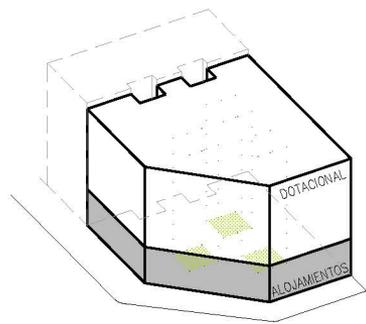


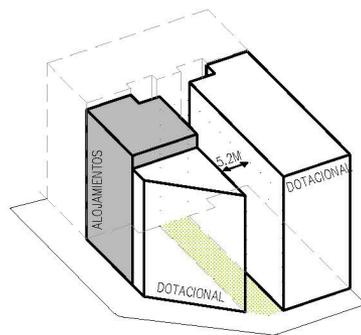
group 5

MIX DWELLING BUILDING
COLL-LECLERC
2017 / BARCELONA / SPAIN

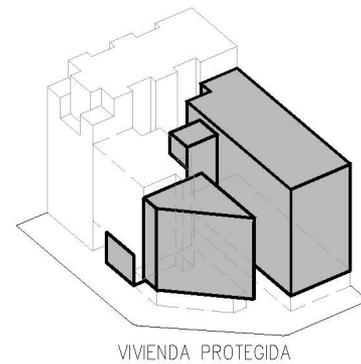




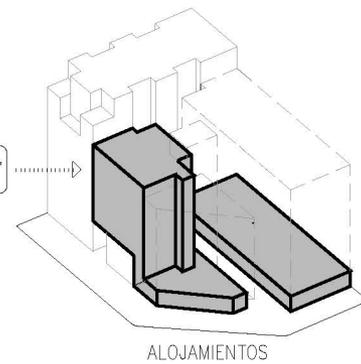
1. VOLUMETRIA PLANEAMIENTO

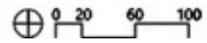


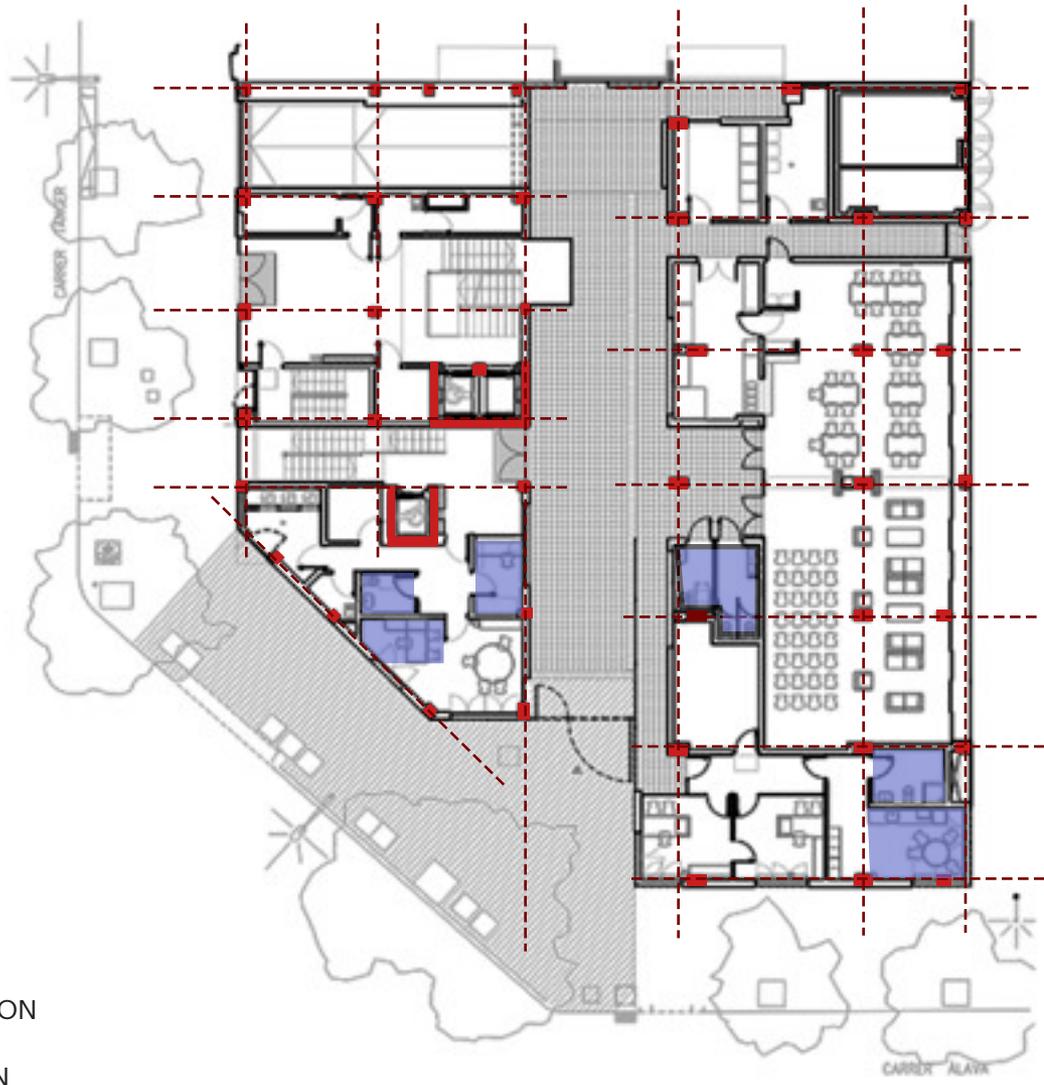
2. VOLUMETRIA PROPUESTA



3. PROGRAMA DEFINITIVO







- CONSTRUCTION
- INSTALLATION



-  CAR
-  VERTICAL CONNECTION
-  HORIZONTAL CONNECTION



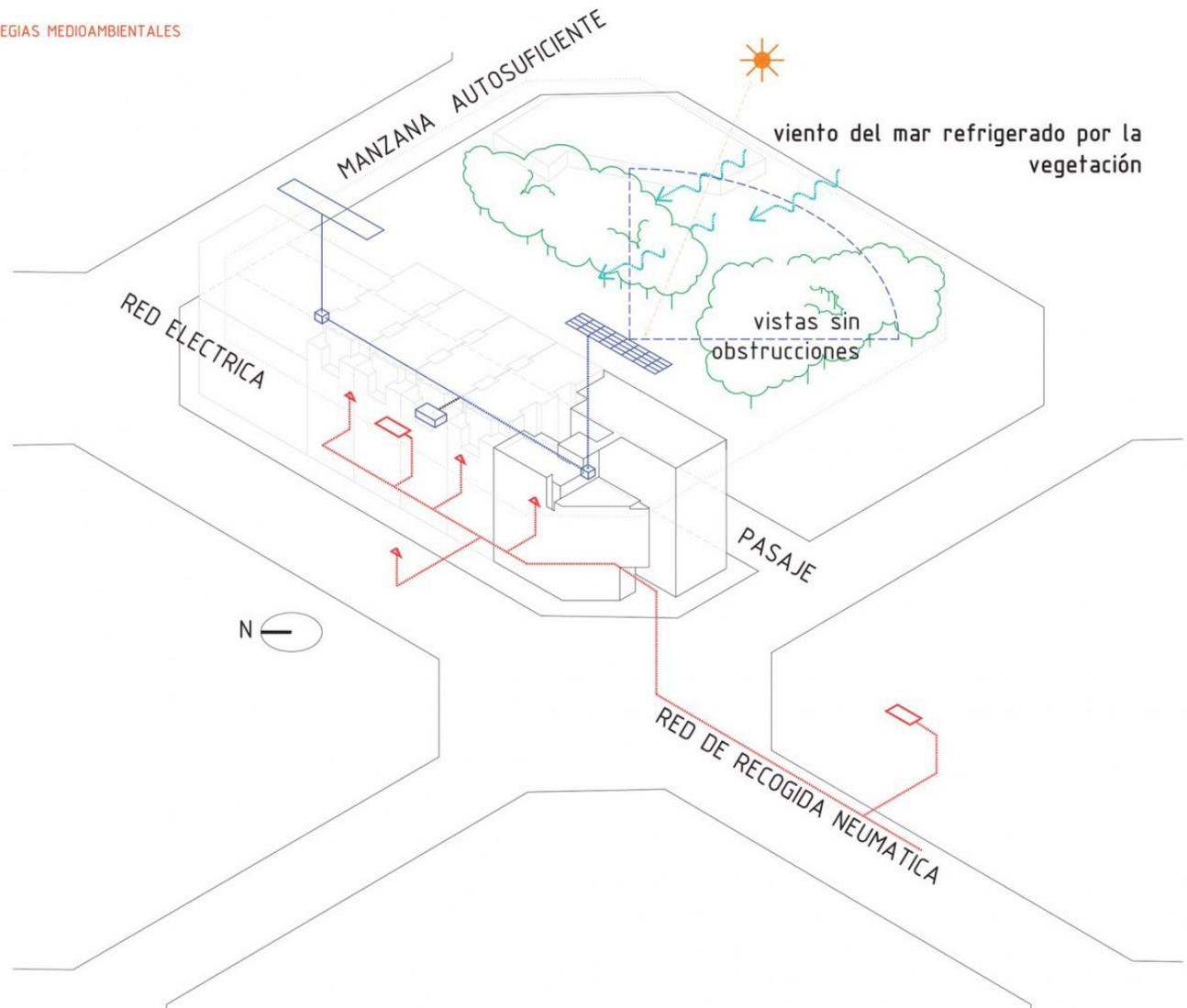
- CONSTRUCTION
- INSTALLATION

A
L

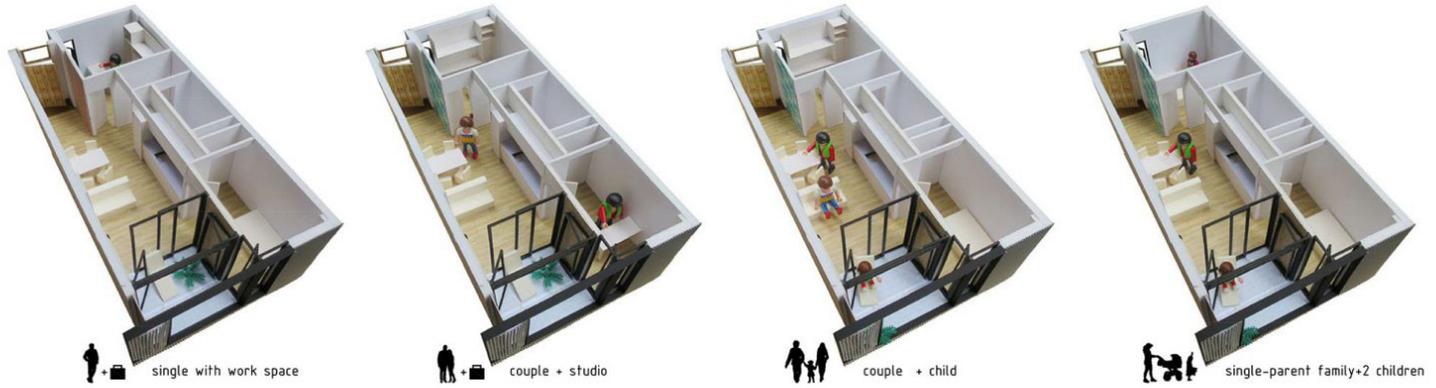


-  VERTICAL CONNECTION
-  HORIZONTAL CONNECTION



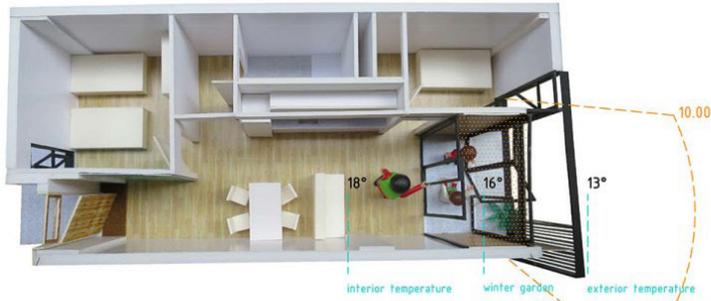


TRANSFORMATION OF DWELLING TYPE A
THE DWELLINGS THROUGHOUT THE YEARS



THE DWELLING THROUGHOUT THE SEASONS

WINTER // 21.12



WINTER GARDEN

- sun catcher with single pane glass on the outside
- high thermal resistance terrazzo

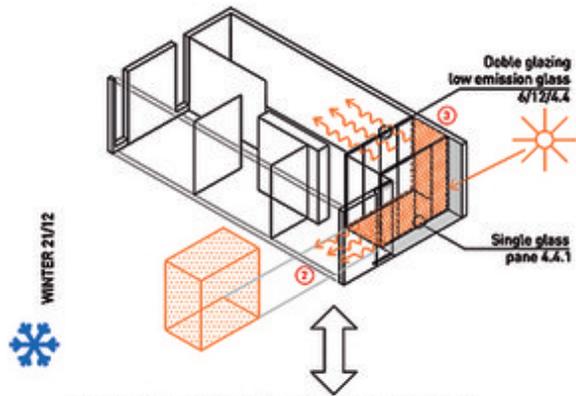
SUMMER // 21.06



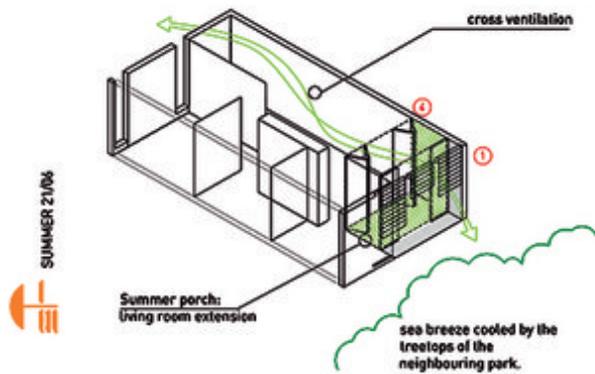
LOGGIA

- super ventilated space with thermal diferencial $24.9^\circ - 16.8^\circ [-8^\circ]$
- falls within the comfort range of the Givoni chart : from 21° to 25° without HVAC for 68% of humidity

WINTER | day: energy accumulation and radiation to the interior
 night: energy accumulation, radiation and max insulation



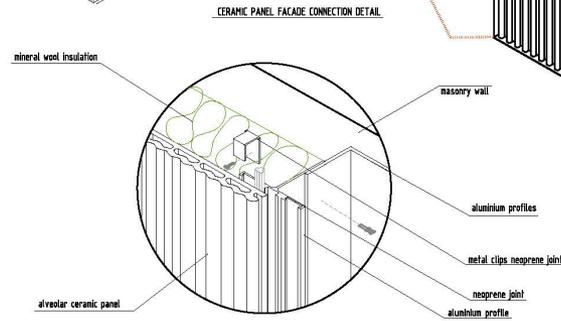
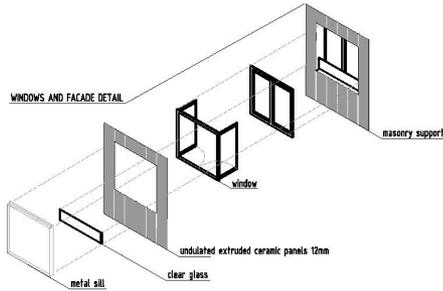
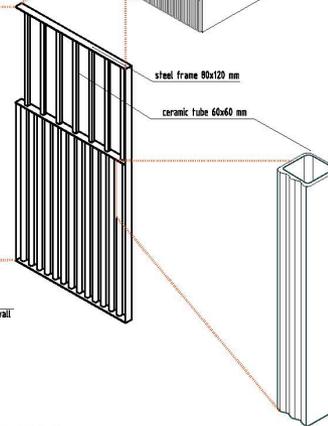
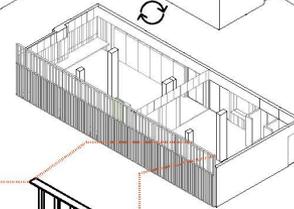
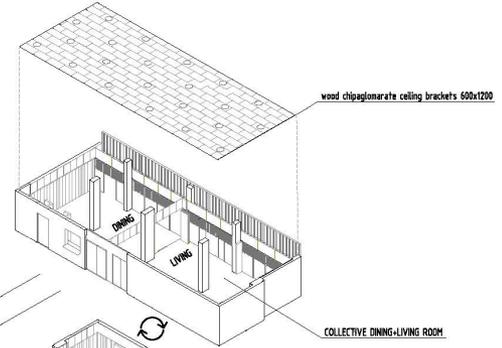
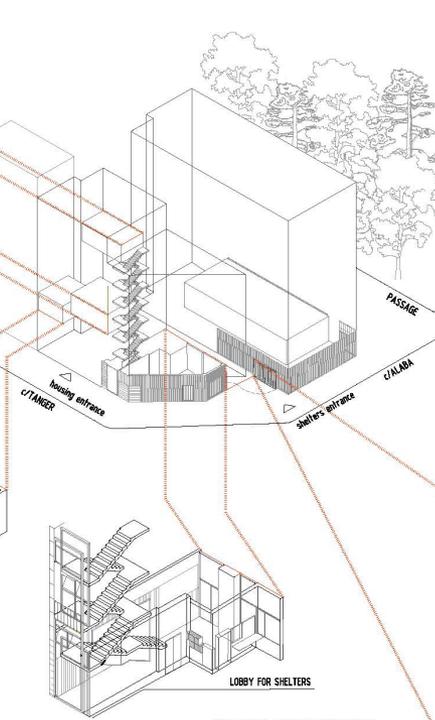
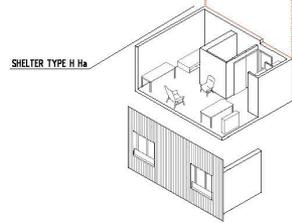
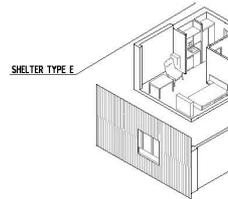
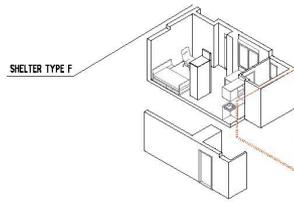
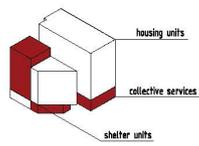
SUMMER | day: cross ventilation and dining room extension
 night: night cross ventilation



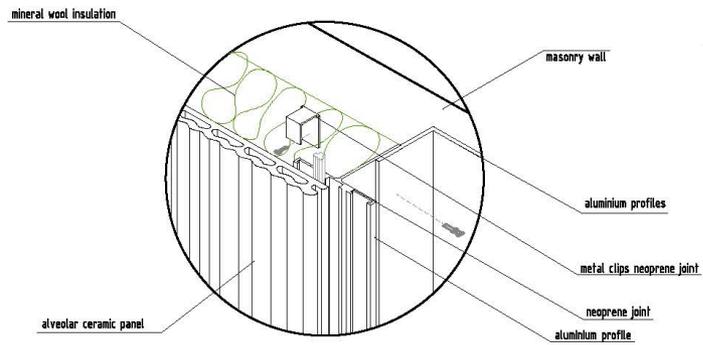
PASSIVE SYTEM:
 South facade with winter garden

- ① Barcelona blind of certified "PEFC" pine wood
- ② Prefab low energy embedded and high thermal resistance Terrazzo
- ③ Wooden fiber / cement boards free of toxic volatile substances
- ④ Low emission glass





CERAMIC PANEL FACADE CONNECTION DETAIL



WINDOWS AND FACADE DETAIL

