The Panels





All the exterior and interior partitions of the co-working spaces are made with panels of *Quincha*, a traditional and cheap constructive system that uses wood, canes and clay to form earthquake-proof framework. This system is still used a lot in Chile and South-American countries for its many advantages, such as:

- good anti-seismic properties, due to the elasticity of the canes which are able to absorb the vibrations produced by ٠ earthquakes;
- economical advantages of using local and cheap materials; good thermal inertia, which maintain the building cool during summer and warm during winter;
- easy and fast to build and assemble, also compared to other system like Adobe; ٠

However, the traditional *Quincha* does not include the use of prefabricated elements, therefore any substitution of dam-aged parts becomes a difficult work. My idea was to simplify and improve the time of construction and maintenance of the traditional system by designing several variations of prefabricated modular elements of *Quincha*, which can be directly screwed to the main structure.

The prefabricated panels are composed by a fixed wooden frame, measuring 1.20x2.50 meters, and by a secondary wooden structure with canes manually intertwined to it. The final layer is composed by different materials according to the function of the panel.



This panel has the standard sizes of the currently available panels in Chile. The final layer of clay and straws is added in situ.

Other materials, such as plaster, can be used according to costs and availability. Pigments can be added to the mixture in order to create a variation in the color palettes of the panels.





Panels without any finishing layer are used in correspondence with the courtyard, which allows light to come inside and it created nice shadows on the walls.

The bamboo canes are manually intertwined and they are easy to substitute in case of damage.





The facades towards the valley are more transparent and composed by windows which frame the beautiful landscape and the view towards the ocean.



During summer the facade next to the public path are composed by light panels which can rotate in order to create a continuity with the outdoor

Instead of using clay and straw, a bamboo weav-ing is fixed by nails to the wooden frame. Bamboo weaving is a natural and extremely light material, perfectly suitable during warm months because it allows the facade to breath while protecting from direct sun light. When sun light partly penetrate the net, it creates beautiful shadows in the interior.

Scale 1.10



A variation of the previous panel where only the upper part can rotate. This panel is used to divide the interior spaces from the courtyard.



Scale 1.10



The Winter Panel

During winter, the summer panels can be substituted with more transparent panels made of acrylic double-skin sheet (8mm+8mm). Acrylic glass transmits light inside the working spaces and it well insulates the building during cold months.

Compared to polycarbonate, the color clarity of acrylic glass does not diminish over time and it can be easily cleaned.



Scale 1.10