

Project for a sustainable tourist ecovillage

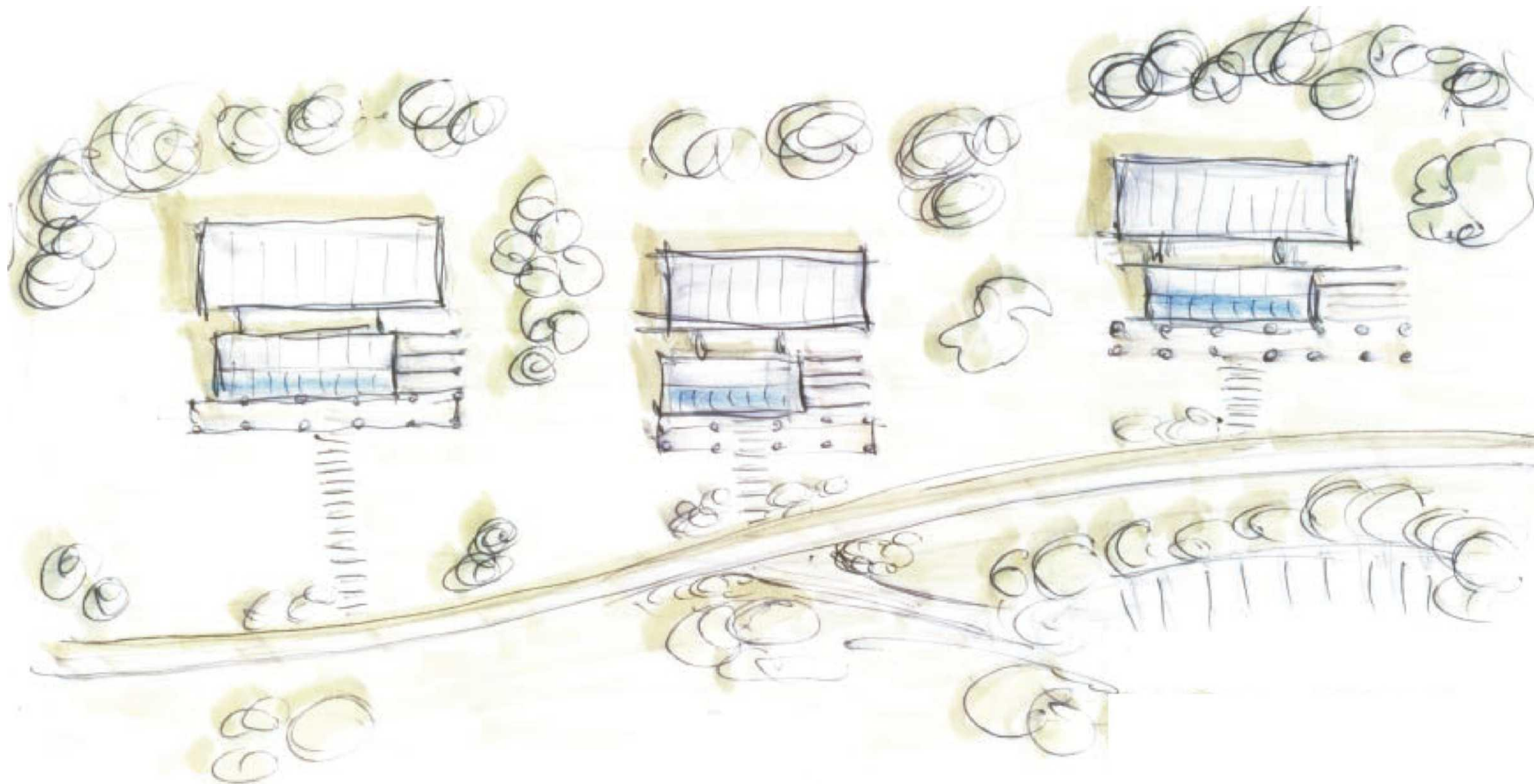


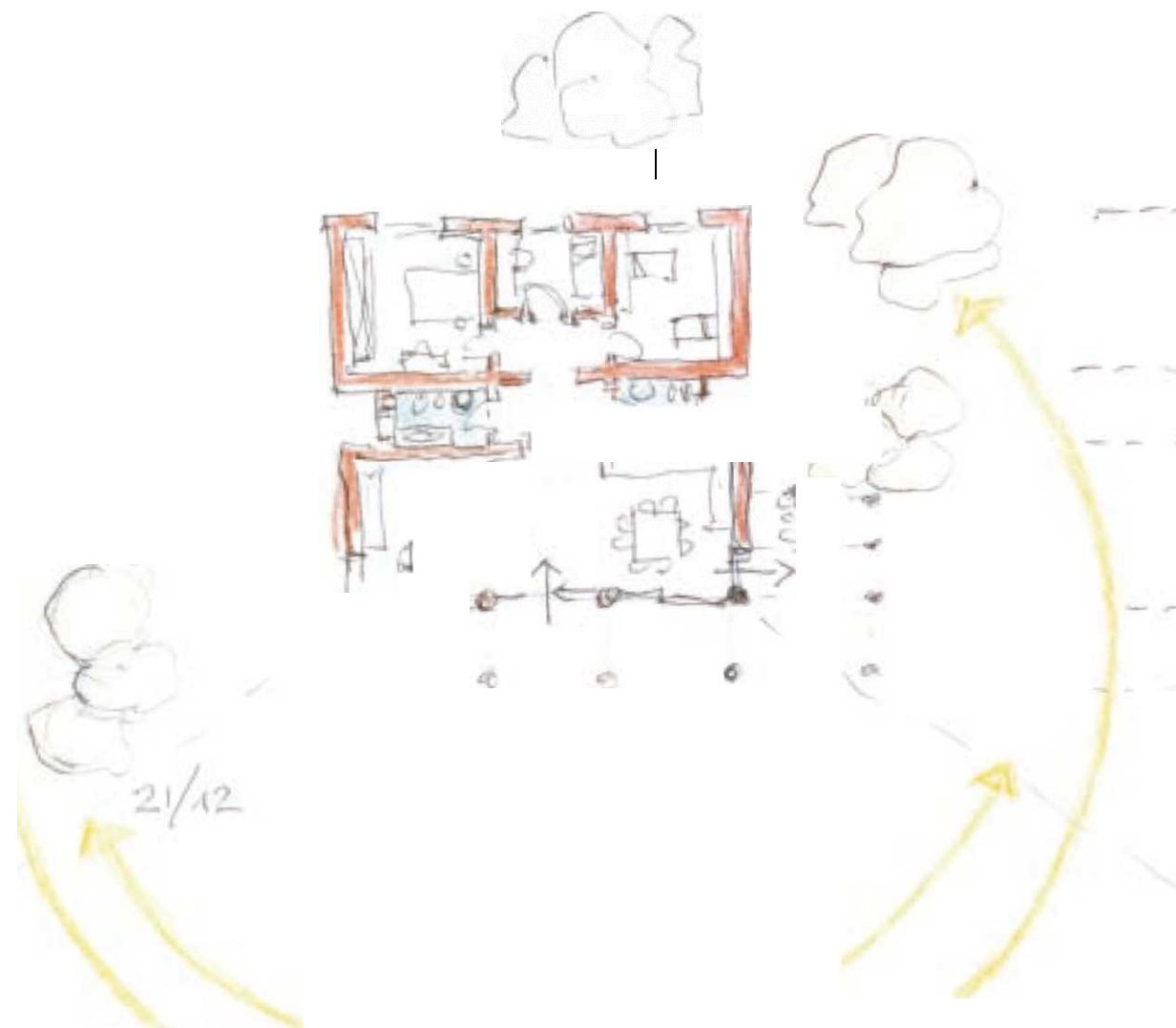
A sustainable tourist ecovillage

The project concerns a small nucleus of self-sustaining tourist houses to be located on a plot of land of approximately 1000 square meters.

The position of the houses can naturally be modified according to the morphology of the terrain, slopes, whether trees or other natural elements such as rocks, waterways, streets, and tracks and so on are present. The only element which must not be modified is the south facing position of the day zone in order to take advantage of as much direct sunlight as possible for natural heating in the winter. A number of additional elements such as the covered terrace (shaded) will guarantee all the required comfort during the summer.

A basic typology has been purposely chosen which on the one hand highlights the functions of the house: to the north the rooms, in the centre a linking zone which allows inhabitants to go outside and on the south open to the landscape; on the other hand, to give the image of a 'friendly system' which is immediately understood and which can be adapted to the different landscapes and integrates, in as far as possible, with nature.



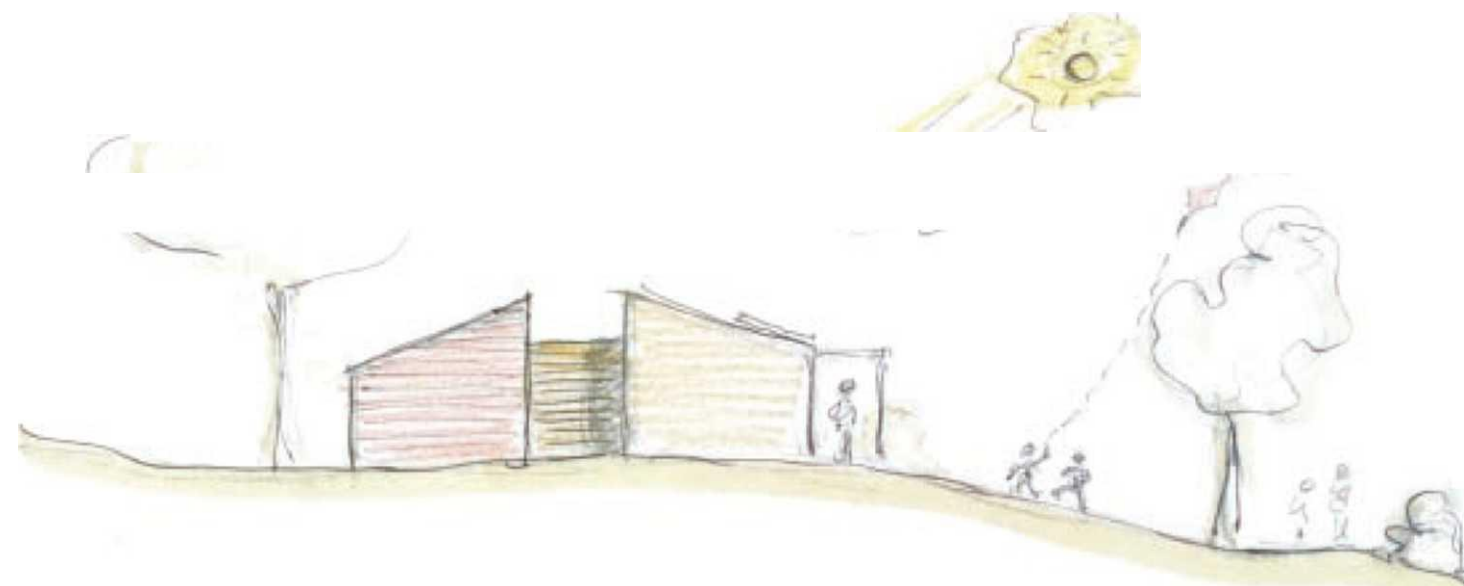


There are two different typologies: the first with two bathrooms and a toilet, a large day zone and an external hard-surface space, where you can relax with friends when the weather is fine, eat, play and enjoy the landscape. The second typology has three bedrooms and 2 toilets, a day zone and a covered terrace outside. The openings which are planned at each side guarantee natural and efficient ventilation during the summer.



The houses are made of wood employing prefabrication manufacturing technology, enabling them to be built in the shortest time possible which significantly influences the building site management costs.

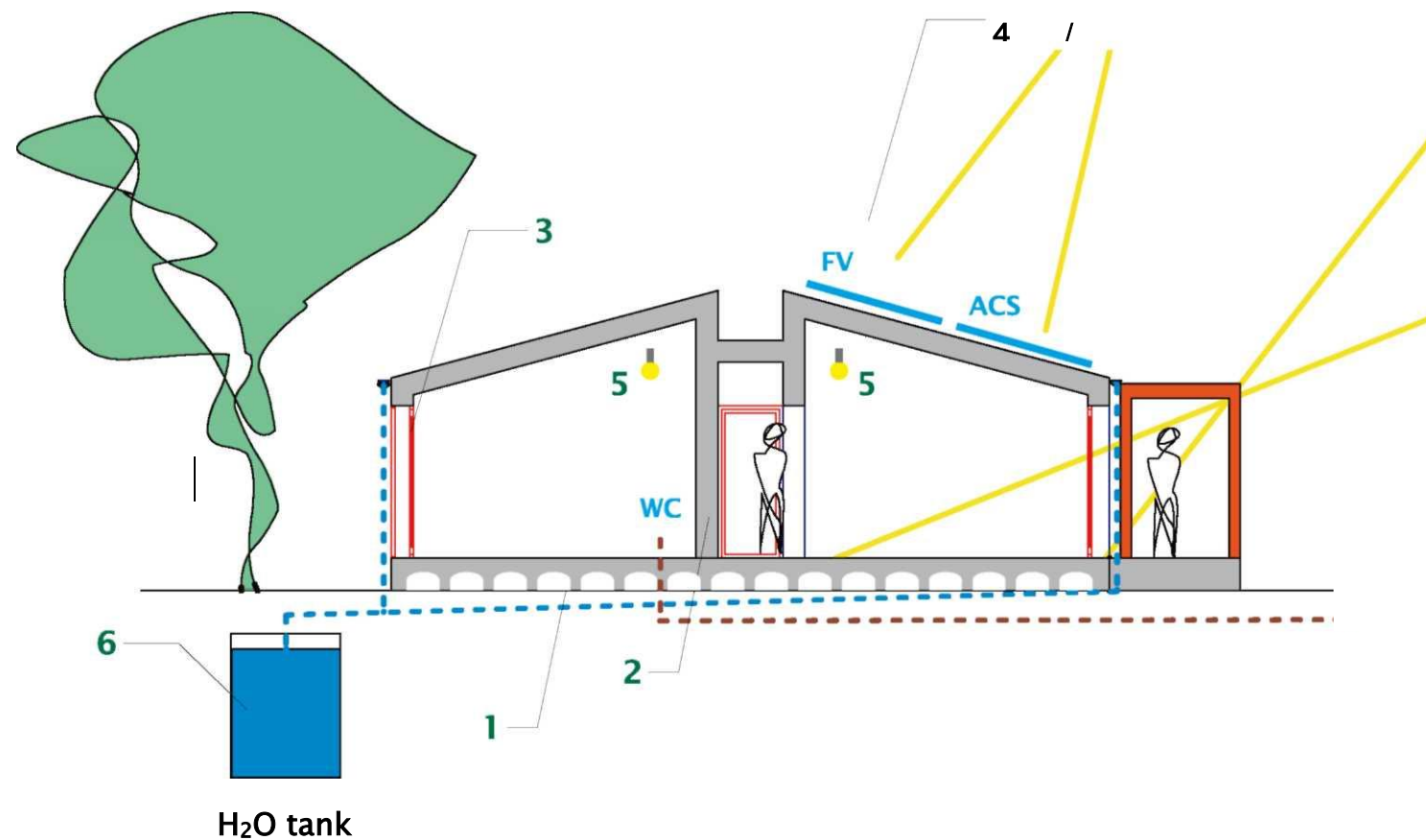
This choice was also repeated in the use of the materials and colors, which are often colored in the bedrooms and left natural in the day zone area.



Additional elements such as the south-oriented terrace can become the main organizational features of the installation, creating a hierarchy of different paths, containing displays for the ecovillage consumption, a support for the playing grounds, acting as a connection between the services etc.

When not in use the houses can give the energy produced by the photovoltaic panels to the closest electrical network.

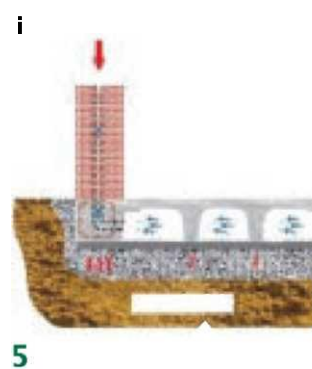
The following tables contain some suggestions about how to realize the various elements.



Self-sustaining buildings

Use of the bioclimatic principles to check the passive solar contribution during the winter and summer: large south-oriented windows with the purpose of capturing the sunlight during the winter and a porch to the south which works as a shade during the summer

- 1 . underground ventilation for moisture disposal and gas radon
- 2 . Prefabricated buildings in insulated wood with natural materials of a low environmental impact to reduce the thermal dispersion and increase indoor well being
- 3 . windows in wood with insulated glass to reduce the dispersion and increase acoustic wellbeing
- 4 electric and domestic hot water generating plants from renewable energy
- 5 . use of lamps with low energy consumption
- 6 . collection and reuse of the water for secondary uses
- 7 . domestic refuse collection, filtration and disposal plant through herbal purification .



SEZIONE ENERGETICA

0 1 2 3 5 m





ecohouse2

2 rooms version

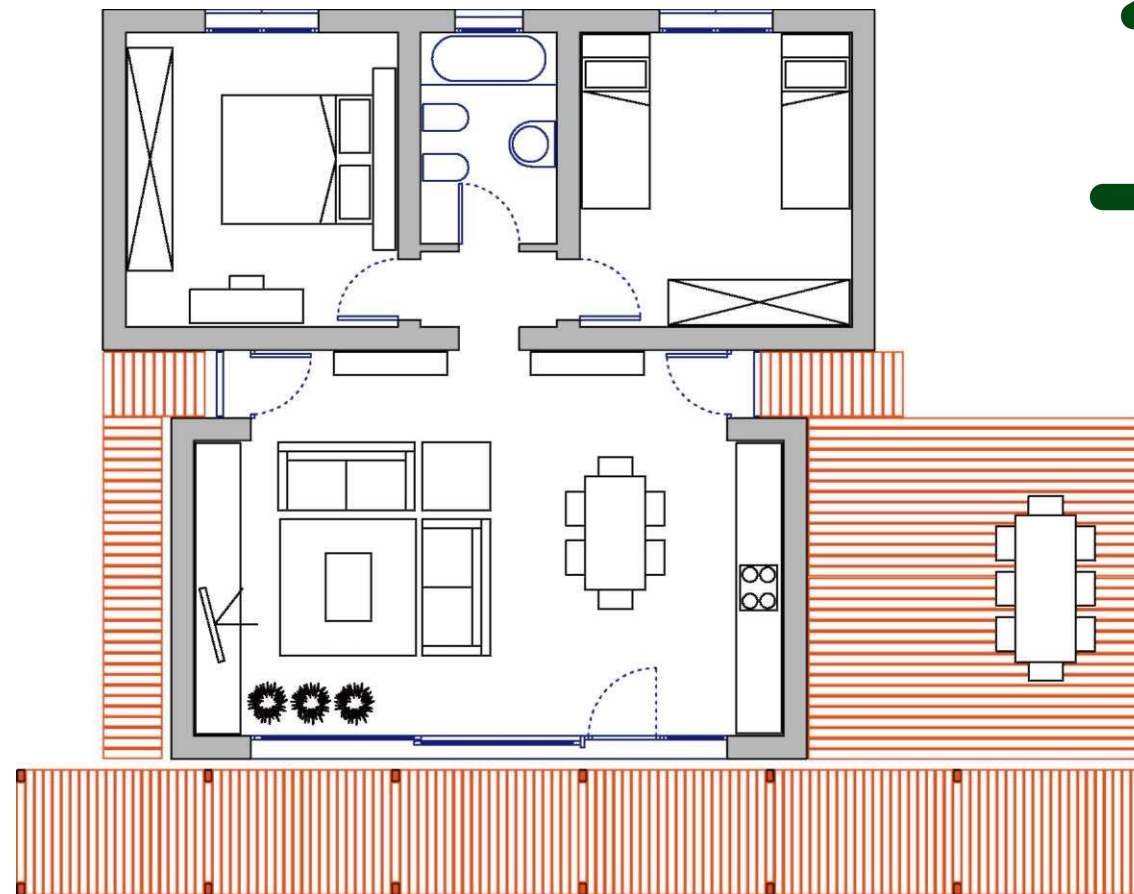
4 beds

Internal net surfaces
mq. 73,70

day zone mq. 37,80

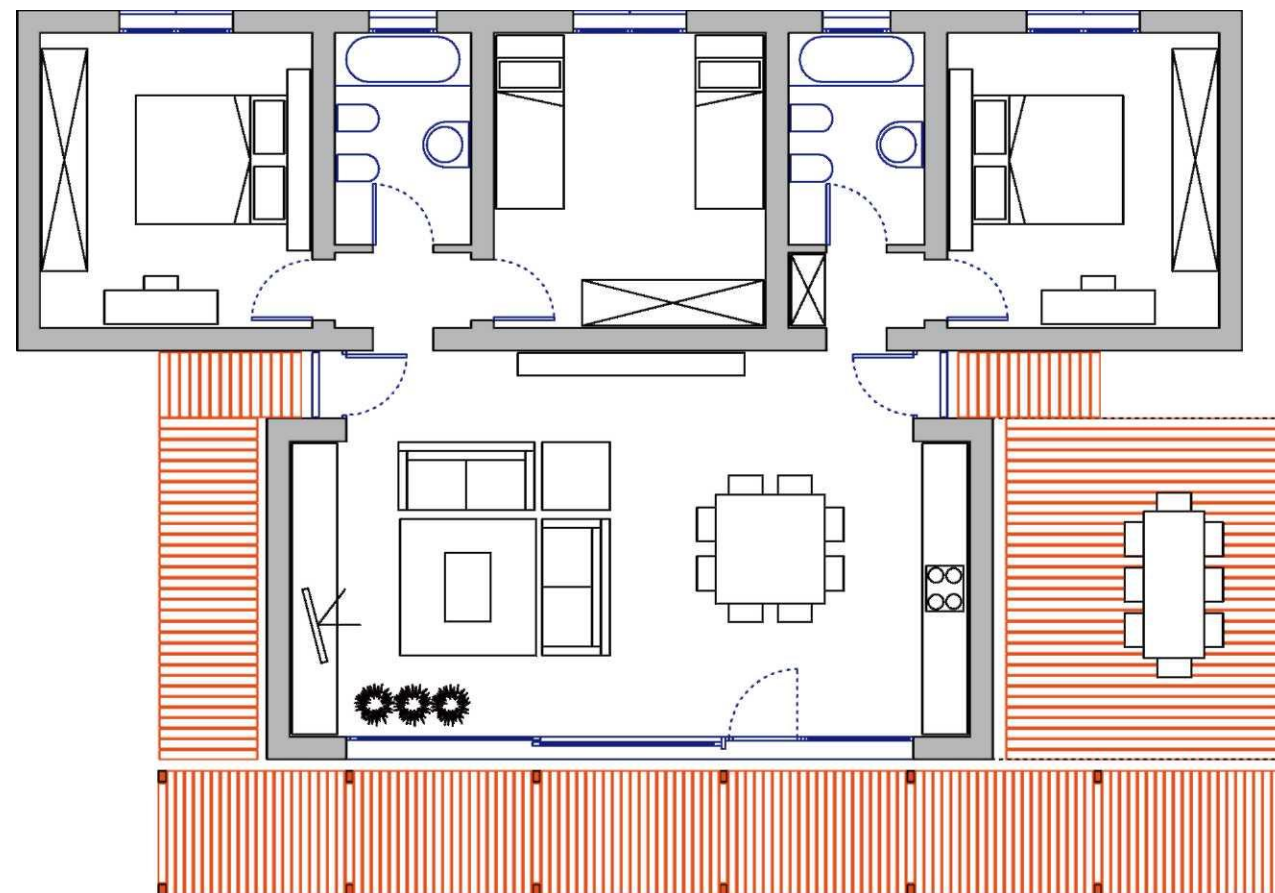
bedroom mq. 14,04

bathroom mq. 5,04



TWO BEDROOM VERSION LAYOUT





ecohouse3

3 bedroom version

6 beds

Internal net surface
mq. 73,70

day zone
mq. 44,10

bedroom
mq. 14,04

bathroom
mq. 5,04

covered porch
mq. 17,64



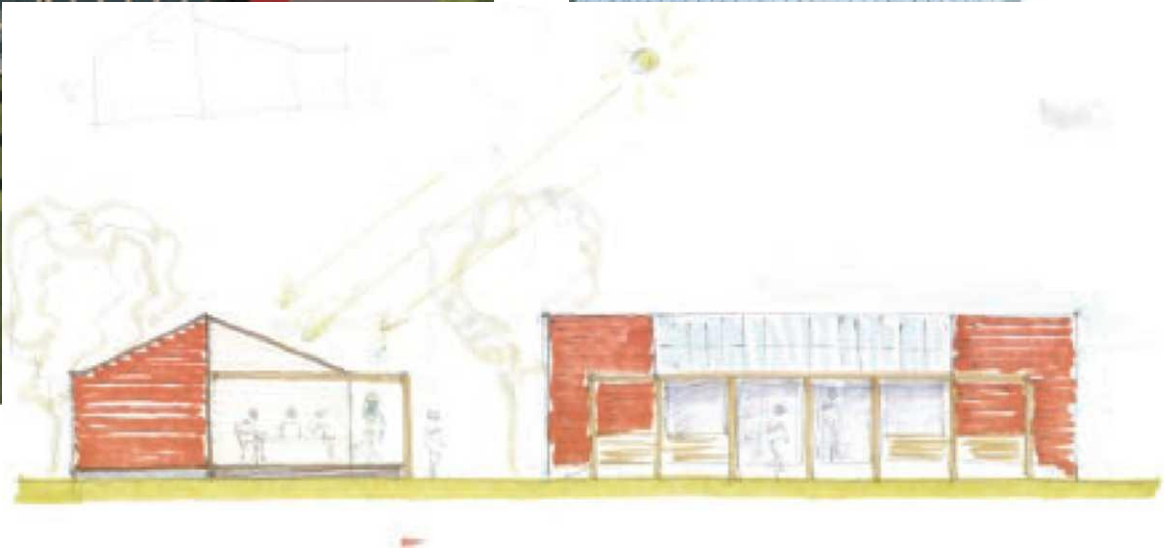
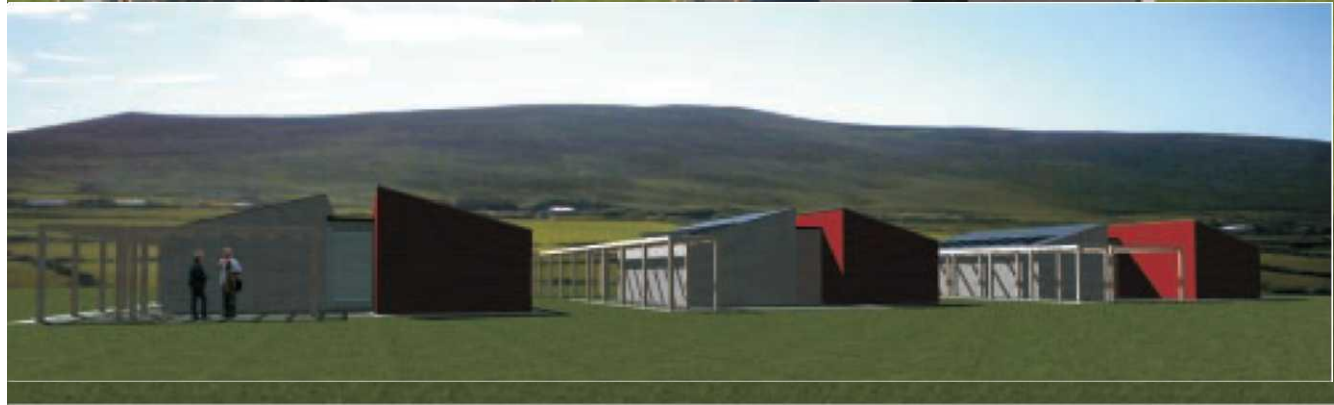
THREE BEDROOM VERSION LAYOUT

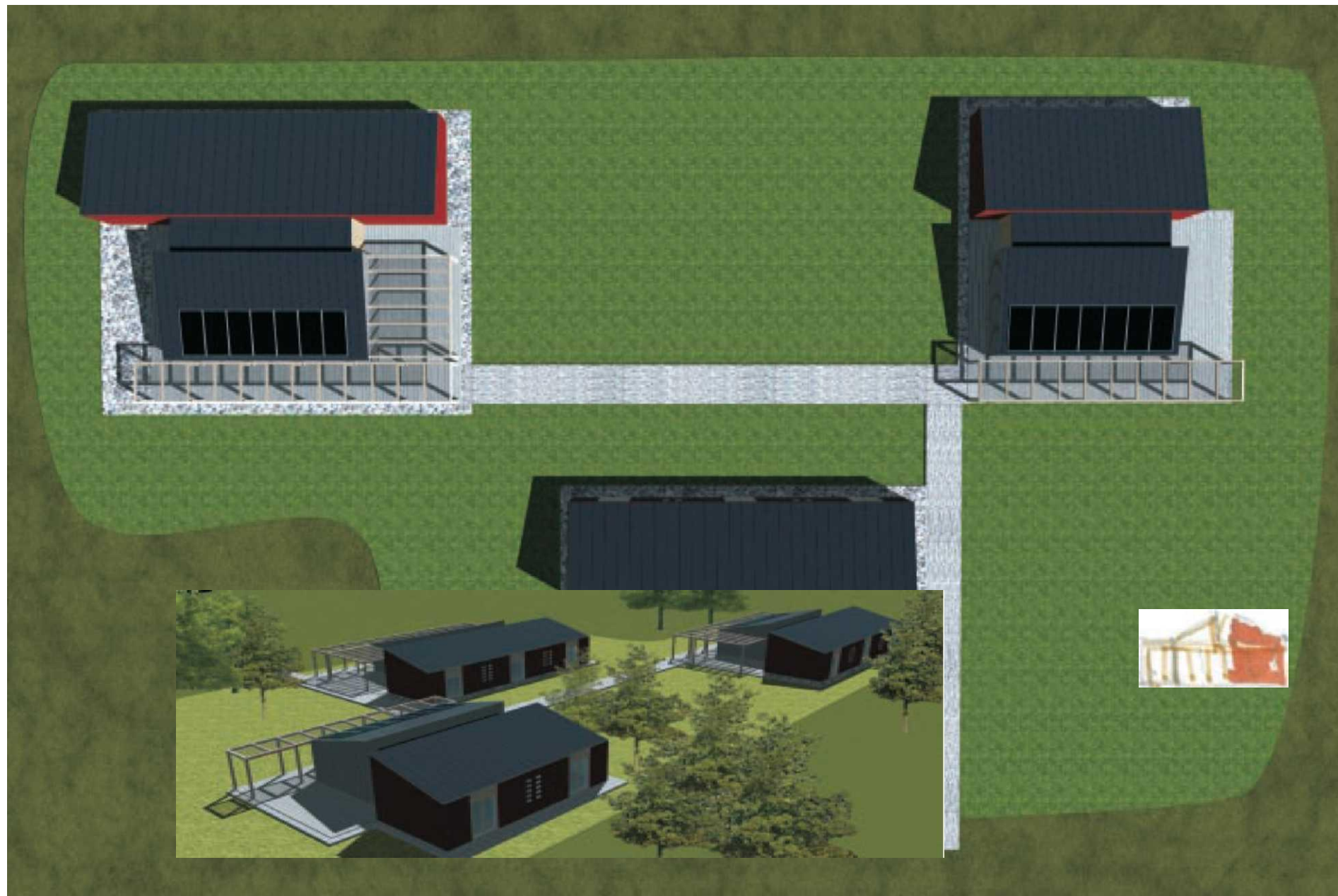
0 1 2 3 5 m



Aggregative system 01

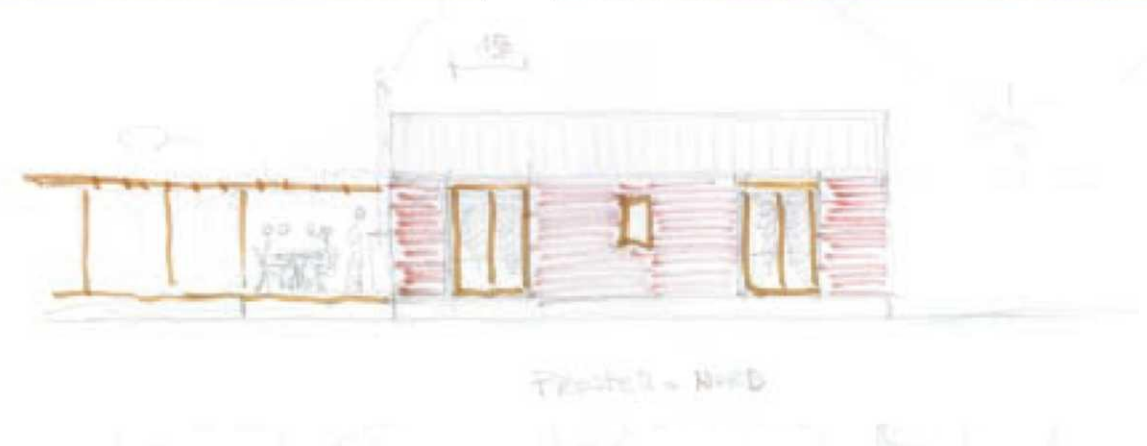
A first example of the aggregation of the two typologies with a number of details relating to the external finishing and a studio sketch of the facades .

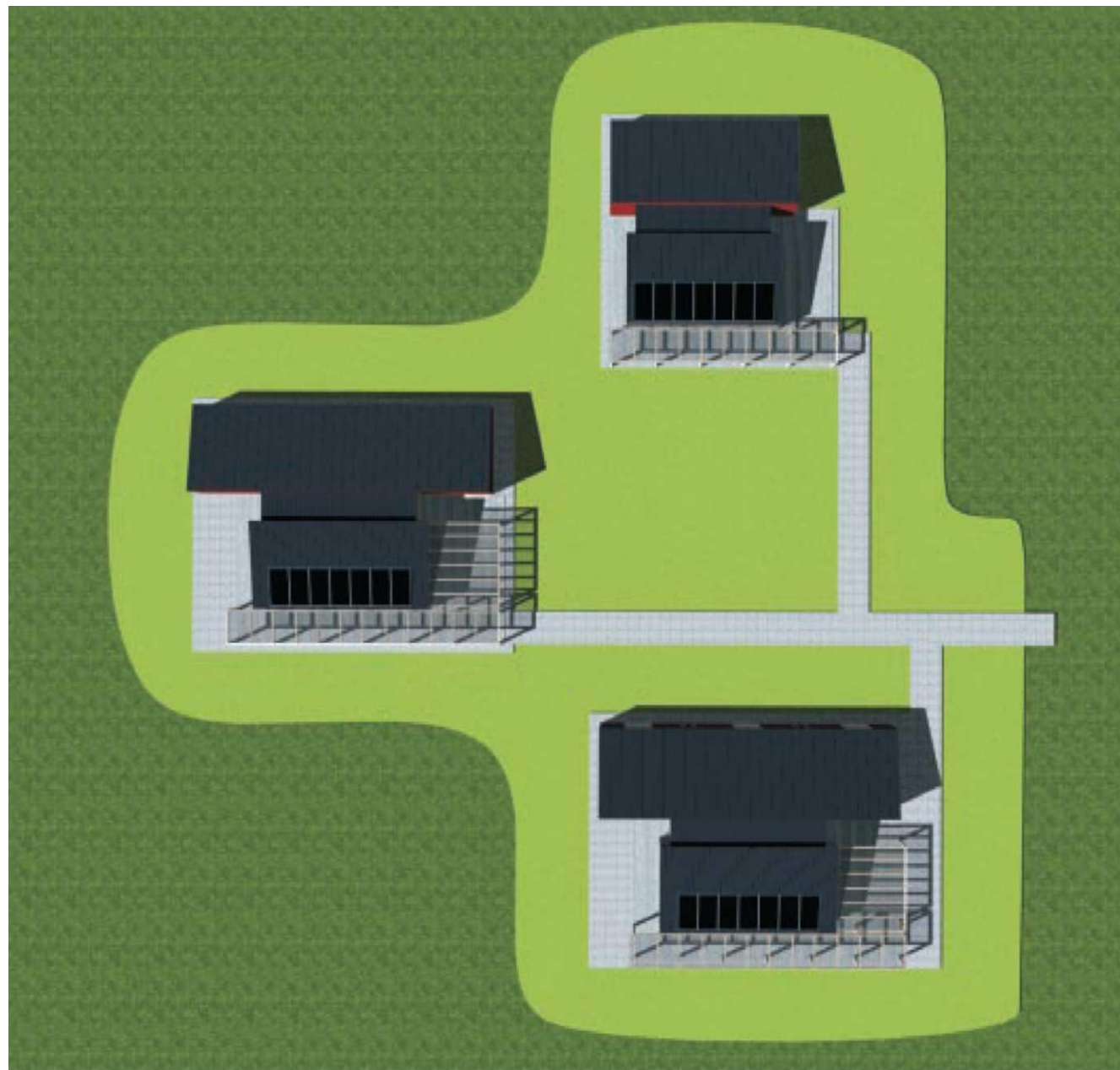




Aggregative system 02

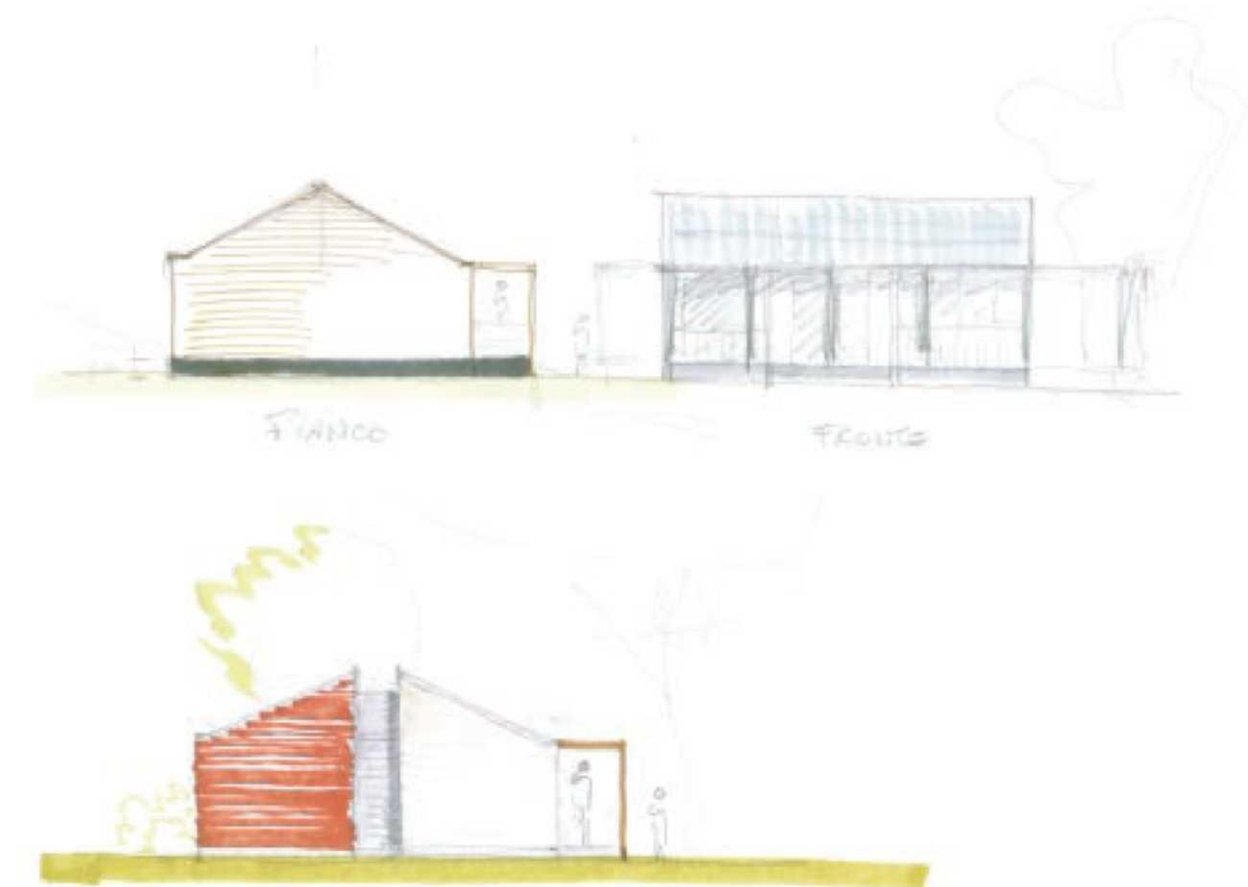
Another example of the aggregation of the two typologies with a number of particulars relating to the external finishing and two studio sketches of the chromatically combined facades





aggregative system 03

A third example of the aggregation between the two typologies, with various environmental inserts and a number of suggestions concerning the wood covering.





aggregative system 04

A final example of the aggregation of the two typologies, with the sun screen porch in view. The sketch of the layout shows the filter spaces on the south and east side.

