Production: Starting from the analysis of the most innovative techniques used nowadays in food supply chain, the project starts with the design of the production phase. It is based on an "urban diet" that is composed by different products that are producible with the hydroponic and aquaponic techniques and within an artificial environment. The volumes of the production part derives from data collected by a hypothetical visitors and neighborhood demand.

Processes: Sorting, cleaning and packaging are the processes present between the production and a specific retail formats. This space is dedicated to the installation of industrial manufacturing machines that processes the harvested mature products and prepare them to reach the display line. These equipment divides the items by size and quality before entering in a cleaning and packaging procedure. At last, the packages arise in a gathering display shelve, already part of the food display retail format.

Retail: In this new building typology, as already stated in the research conclusions, the three main themes of the food path and the technical systems are joined together with the social and public realm of the retail portion. The position of each phase settle an organized layout that guide the visitors through the life span of the products toward the access to the mature food that is gathered in the various retail formats.
With the nowadays technological changes, a new building typology should be developed, where all the phases of the "Food Supply Chain" should be elaborated as one: production, process and retail. The objective is to develop a building typology that could host a space entirely dedicated to food, where all the unnecessary phases are removed, saving on time, resources and costs, and avoiding all the possible wastes related to transportation and processes. In addition to the evident economic benefits, within this new space the consumer could achieve a stronger awareness on how massive quantities of edible products are produced. The project aims indeed to create a space build up from innovations and technology, where fresh local food, respect and knowledge about health are cultivated and taught.
With this new building typology production, processes, retail and culinary experiences are combined together in order to be part of the same atmosphere and let the visitors walking by all the phases and be informed on the product life span. The efficiency of reassembling the production phases in the unique design strategy results in a project that investigates on the strong connection between food products and the architectural disciplines. The thesis aims to develop a critical project, and as such it tries to propose an alternative scenario to an existing situation.
WOODEN STRUCTURE & FOOD RAIL SYSTEM

1. CNC prefabrication
2. Cross connection
3. Assemblage
4. Elevation
5. Skeleton
6. Rail system connection

1:5 DETAIL

Clip link rail - structure
Reflective curtain
Extractor warm air
Wire - rail link
Pot - LED lamp

ETFE foil 95% transp.

Parametric space calculation

Horizontal layout
Vertical layout