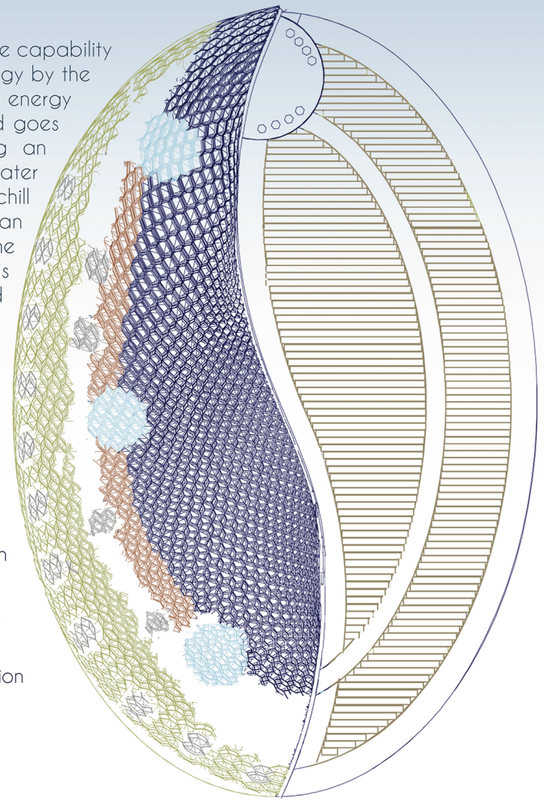
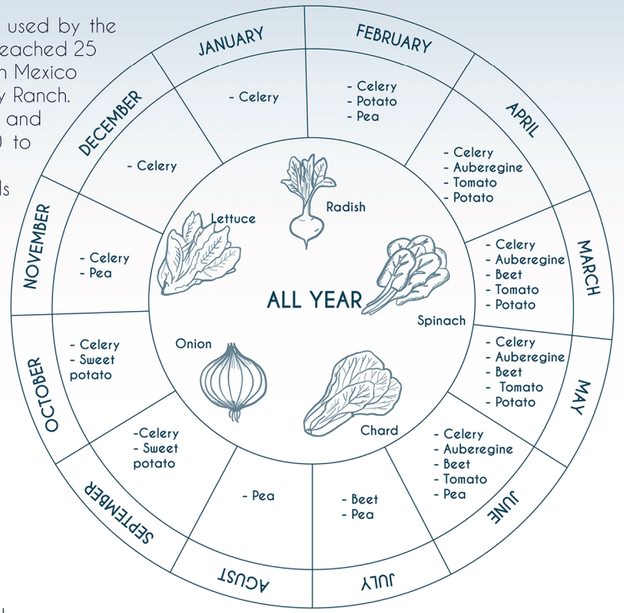
On an annual basis the project has the capability of producing 800 kwh of electric energy by the solar panels on the south facade, the energy is collected all over the structure and goes by the columns that besides being an structural element serve as water collectors, same water that is used to chill the inside of the Greenhouse with an HVAC absorption chiller system. The system just needs hot water that is heated by the solar panels and constant flow of the air, the organic form of the building helps to catch the wind better.
The chinampas produce 10.4 Tons of food every year and the waste produced by the food goes to the compost, and with this, the cycle ends and can start over and over again.



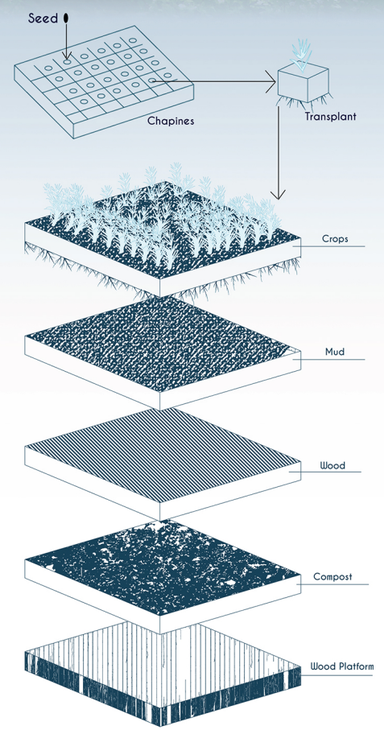
Chinampas

The chinampas are an ancient agriculture method used by the mexicas in Xochimilco Lake some of the chinampas reached 25 km building over the lake. Nowadays there are few in Mexico City and we want to introduce this knowledge to Fly Ranch. The chinampas are floating platforms made of wood and mud, the constant humidity mades the ground 40 to 60% more fertile than the conventional agriculture.
To seed we need chapines, this are mud beds divided in little squares and every square have in the middle a tiny hole to introduce a seed, after 20 to 30 days the plant grown and its ready to moved to the chinampas, in our project we are going to move the chapin to the chinampa area but also to the vertical garden, providing food all the year. Other advantage of the chapines are that every time we moved one to the chinampa we renewed the ground.

Hanging Garden



Food Calendar



Chinampa Diagram