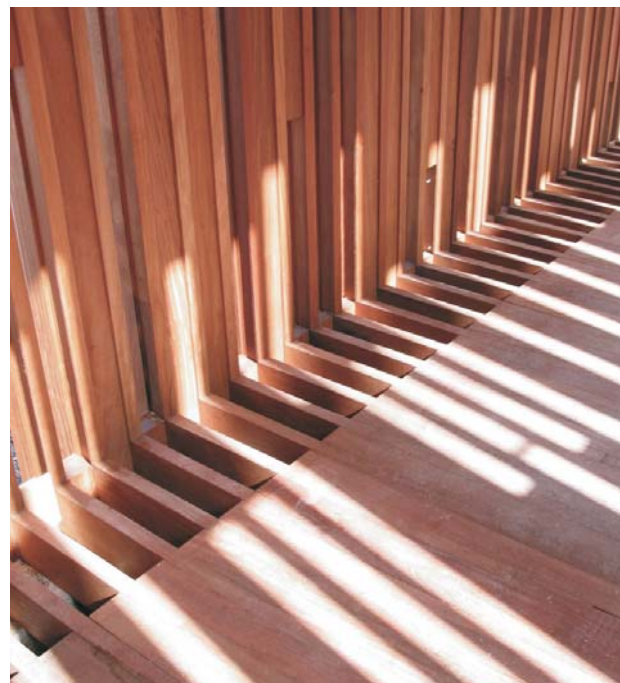




PUBLIC LIBRARY MARÍA LEJÁRRAGA
Ogijares , Granada (Spain)



Credits

Public Library María Lejarraga

Rubens Cortés (M57 arquitectos)

Date:	2008 - 2011
Site:	Ogijares (Granada)
Area:	612,72 m ²
Client:	Ayuntamiento de Ogijares
Architect:	Rubens Cortés
Architect (associated):	Raúl Melguizo
Team:	Álvaro Castellano Marta Gamarro
Technical architect:	Carlos Guerrero
Engineer:	Juan Fernández
Builder:	Urbana + B.Solís
Timber structure:	José Valero (Jovagema).
Photography:	Javier Callejas
Text:	Michele Panella

PUBLIC LIBRARY MARÍA LEJARRAGA. OGÍJARES, GRANADA.

INTRODUCTION: Tobacco drying houses in granada's farmlands

Tobacco drying houses are simple agricultural buildings that are characteristic of Granada's farmlands. The spreading of this building typology is related to the growth of tobacco plants which was introduced at the end of the XIX century in Granada. Since the 1920's this crop became of increasing importance with peak tobacco production taking place during the 1940's, when more than half of all cultivable areas were dedicated to tobacco growing. After this growth, a progressive recession occurred resulting in the crisis of the 1990's, when the tobacco crops were no longer subsidized for cultivation.

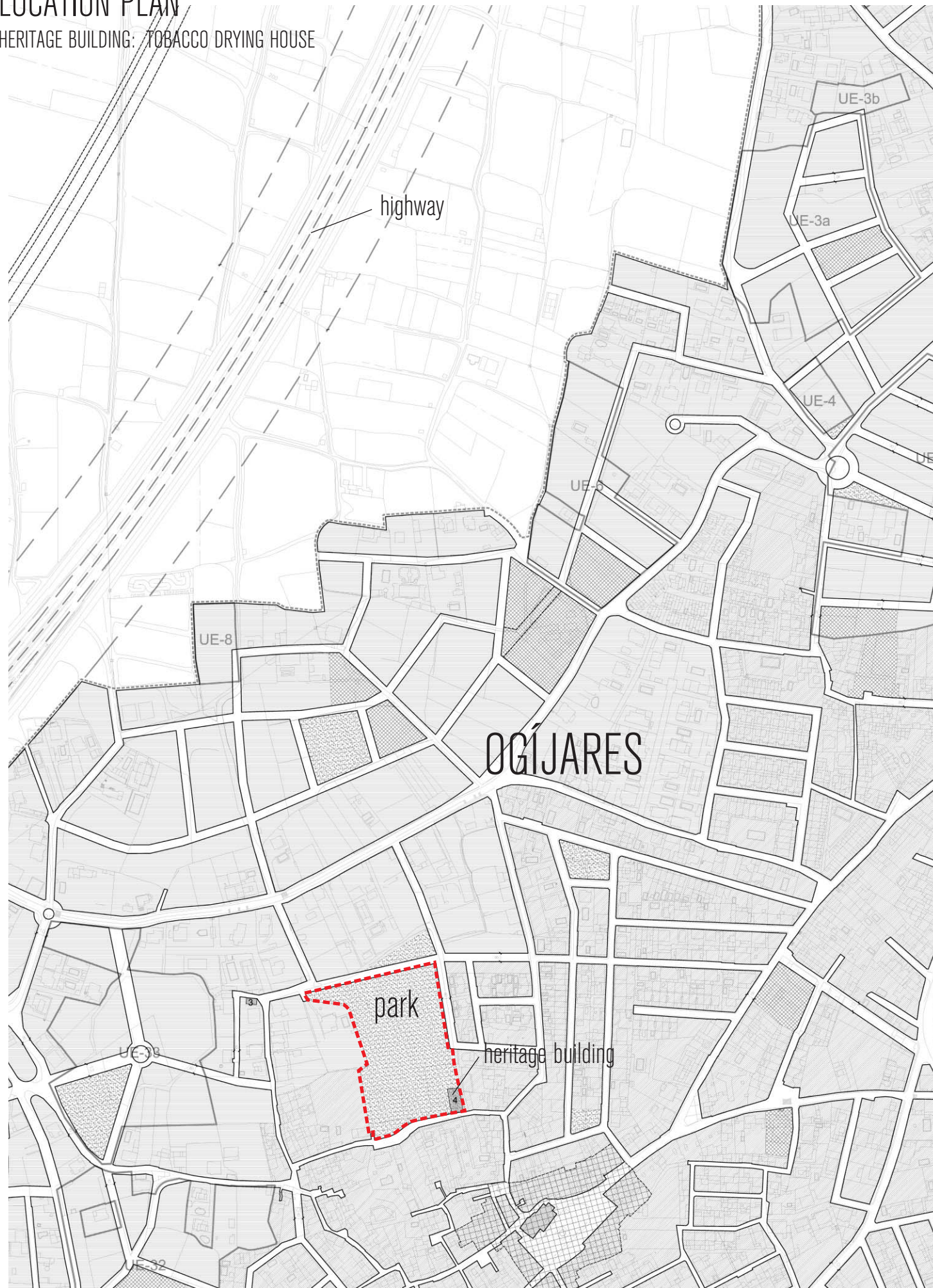
Nowadays very few areas are dedicated to this type of cultivation. But the tobacco drying houses are still a reference of the past. They are the most recognizable remains of a long and important rural industry. The continued growth of Granada's surrounding towns during the last two decades together with the recession of agricultural activity, has resulted in the progressive occupation and transformation of the rural landscape into an urban environment.

During this time some of the tobaccos drying houses have disappeared while others have become part of the urban fabric as is the case with the building illustrated in this project.



LOCATION PLAN

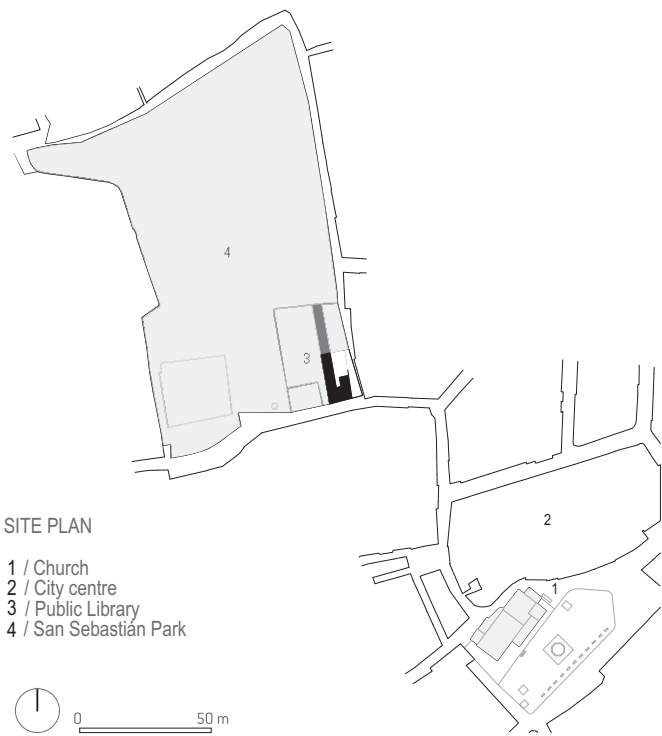
HERITAGE BUILDING: TOBACCO DRYING HOUSE



SITE PLAN

HERITAGE BUILDING: TOBACCO DRYING HOUSE





ABSTRACT

Near to Granada, the town hall of Ogiñares commissioned the restoration of a derelict tobacco drying house. The existing building is located in the south-east corner of San Sebastián Park and has been restored to function as a new Public Library. The building is historically listed as an example of the local vernacular architecture. The project took place in two stages, the restoration of the existing building and a new extension to increase the building's area in order to reach the minimum area requirement set by the Public Library Network of Andalusia.

Local planning laws restrict building within the park, therefore any extension to the existing building had to be a lightweight construction that could be removed if necessary. A timber structure was designed as a continuity of the existing tobacco drying house. The new extension to the building is designed as a contemporary interpretation of the vernacular architecture found in Granada's rural landscape.



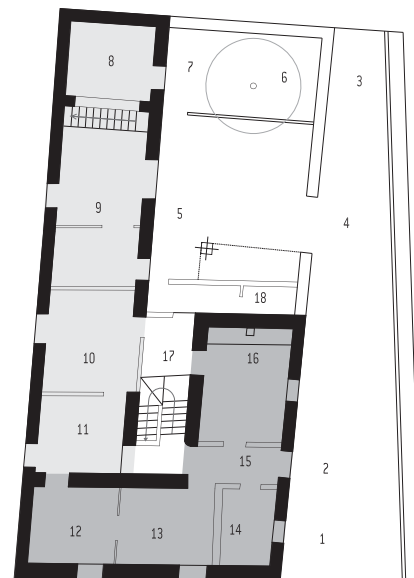
Previous state tobacco drying house

PREVIOUS STATE

GROUND FLOOR

- 1 main access
- 2 house access
- 3 store access
- 4 entrance patio
- 5 interior patio
- 6 tree
- 7 coop
- 8 henhouse
- 9 store
- 10 room 1
- 11 room 2
- 12 room 3
- 13 room 4
- 14 kitchen
- 15 hall
- 16 living
- 17 garden exit
- 18 wc

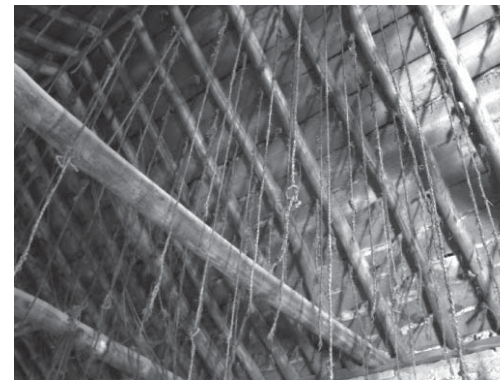
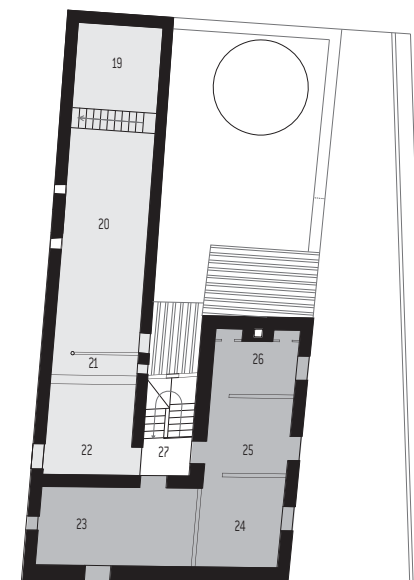
- vivienda
- secadero



PLANTA ALTA

- 19 tobacco drying
- 20 tobacco drying
- 21 store
- 22 store
- 23 main room
- 24 room 5
- 25 room 6
- 26 room 7
- 27 stairs

- vivienda
- secadero



Ropes for hanging tobacco inspire the illumination system of the restored house

THE LEGACY OF TRADITION

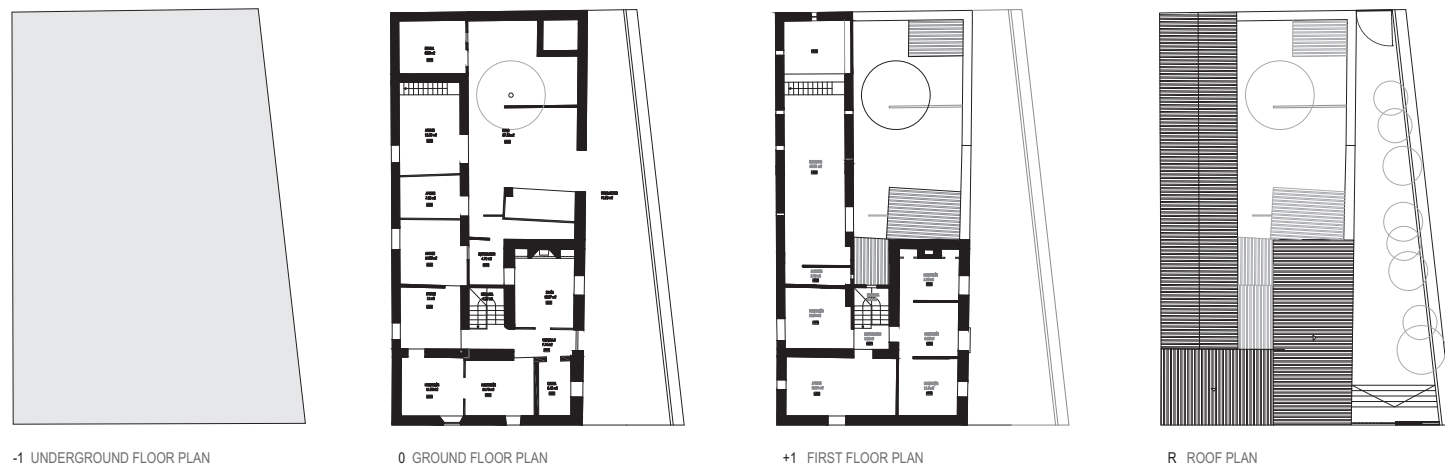
The existing tobacco drying house is a protected cultural building that represents the heritage and traditions of Granada's agricultural past. The strategy taken during this project has been to respect the existing tobacco drying house and maintain its image as a local landmark while at the same time reprogramming the building for use as a public library.

The project aims to form a harmonious relationship between old and new. Through reinterpretation of the materiality and simplicity of the construction techniques used in the existing wooden tobacco drying house, inspiration was found for a contemporary architectural intervention.

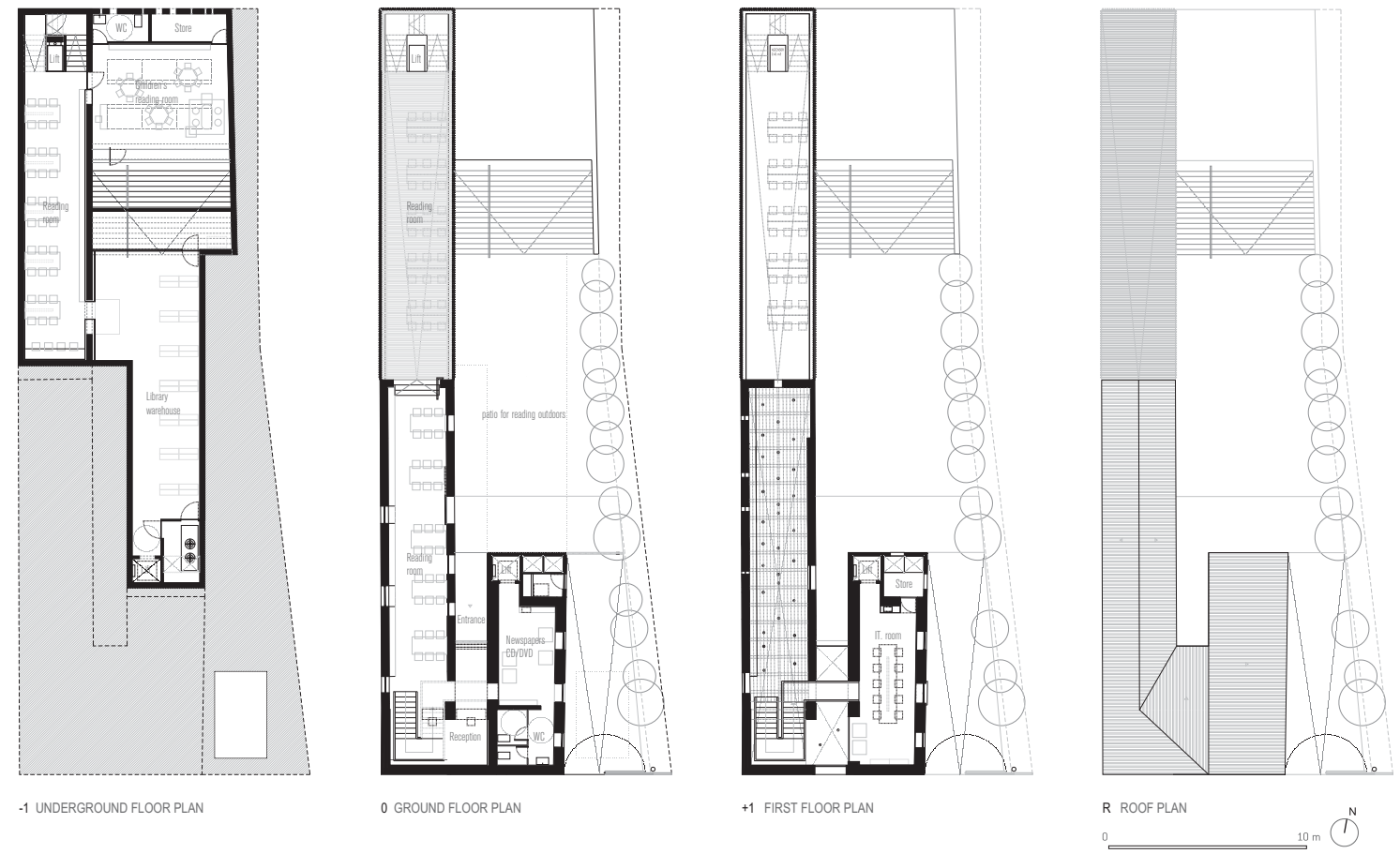


State of tobacco drying house during construction

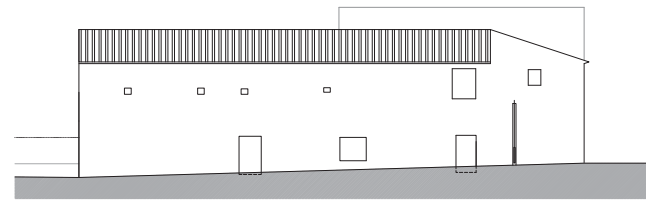
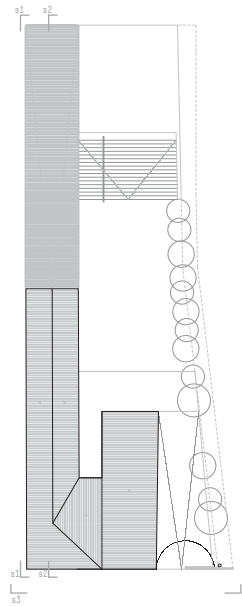
BEFORE
HERITAGE BUILDING: PREVIOUS STATE OF TOBACCO DRYING HOUSE



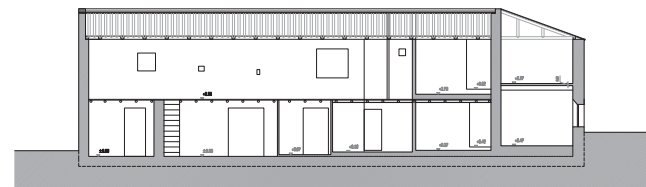
AFTER
CONSERVATION AND EXTENSION: PUBLIC LIBRARY MARÍA LEJÁRRAGA



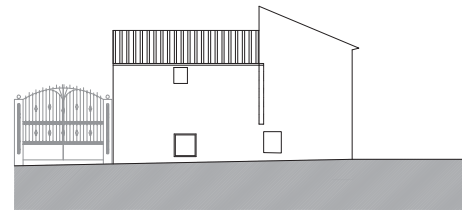
BEFORE
HERITAGE BUILDING: PREVIOUS STATE OF TOBACCO DRYING HOUSE



s1 - Elevation from San Sebastian's park



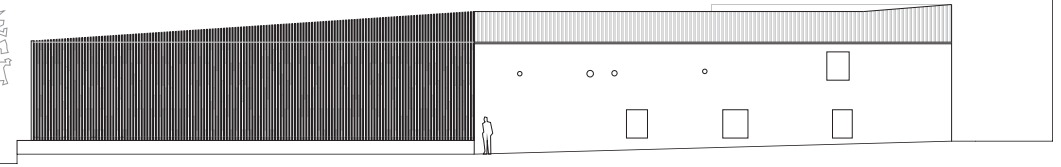
s2 - Longitudinal cross section



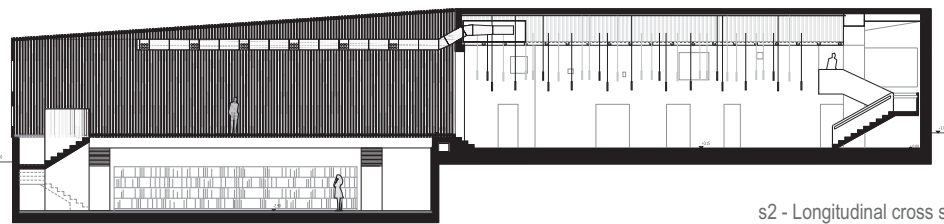
s3 - South elevation



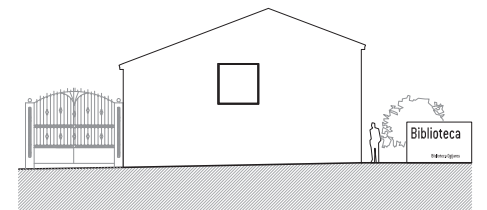
AFTER
CONSERVATION AND EXTENSION: PUBLIC LIBRARY MARÍA LEJÁRRAGA



s1 - Elevation from San Sebastian's park



s2 - Longitudinal cross section



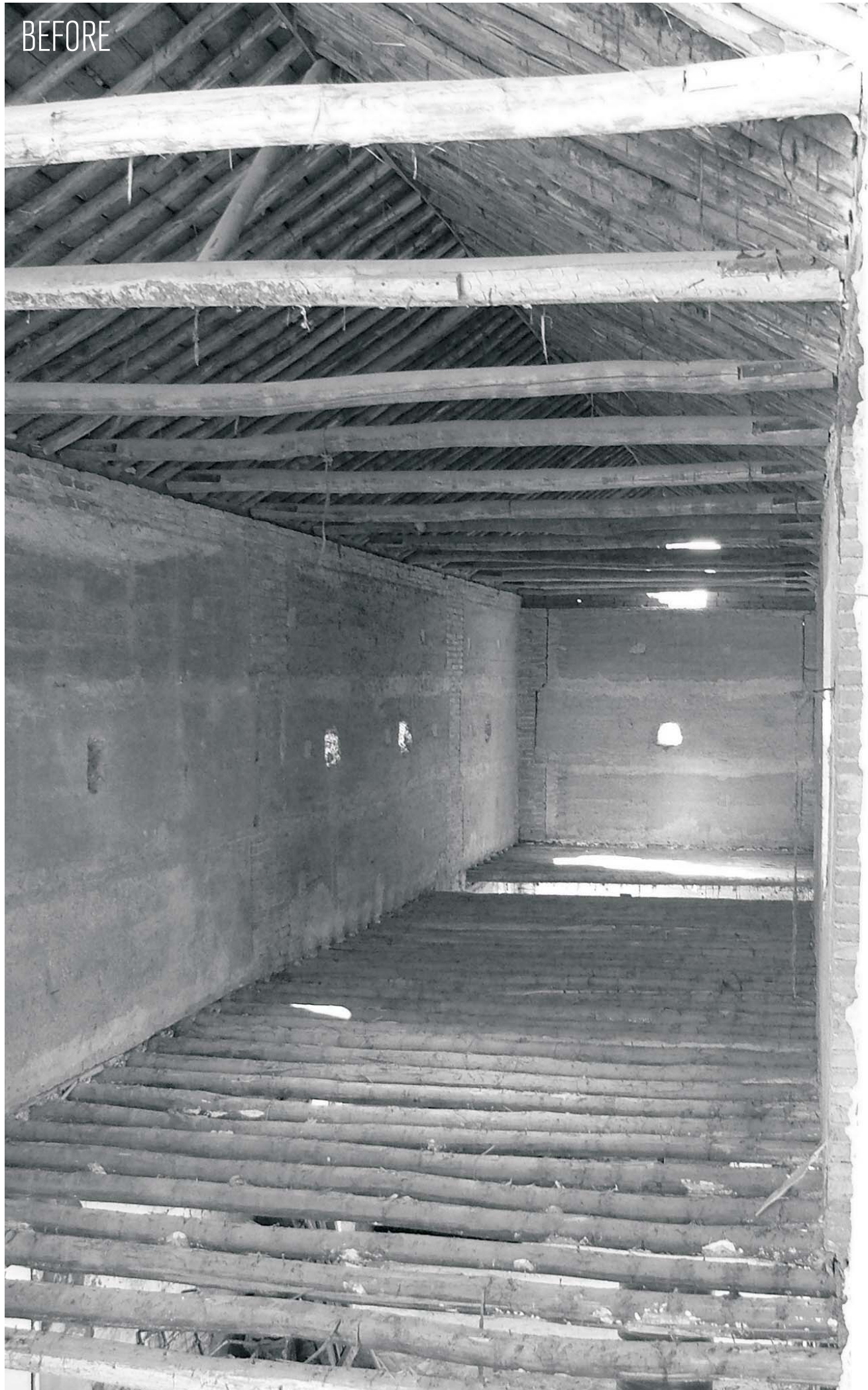
s3 - South elevation



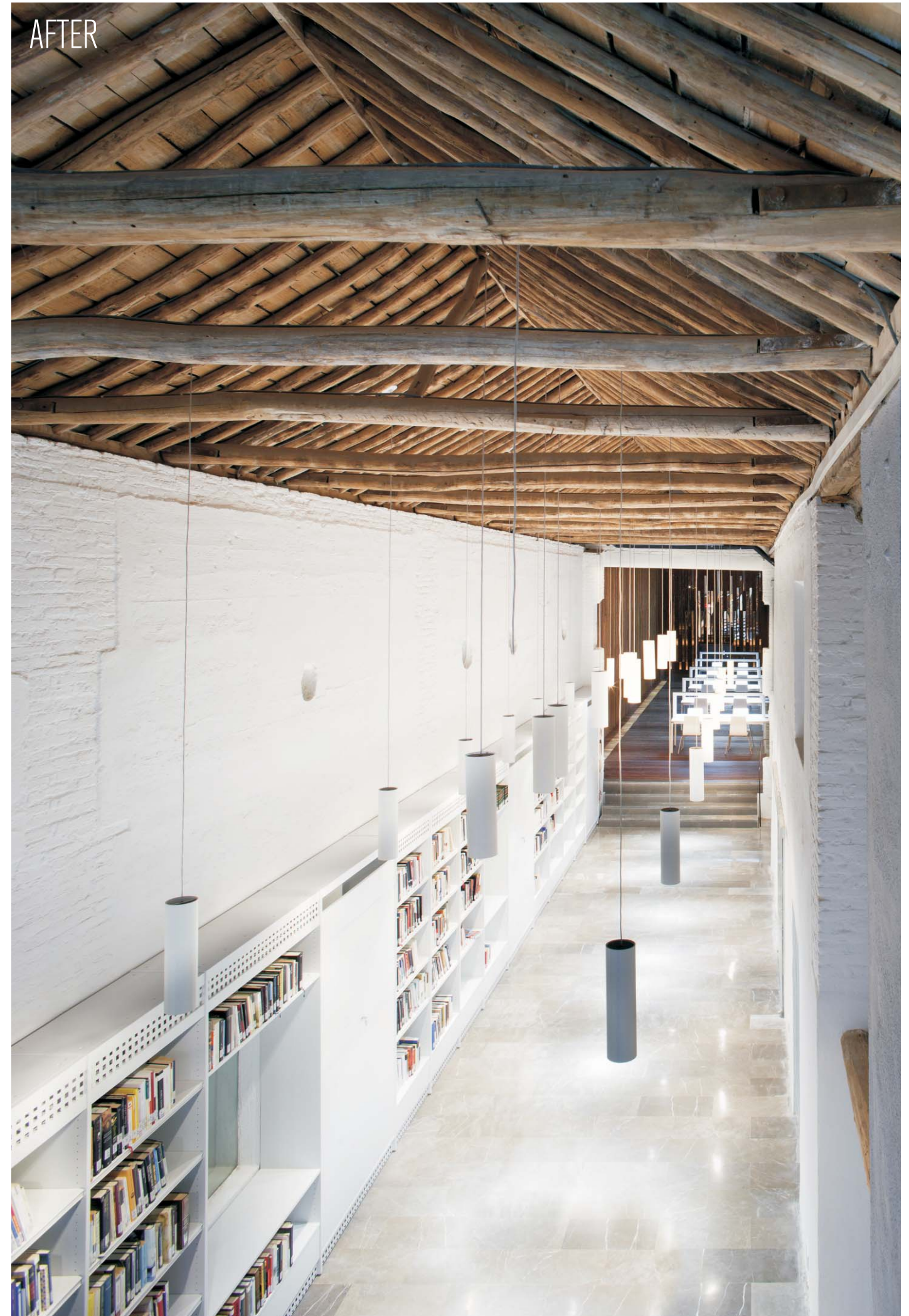
WORKS IN PROCESS



BEFORE



AFTER



BEFORE



AFTER



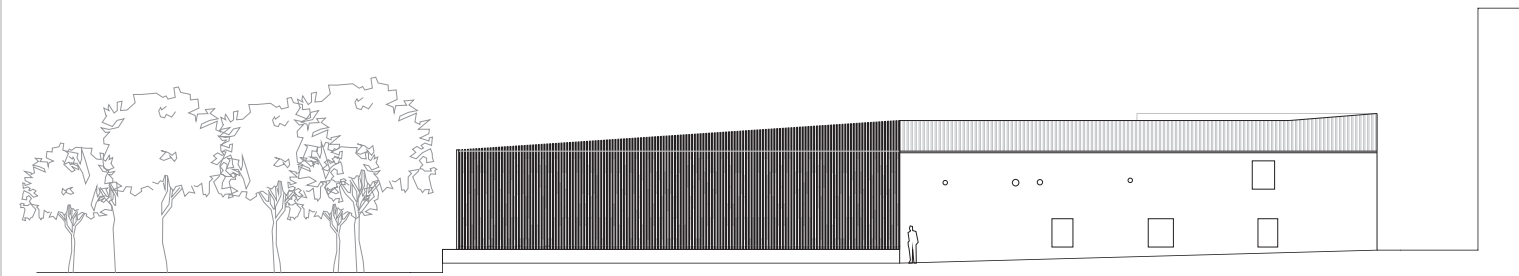


THE PROJECT

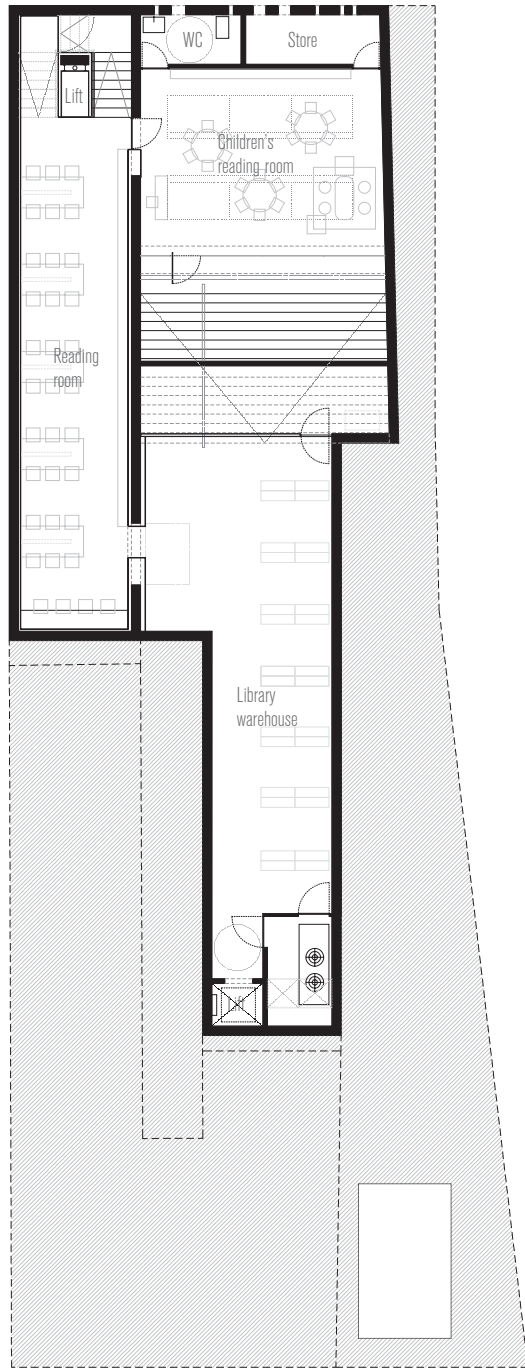
The Project began with the cleaning and restoration of the damaged elements of the tobacco drying house, which included the removal of any elements that were beyond repair. The two most recent volumes were substituted, and the internal partitions and the floor of the bigger space were removed creating a new double height space. The wall to the north of the existing building was also demolished to allow the new extension to be built. Existing features of the tobacco drying house were retained as reference to the buildings previous use.



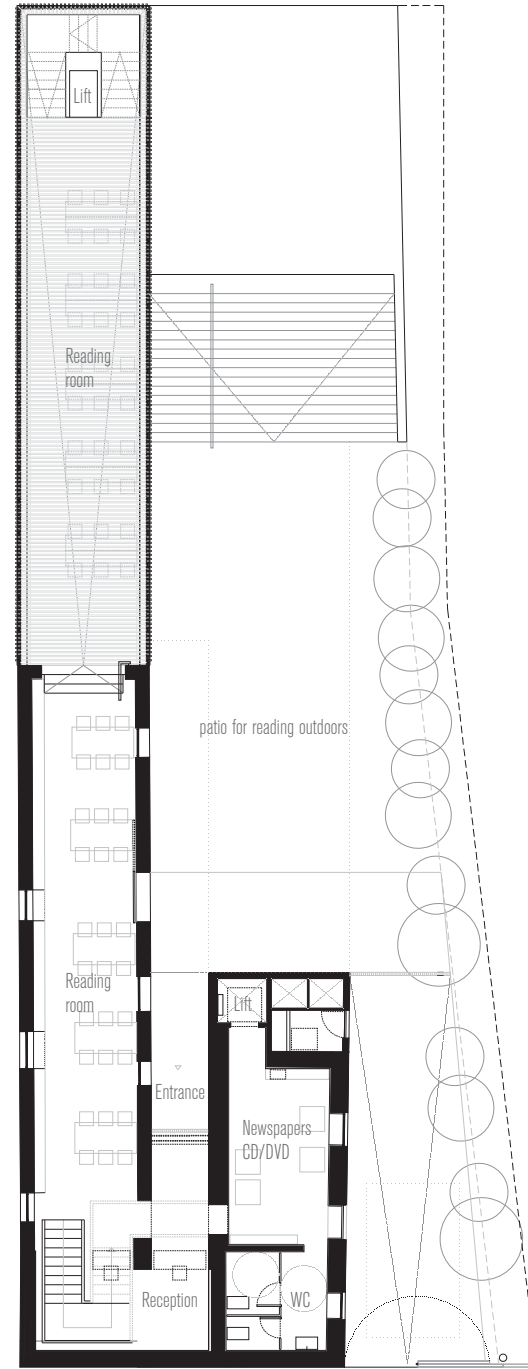
Due to site restrictions many challenges arose. These difficulties were transformed into opportunities that were used to drive the buildings design. The result is a simple building that translates in to a wooden volume that sits above an underground concrete basement which houses the rest of the spaces required. The new light-weight timber structure is added to the existing building as a prosthesis with a temporal character. Externally the building is seen as two elements, the historic tobacco drying house and the new library extension integrated into of the landscape of the surrounding park.



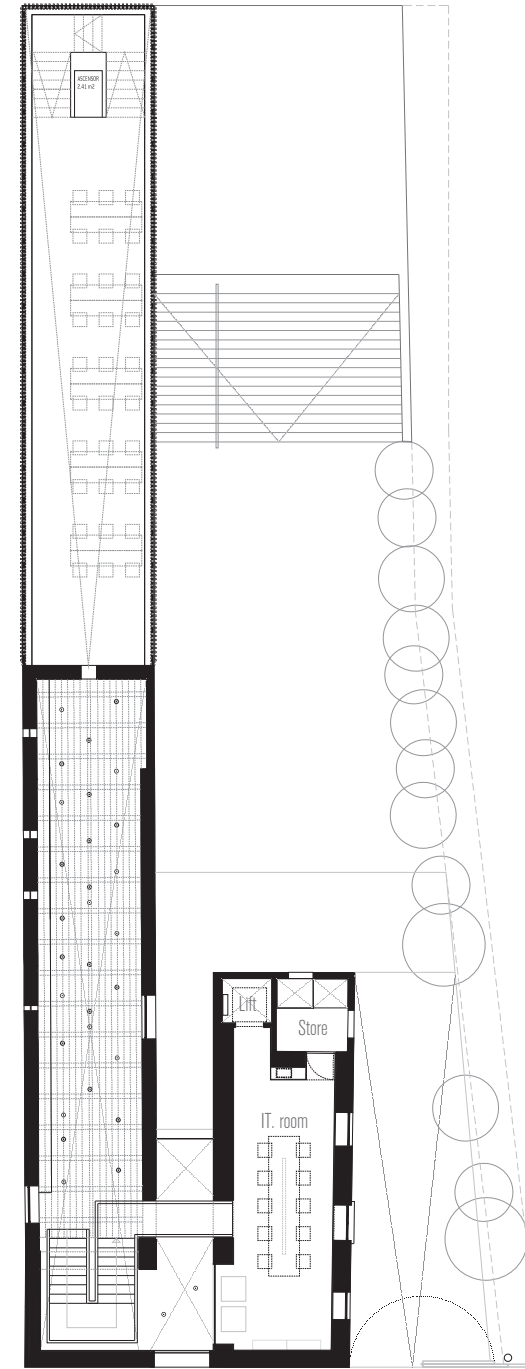
s1 - Elevation from park



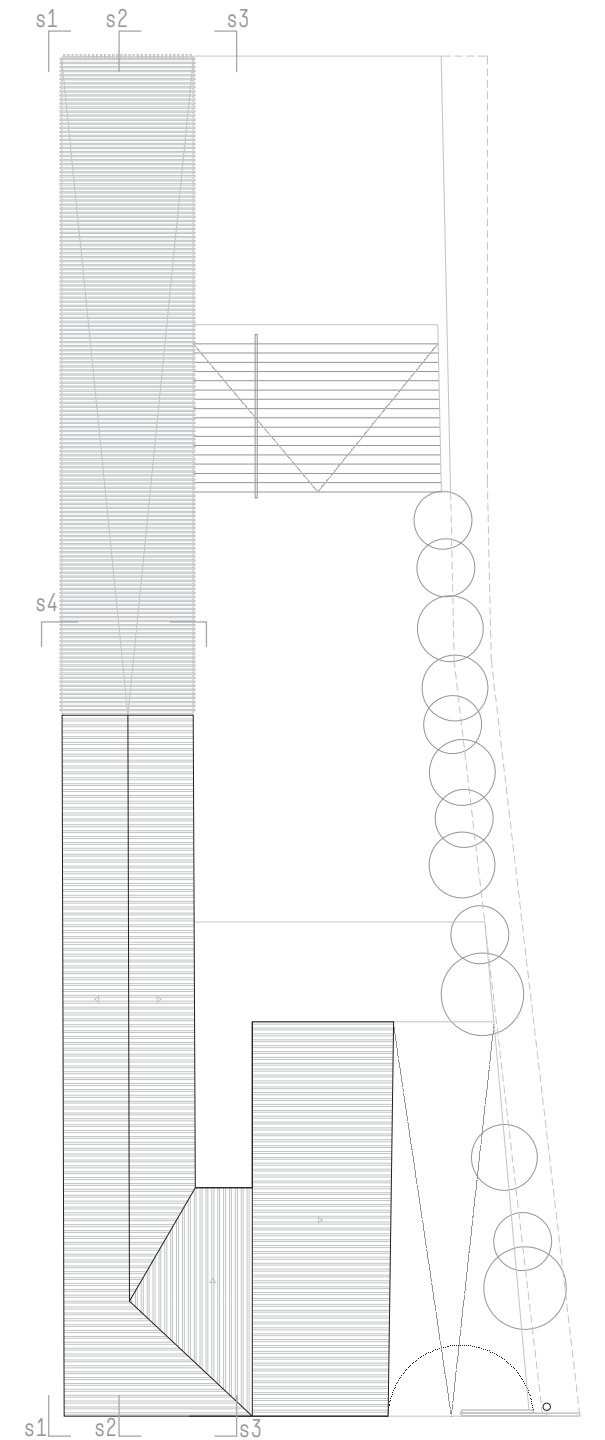
-1 UNDERGROUND FLOOR PLAN



0 GROUND FLOOR PLAN



+1 FIRST FLOOR PLAN



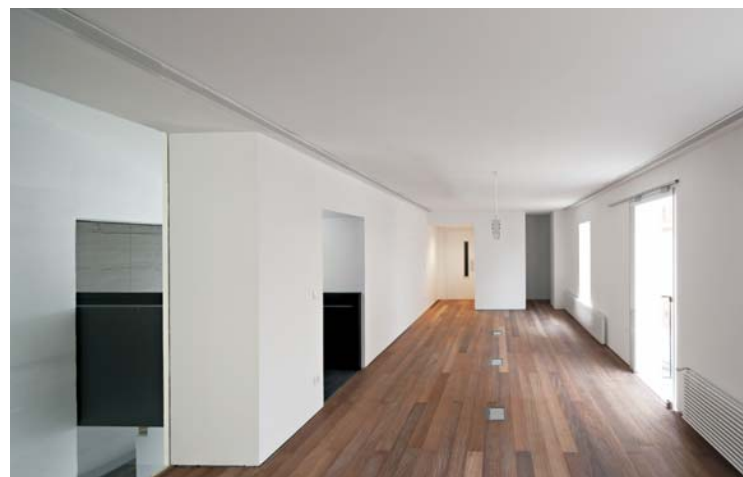
R ROOF PLAN





The main access to the building retains the old entrance of the tobacco drying house. This point of access provides the visitor with a private and protected space that also functions as a small patio for reading outdoors.

The building organization uses the existing layout, only the staircase is moved to create a hall between the former living space and the tobacco drying house. At ground floor the building consists of a newspaper library and at first floor IT facilities. Access to this space is made by a steel sheet staircase, a modern addition to the ancient tobacco drying house. As the visitor travels up the stairs there is a moment for reflection, made possible by an interior balcony. This allows the visitor to appreciate the reading space and its continuity from old to new.

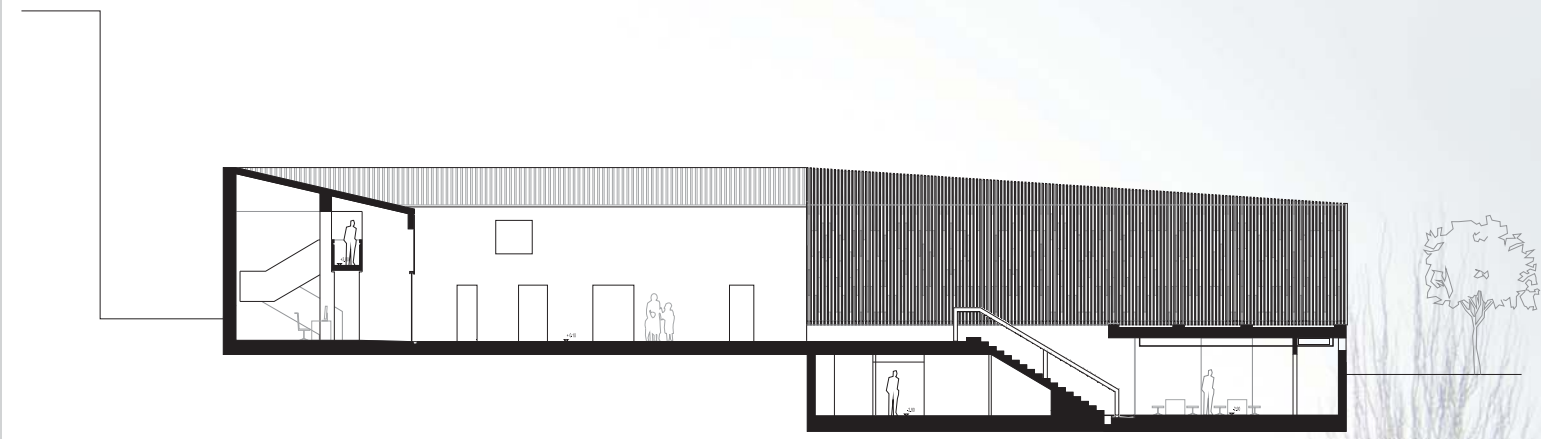
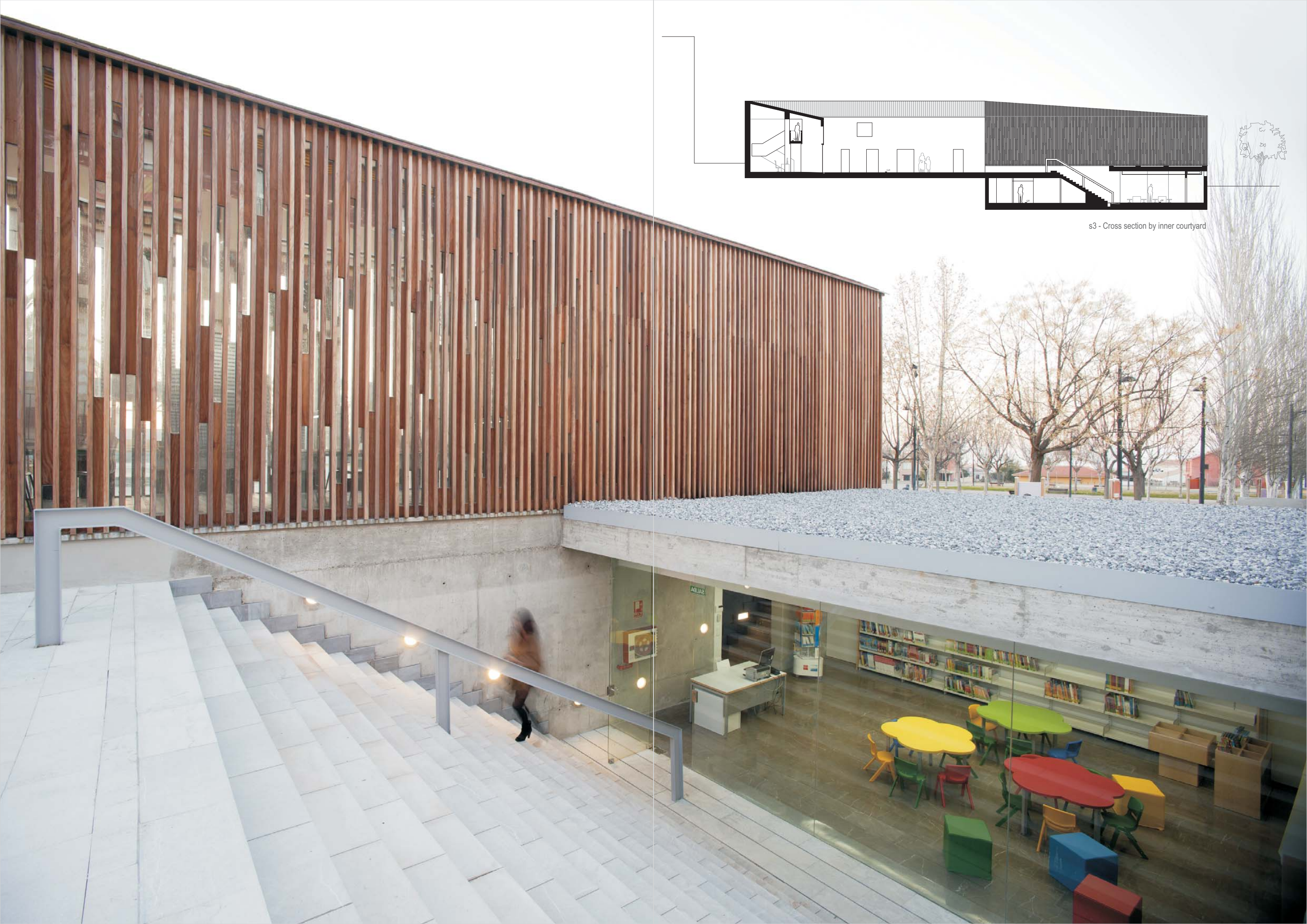


The tobacco-drying house is an Asset of Cultural Heritage which reflects its importance as a meaning element in the productive and constructive tradition of Granada's farmland.

The timber extension to the drying house sits upon a concrete podium which forms the foundations for the timber structure. The concrete podium also houses an additional reading room, the archive and a children's reading room. The children's reading room has independent access via a wide staircase which provides access to the an external courtyard.

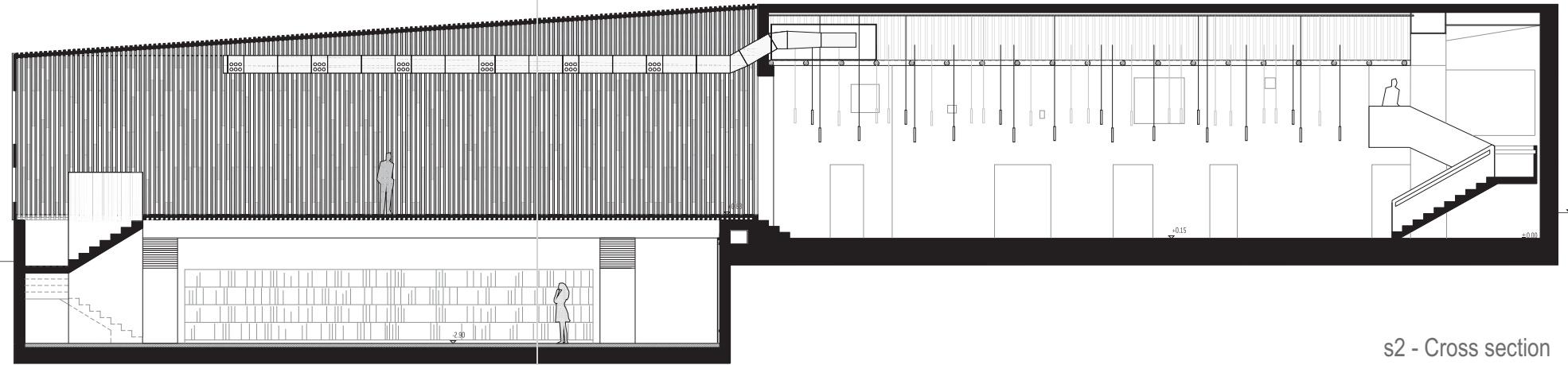
The buried reading room is the most isolated space. Here the presence of the natural light is made possible by a slots in the floor above which allow light to filter through. At the same time the buildings timber structure is exposed allowing the visitor to read and understand the buildings construction.



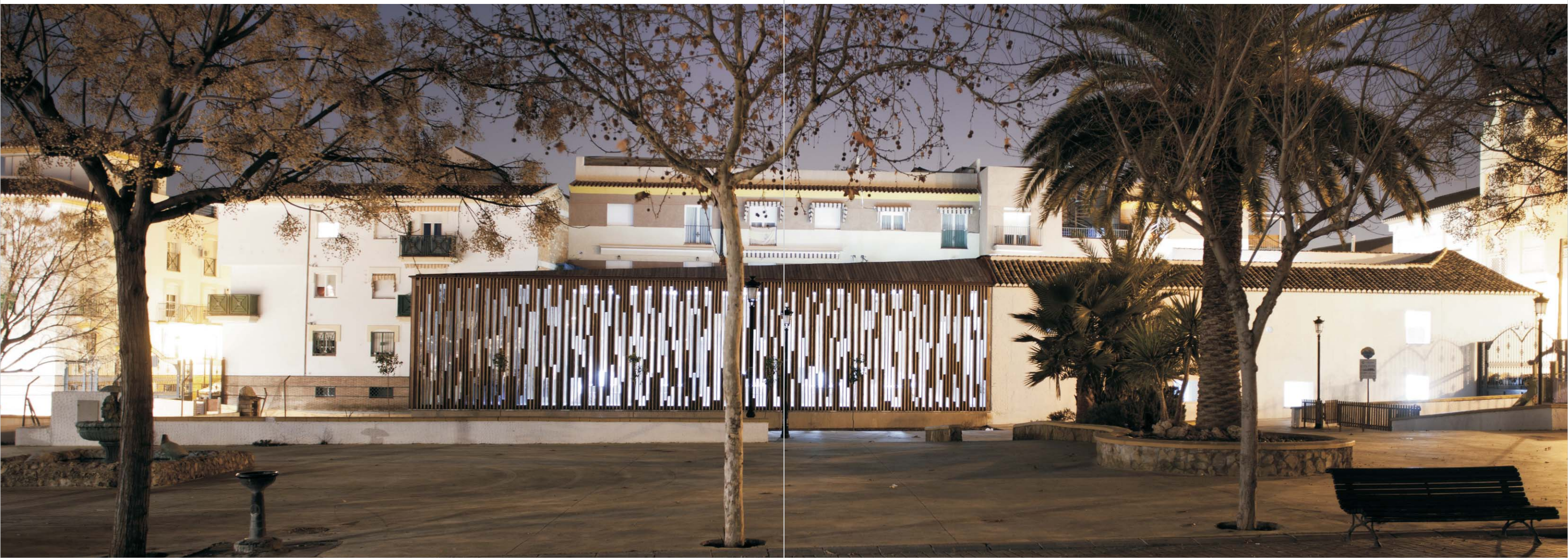


s3 - Cross section by inner courtyard





s2 - Cross section



THE WOODEN STRUCTURE

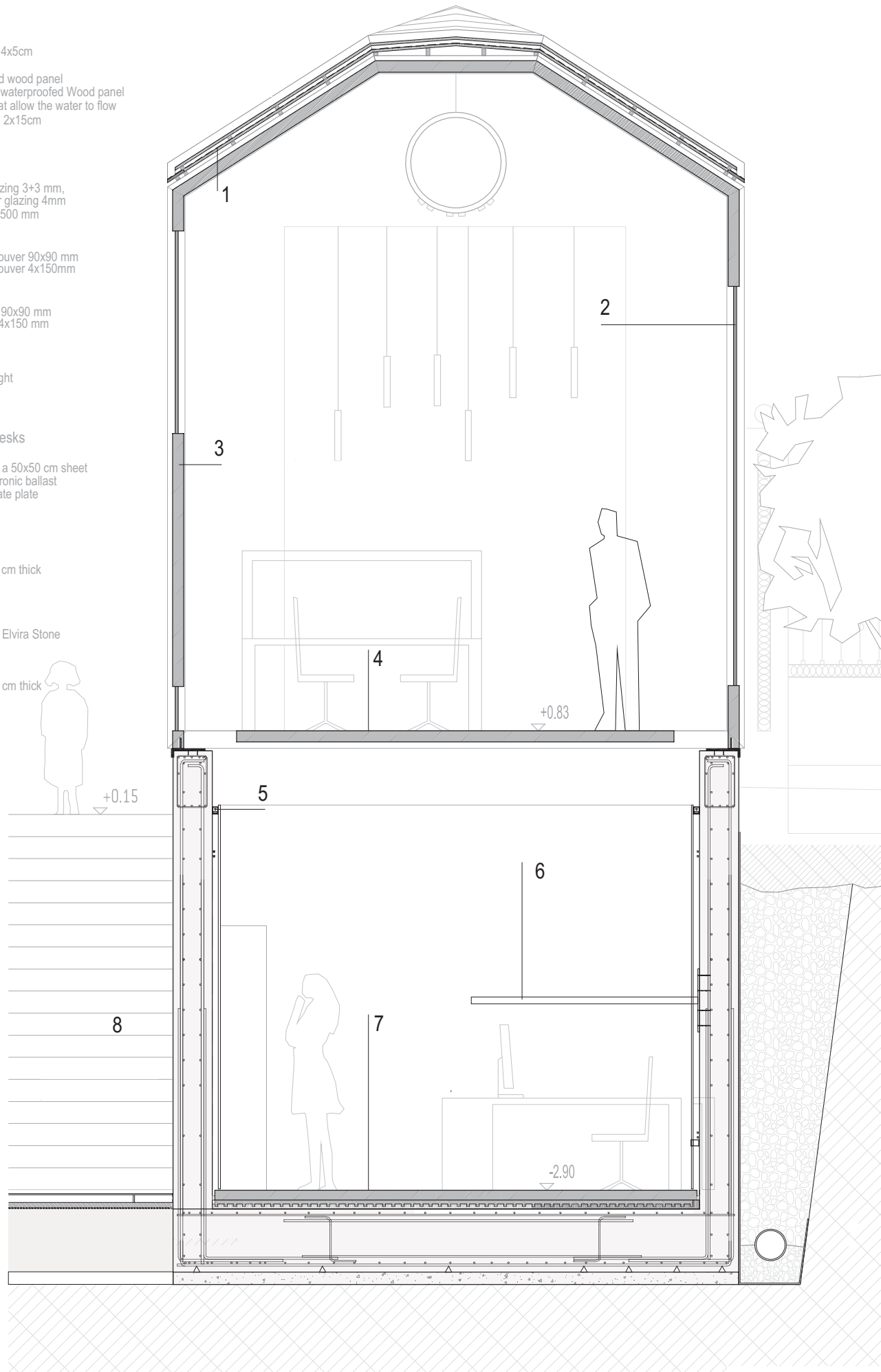
The wooden volume is inspired by the "stick tobacco drying houses". These rural structures are constructed from black poplar for both structure and cladding. These buildings perform their function using minimum resources and leave exposed the essence of their construction. This honest way of building using simple traditional construction methods has been used as a precedent for this project.



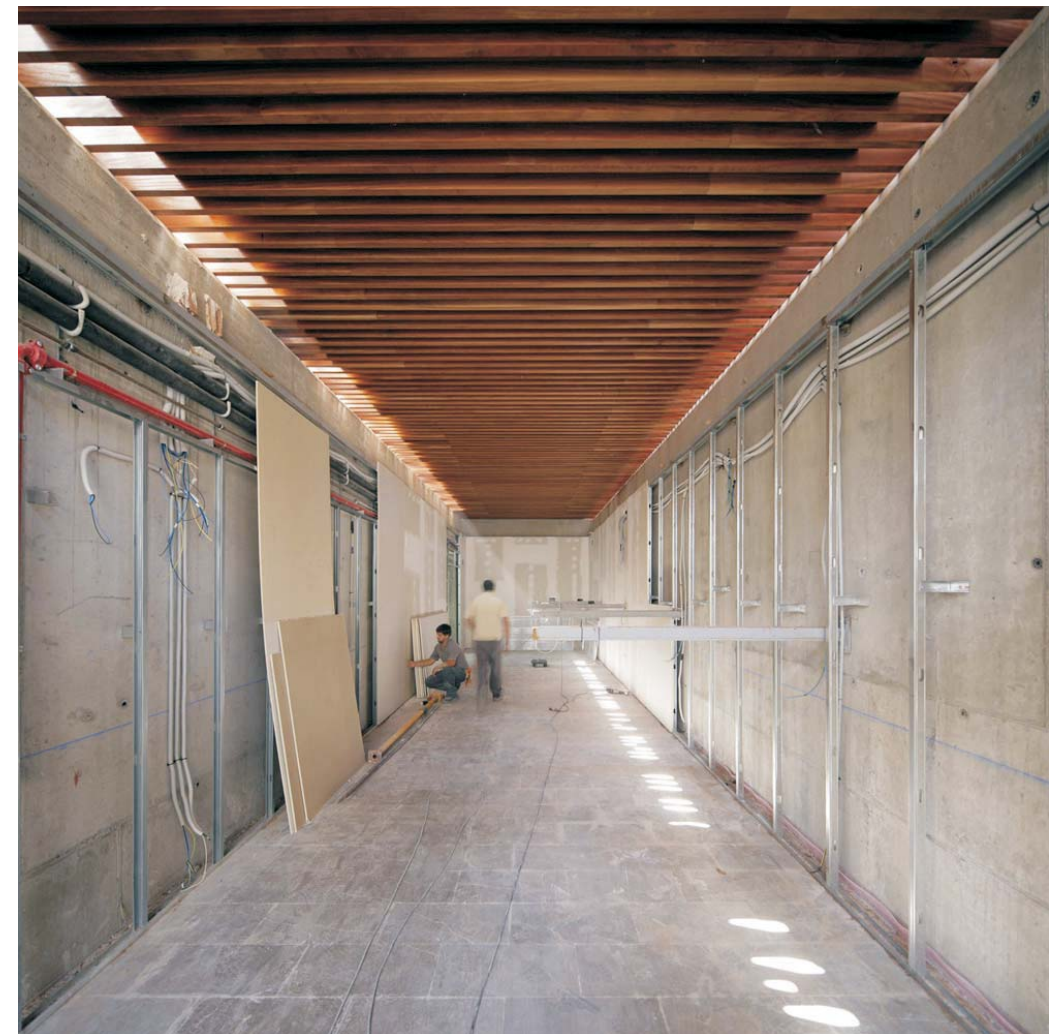
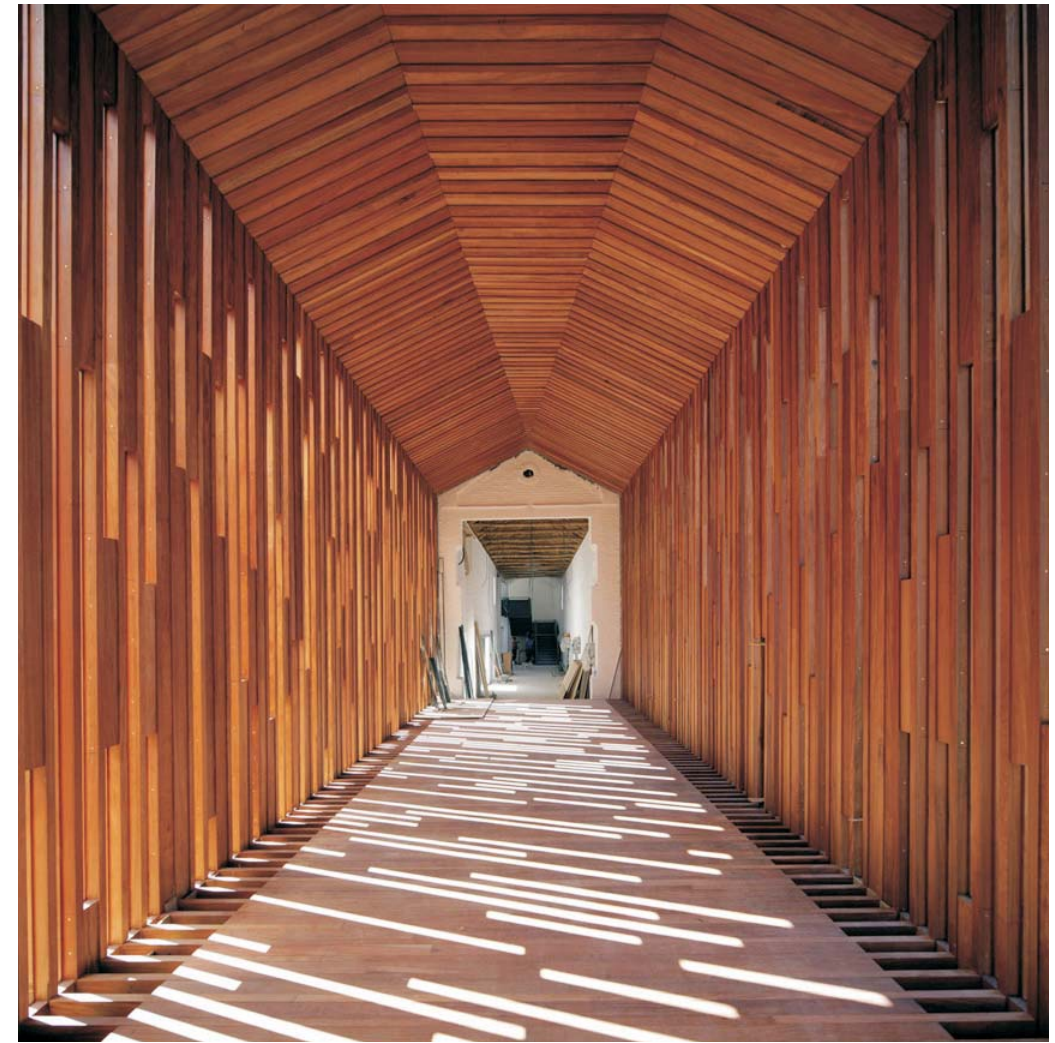


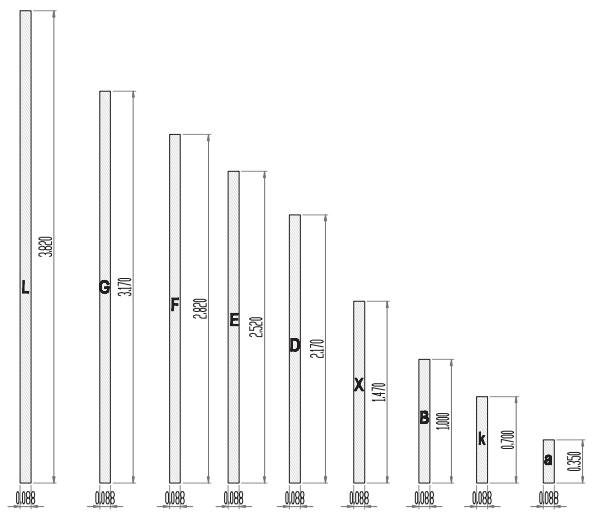
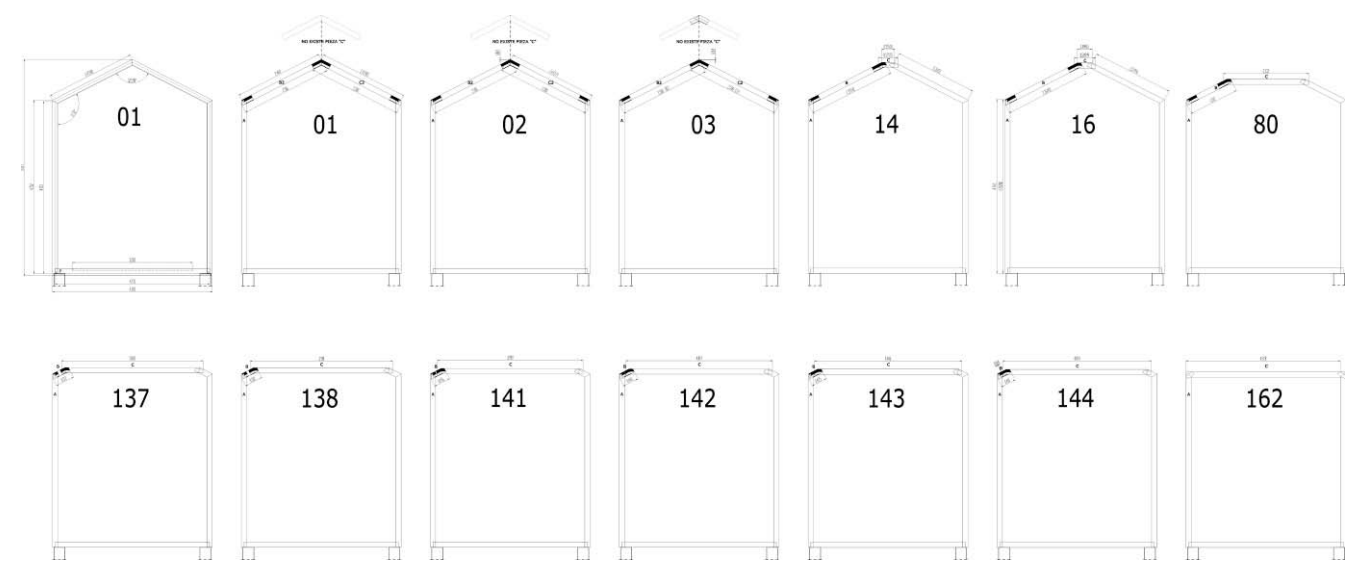
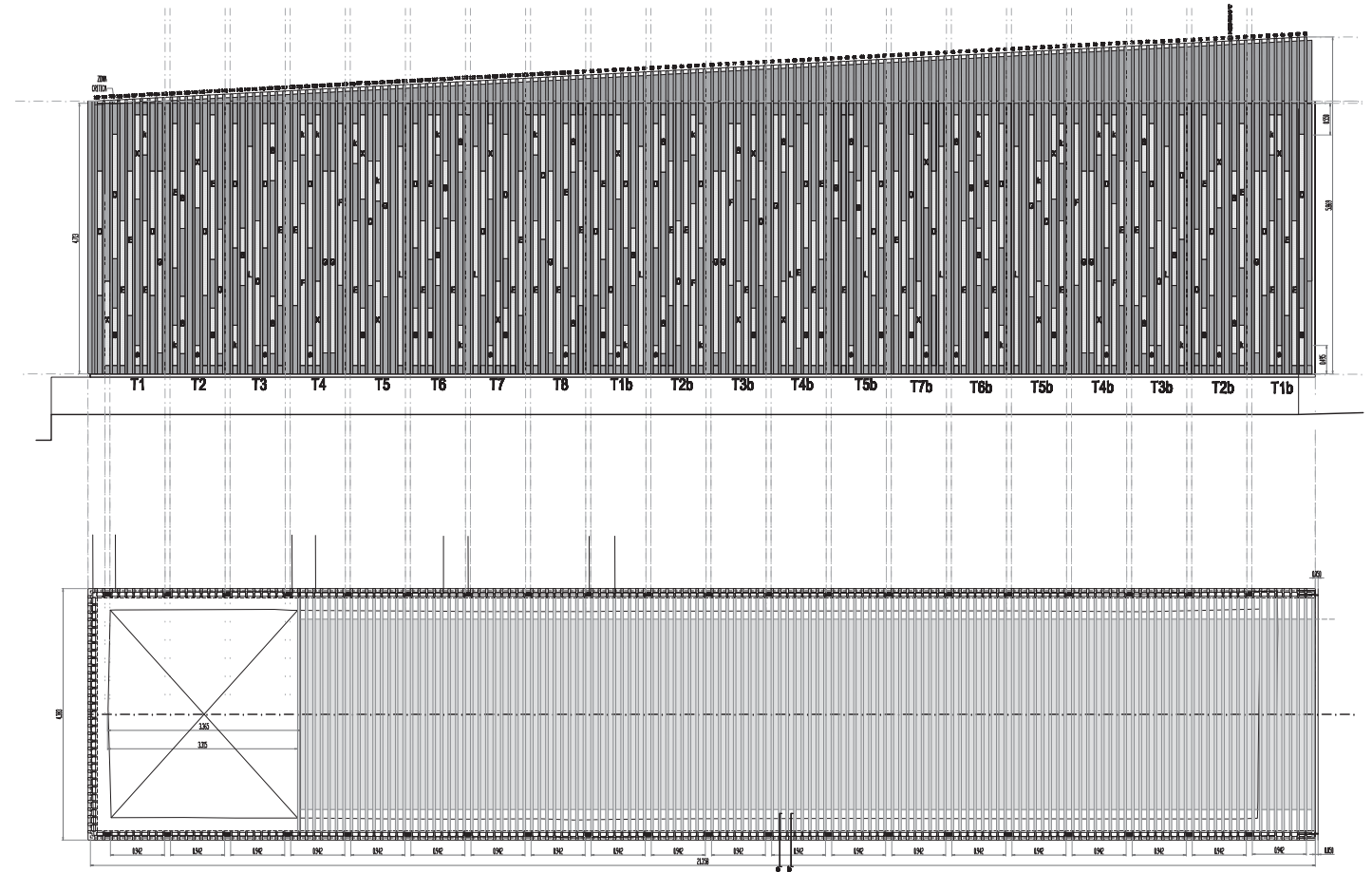
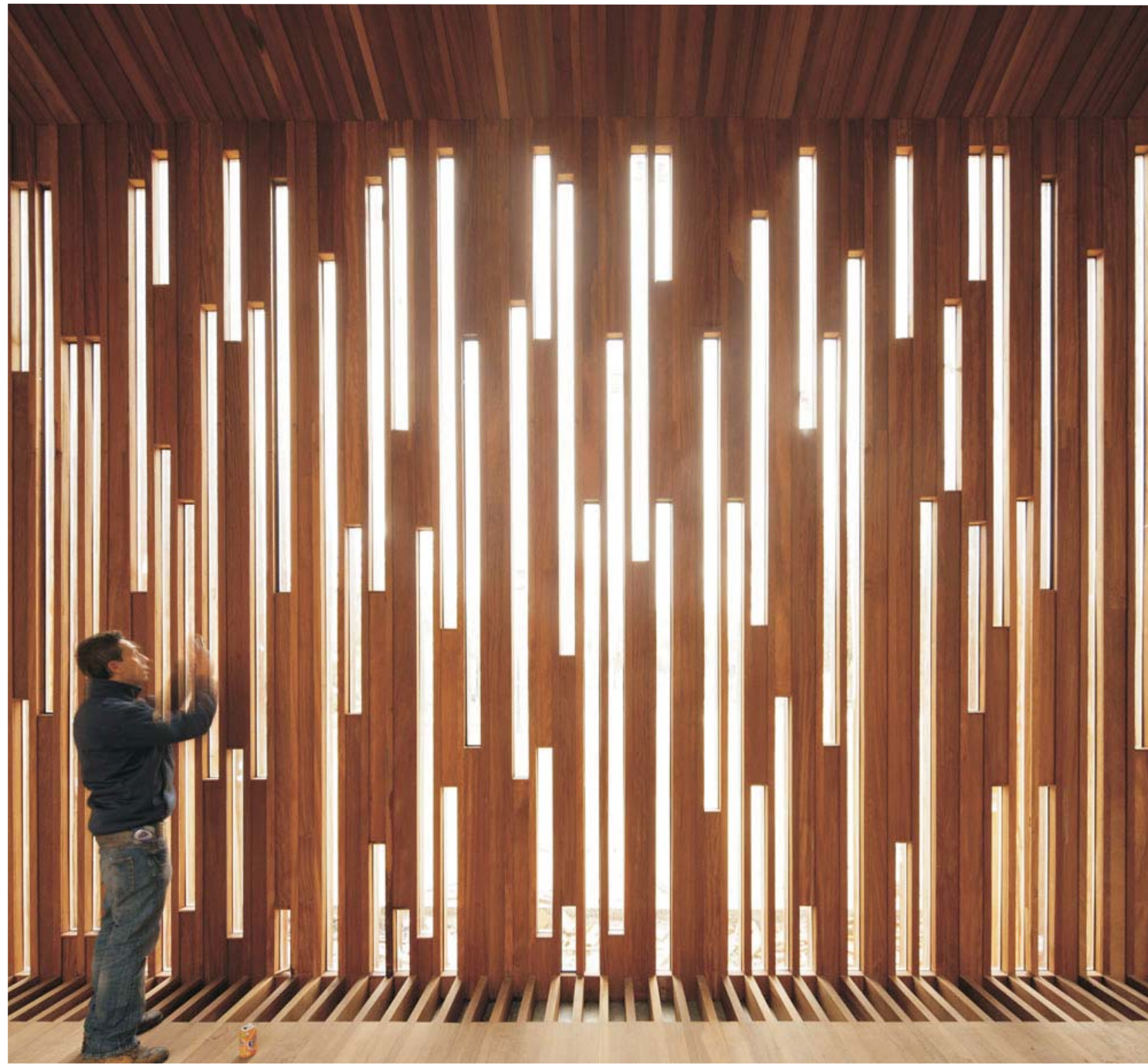
DETAIL

- 1 Roof
 - Elondo wooden louver 4x5cm
 - Iroko panel 2cm thick
 - Lightened waterproofed wood panel
 - Impermeable film over waterproofed Wood panel
 - Batten with grooves that allow the water to flow
 - Elondo wooden panel 2x15cm
 - Iroko Batten
 - Existing structure
- 2 Glazing enclosure
 - Trasparent exterior glazing 3+3 mm,
 - air gap 12mm y interior glazing 4mm
 - Wood lattice 40x150x4500 mm
- 3 Wooden enclosure
 - Solid Elondo wooden louver 90x90 mm
 - Solid Elondo wooden louver 4x150mm
- 4 Interior floor
 - Elondo wooden louver 90x90 mm
 - Elondo wooden beam 4x150 mm
- 5 Indirect lighting
 - Frosten methacrylate
 - Fluorescent with day light
 - Electronic ballast
 - U shape
 - Concrete wall
- 6 Illumination of the desks
 - Sheet
 - Anchor to the wall with a 50x50 cm sheet
 - Strip light with an electronic ballast
 - Translucent methacrylate plate
- 7 Interior floor
 - Sierra Elvira stone
 - Underfloor heating
 - Porous mortar
 - Concrete base slab 50 cm thick
 - Polyethylene film
 - Flatten natural ground
- 8 Exterior floor
 - Bushhammered Sierra Elvira Stone
 - Steel substructure
 - Mortar to form slope
 - Impermeable film
 - Concrete base slab 50 cm thick
 - Polyethylene film
 - Flatten natural ground



s4 - Cross section



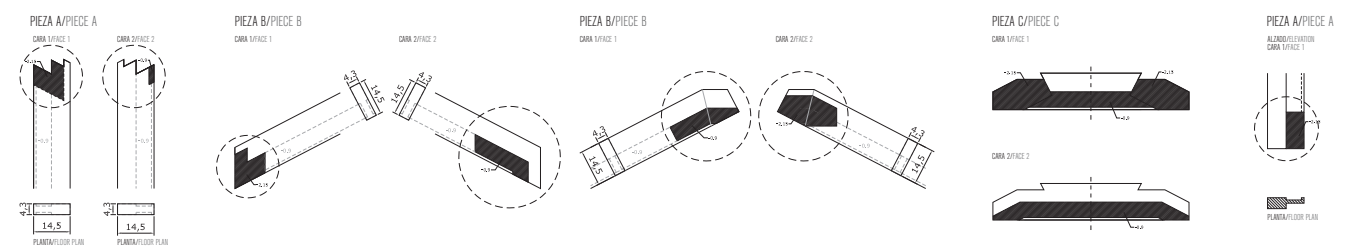


The wooden structure is composed of 162 trusses made from Elondo timber. Each truss has a unique geometry due to the height of the building diminishing towards one end. From the interior the geometry of the timber structure can be fully understood and evokes the image of a Mudéjar framework.

Two different types of truss were used. One 4.5cm, and the other 15 cm thick in section. These were positioned every 9 cm. At 95cm centers a solid timber structural truss was located to form the load bearing structure of the building. The irregular composition of vertical gaps and solid infills in the building's façade, highlight the light character of the intervention and at the same time integrate the structure with the cladding. The junction between the wooden structure and the concrete podium is made using a steel plate. This plate functions as a guide for setting out the trusses and as an expansion joint that is able to control any movement within the timber structure, due to the extreme climate of Granada. Instead of giving more rigidity to the structure which would generate tension between the glass and the wood the system allows for movements throughout the overall structure and cladding systems.

Vidrio 3+3mm transparente en el exterior cámara de 12mm y vidrio 4mm transparente en el interior. cámara de aire intermedia con soporte de material absorbente

MECANIZADOS EMEDEC/MECHINING EMEDEC



MECANIZADOS COMPLETO COMPLETE MECHINING

