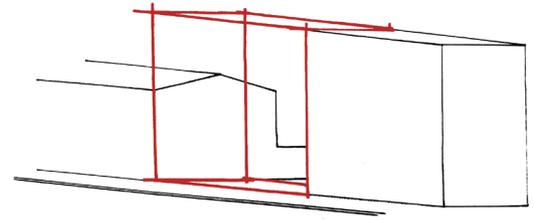
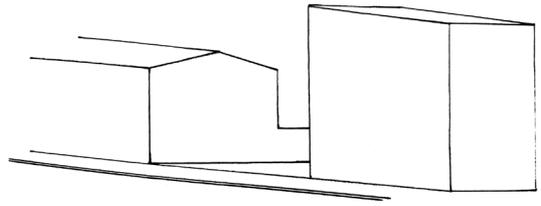


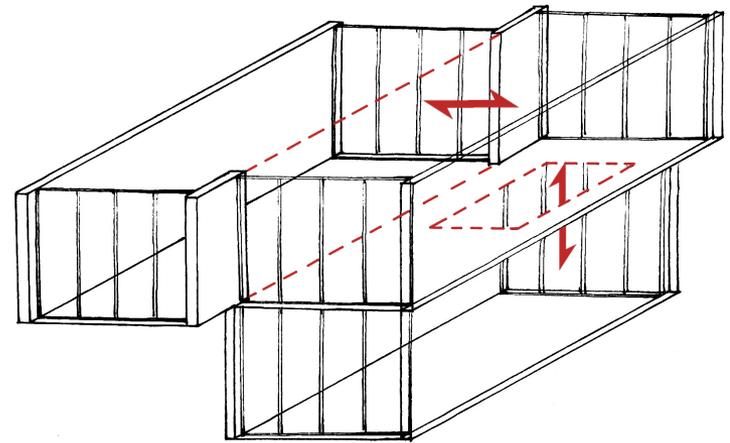
# **concept group 5**

ELOISA CRISTINO / EVA VIDAL / ANTOINE BELLIER / KATJA KLAUE

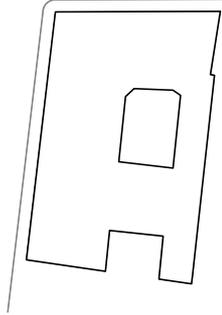
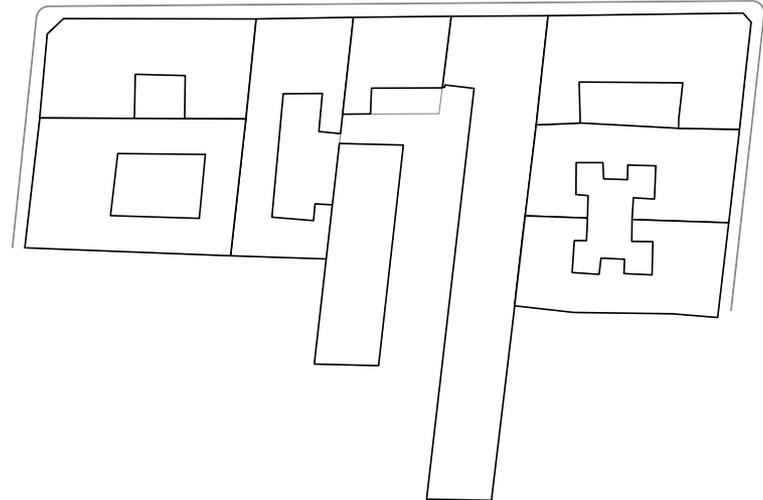
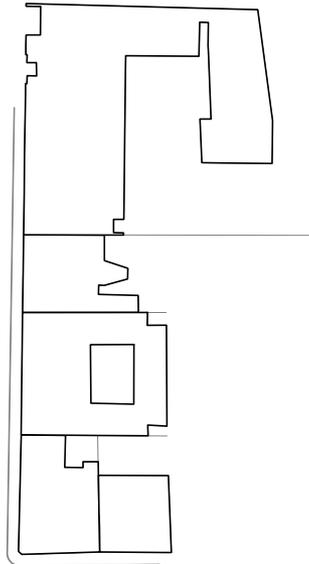


MAIN IDEA

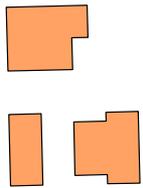




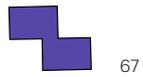
CONNECTIONS



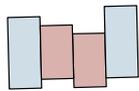
IN THE PLOT



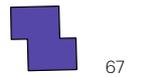
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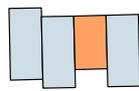
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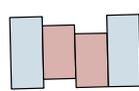
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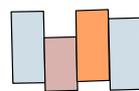
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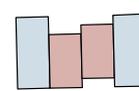
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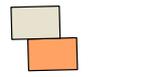
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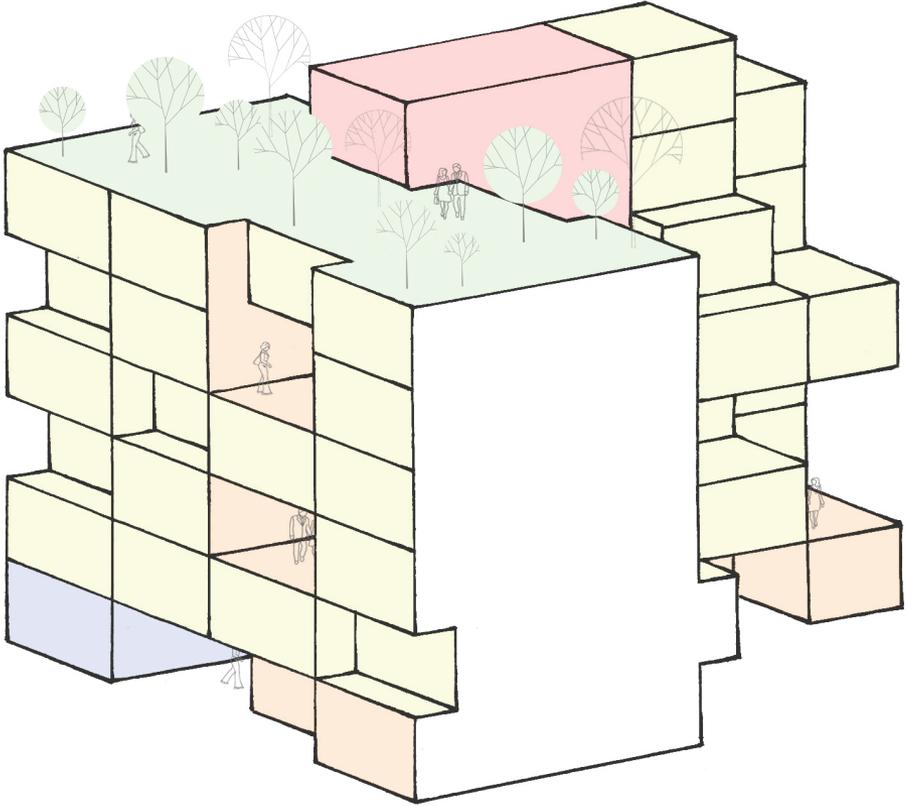
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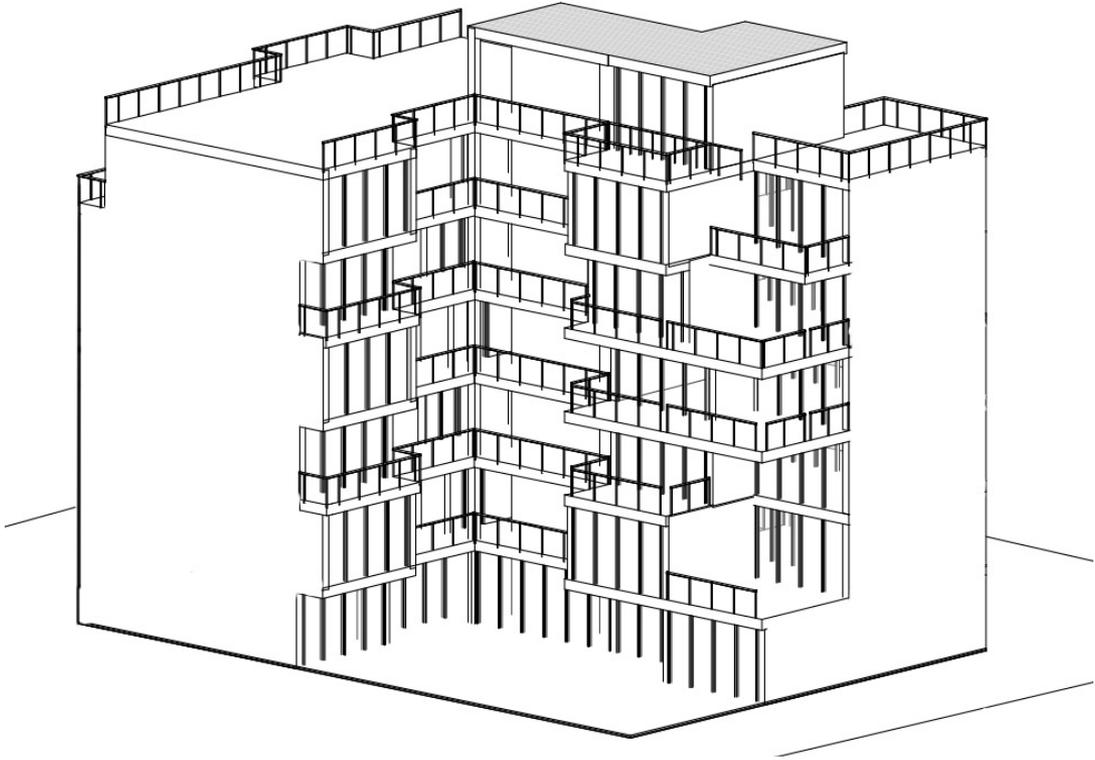
### FLATMIX

|            |         |          |     |
|------------|---------|----------|-----|
| 1-2 PERSON | 37 sqm  | 7 FLATS  | 30% |
| 3-4 PERSON | 50 sqm  | 11 FLATS | 50% |
| 5-6 PERSON | 67 sqm  | 4 FLATS  | 15% |
| 7 PERSON   | 101 sqm | 1 FLAT   | 5%  |

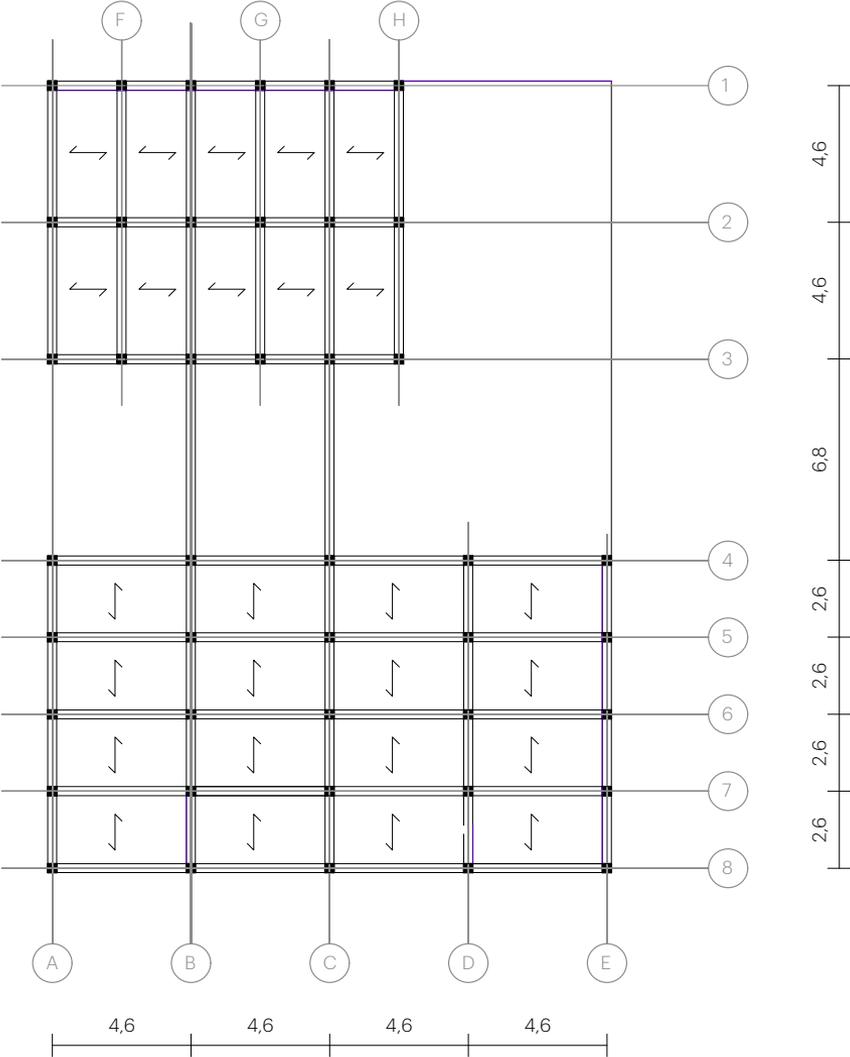
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23 FLATS

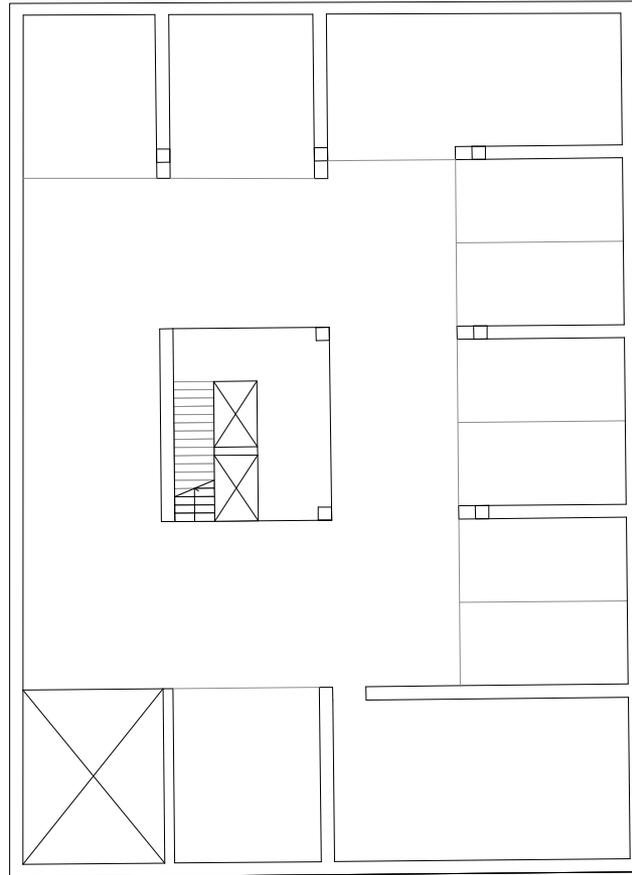
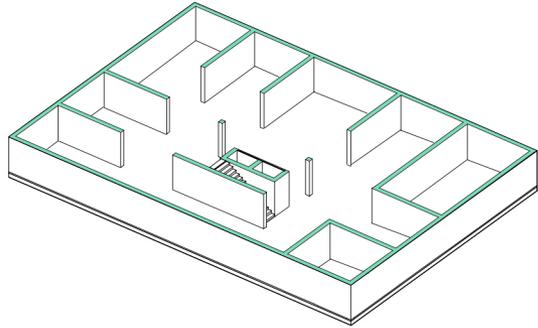




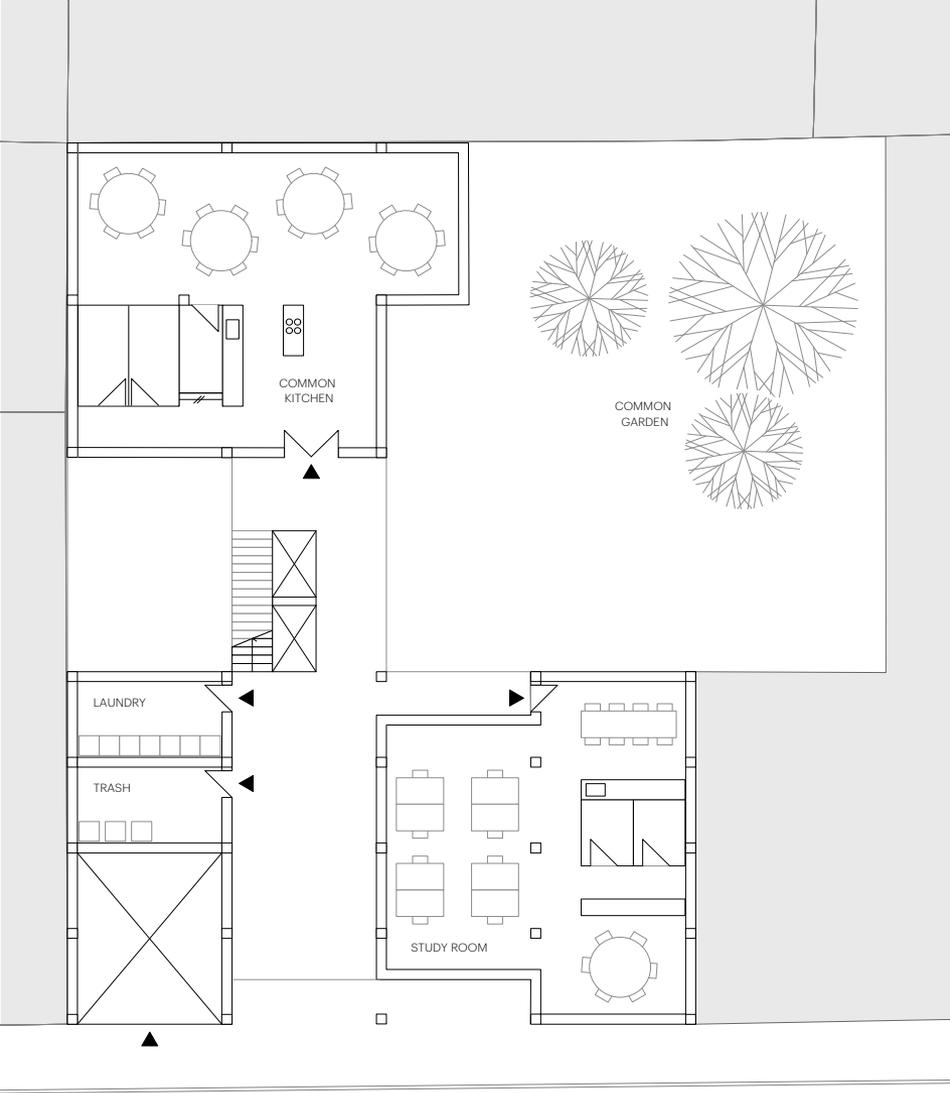
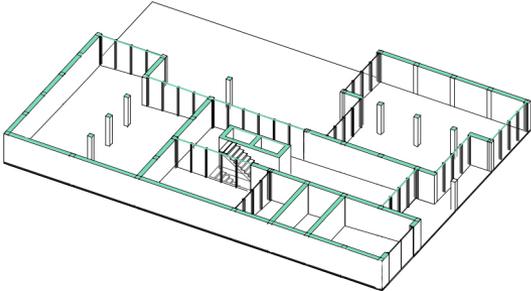
STRUCTURE



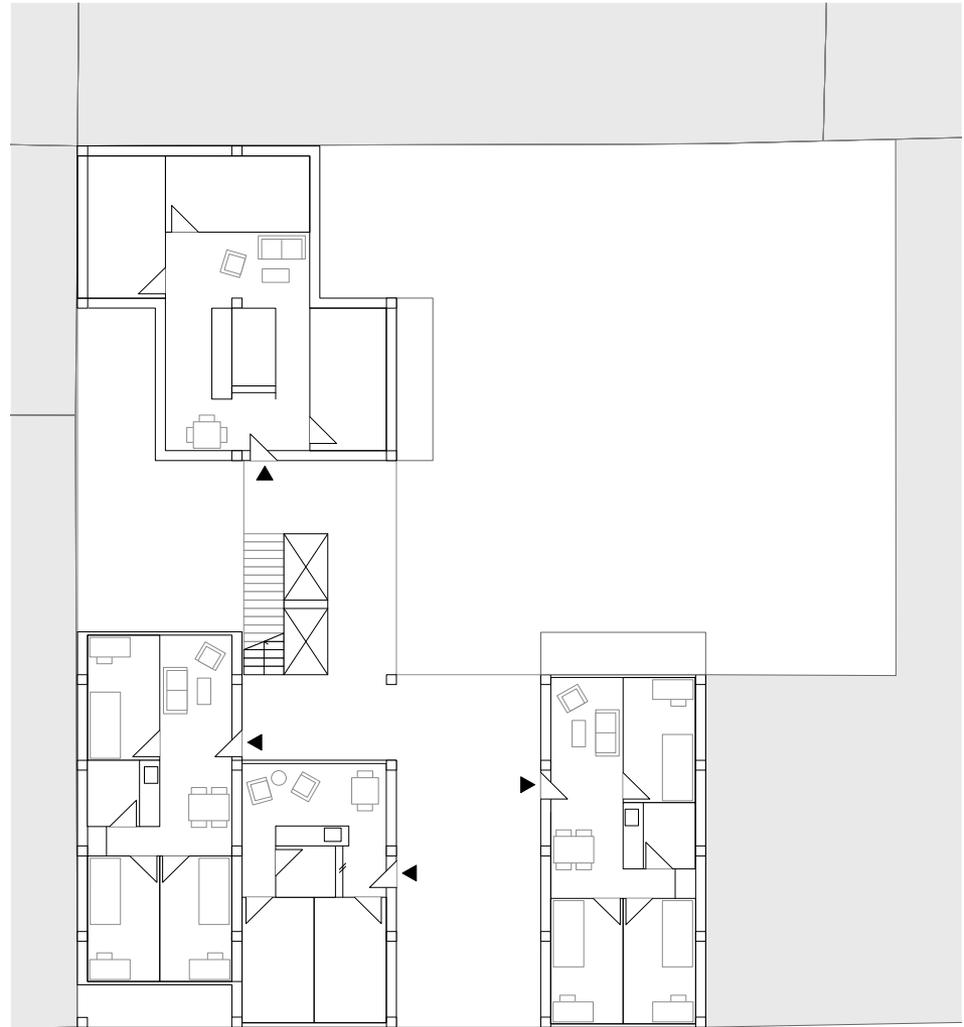
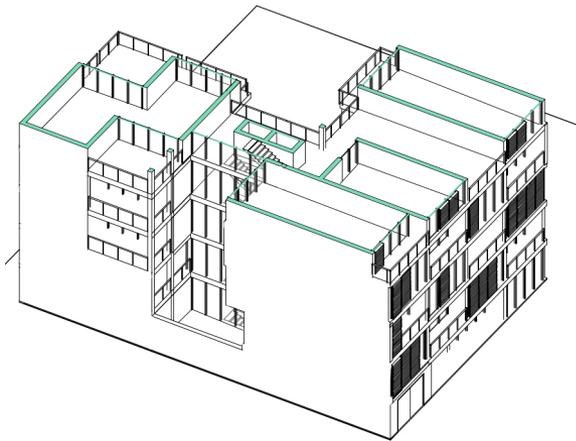
UNDERGROUND  
PARKING



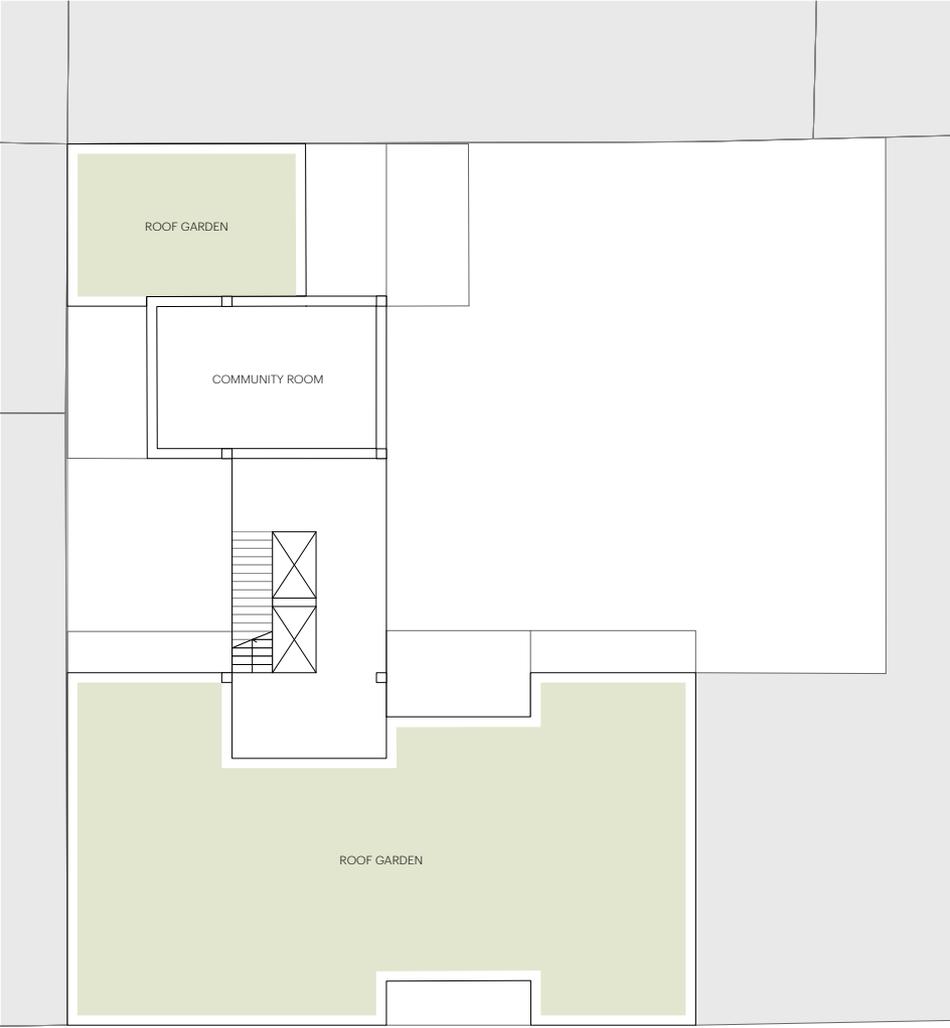
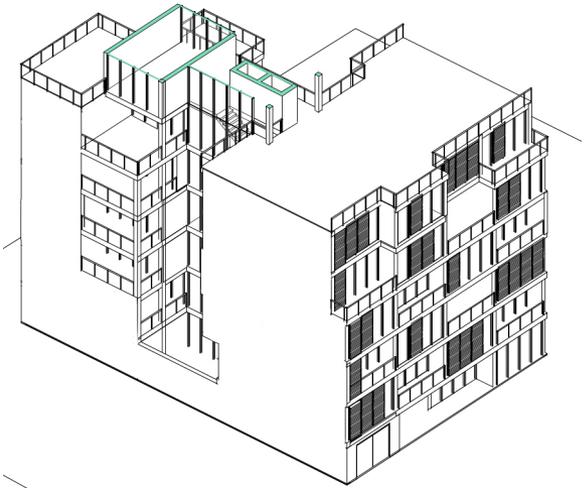
GROUND FLOOR



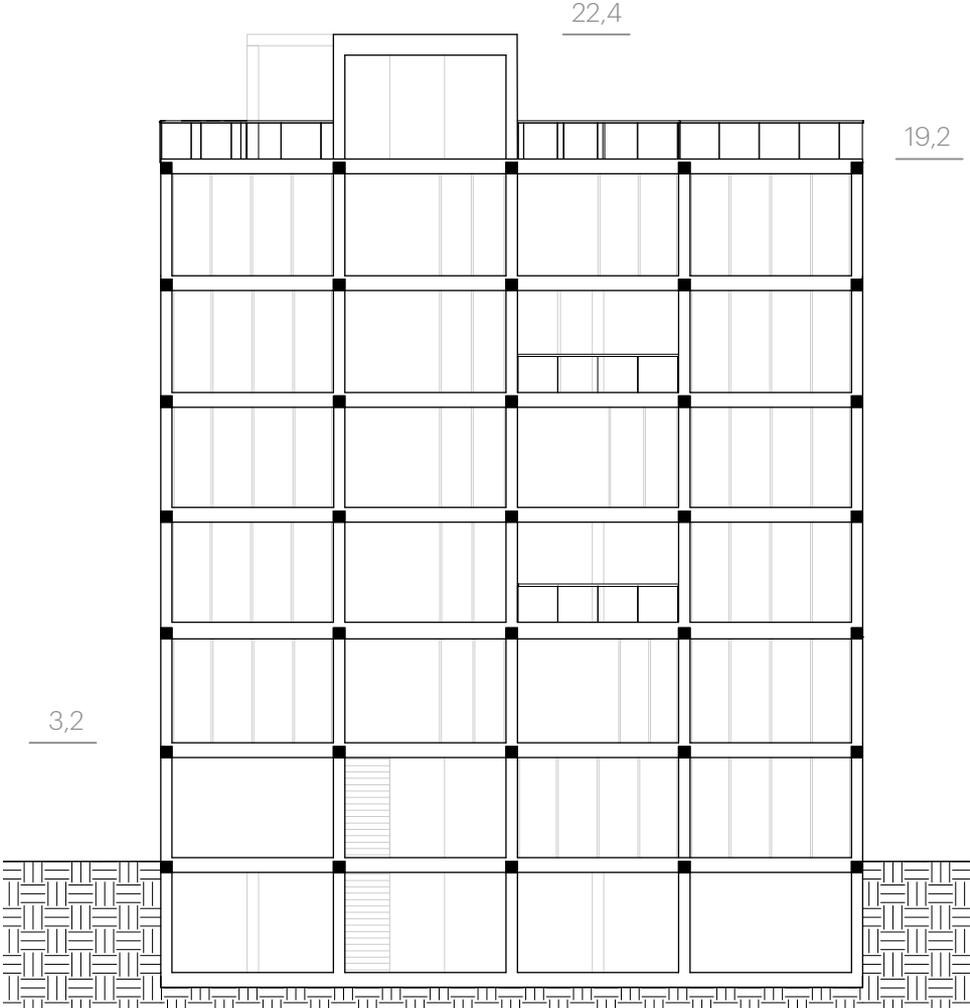
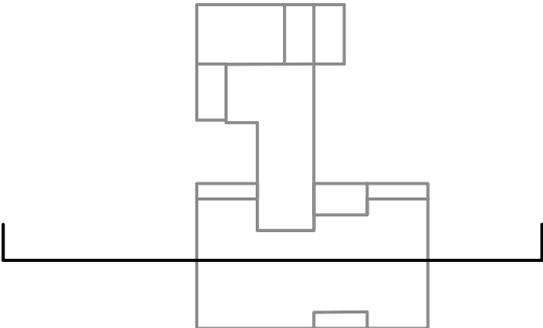
FIRST  
FLOOR



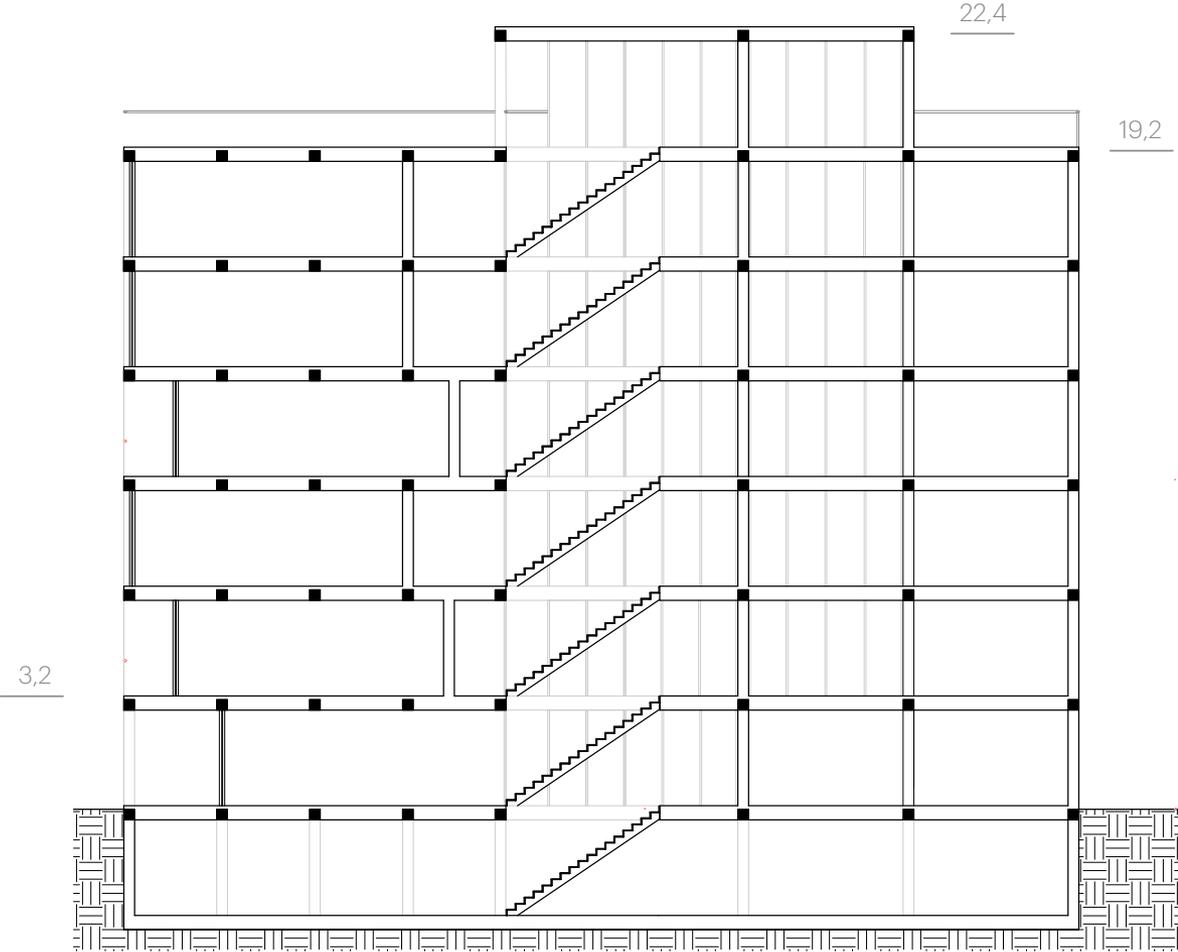
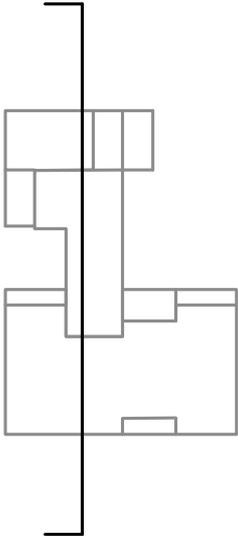
ROOF  
TOP



SECTION



SECTION



STREET  
FACADE

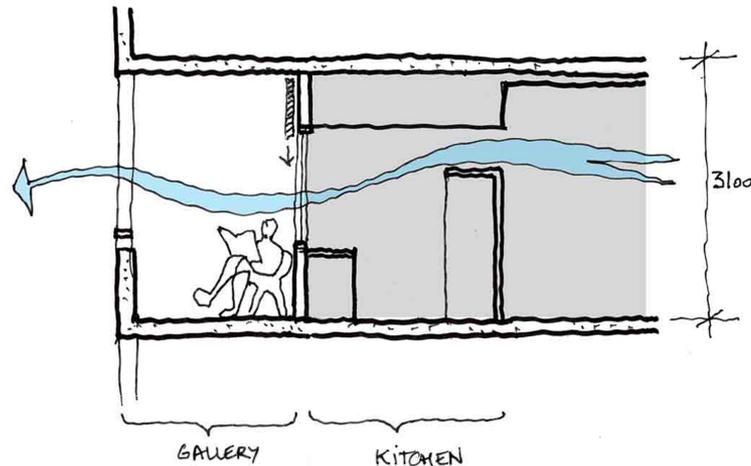
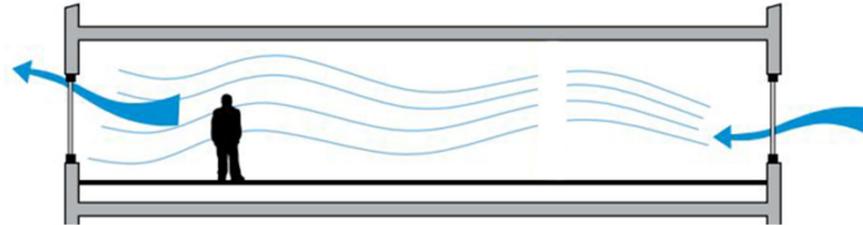


# CROSS VENTILATION

Cross ventilation is a natural method of cooling. The system relies on wind to force cool exterior air into the building through an inlet (like a wall louver, a gable, or a window) while outlet forces warm air out (through a roof vent or window opening).

Modern natural ventilation systems increase the flow of cool air coming in and assist the hot air going out. This increases building air flow naturally.

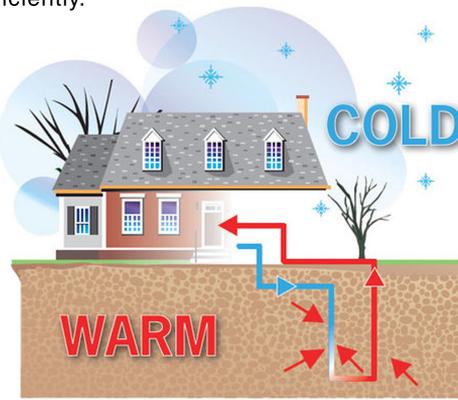
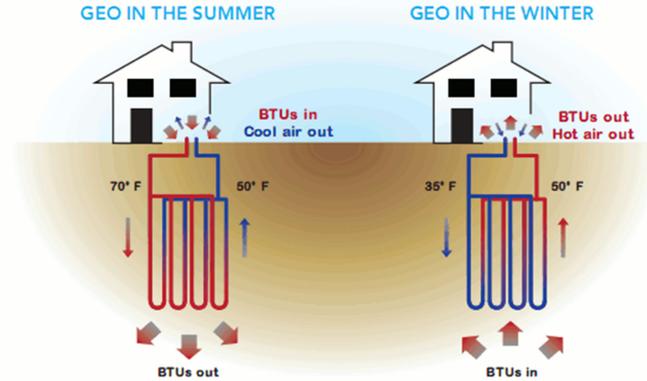
CROSS VENTILATION CONSERVES ELECTRICITY



# GEOHERMAL SYSTEM

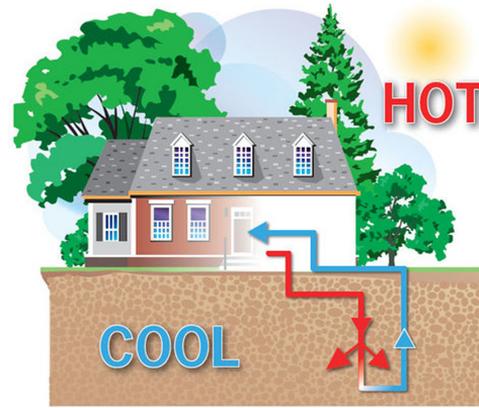
Regardless of whether it is summer or winter, the temperature stays relatively constant underground.

A geothermal system harnesses the constant temperature underground to heat or cool a home efficiently.



## Heating

In the winter, water circulating inside a sealed loop system absorbs heat from the earth and carries it to the heat exchanger. Here, the water is compressed to a higher temperature and is sent as warm air to your indoor system for distribution throughout your home.



## Cooling

In the summer, the system reverses and expels heat from your home to the cooler earth via the same closed loop system. This heat exchange system is not only a natural process but is a highly efficient way to create a comfortable climate in your home.

# SHUTTERS

- Solar protection: Stop solar radiation.
- They are controlled through a solar collector that opens or closes them according to the light.
- Acoustic protection: the installation of lattices reduces ambient noise, especially in urban environments.

Reference: MRW Sustainable Building, Barcelona.



# SOLAR PANELS



- Reduces Electricity Bills

- Solar energy can be used for diverse purposes. You can generate electricity (photovoltaics) or heat (solar thermal).

- The most important thing is that solar energy is a truly renewable energy source.



How photovoltaic solar panels work

