

Rehabilitation of two tanneries for urban revitalization.

Rehabilitation of the Bella and Bernades tanneries, Igualada, Barcelona, Spain.

Type of intervention

Restoration Rehabilitation / Renovation

Concerned elements on the intervention project

- 1. Foundations and underground structures
- 2. Vertical structures
- 3. Horizontal structures and vertical connections
- 4. Roof and terraces
- 5. Façade and building envelope
- 6. Finishes and completion elements
- 7. Integrate services
- 8. General strategies for building recovery

Site European Quality Leather Centre, Carrer del Rec 25, 08700 Igualada, Barcelona, Spain

Objectives Rehabilitation of the Bella and Bernades Tanneries as the Igualada Headquarters for the European Quality Leather Centre.

Property Igualada City Council, Barcelona Provincial Council

Designer Taller 9s Arquitectes:
Oriol Cusidó and Irene Marzo

Date June 2013 - October 2013
April 2014 - March 2015



Background to the intervention

The project proposes the complete rehabilitation of two tanneries located in the industrial district of Rec (“acequia” in Catalan). The project is part of a strategic city operation that wants to take advantage of the heritage assets of the neighborhood with economic and tourist objectives. Its rehabilitation wants to be a first step in the regeneration of the neighborhood, creating a space for the dissemination of tanning that explains this industry in the 21st century, as a complement to the neighboring leather museum, which in turn can become a reference space for leather at a European level for professionals and designers linked to this productive sector. The building not only houses the quality leather center, but also responds to a triple program, together with the municipal technical office for the rehabilitation of the neighborhood and in the near future, with a bar-cafeteria. The three uses must work autonomously, without interference.

A minimal intervention that should be a model. This first public intervention was meant to become a model operation for future interventions. The project started from the need to start up the building with a demanding, predetermined, and invariable budget limitation: 750.000 euros. With this maximum budget, an intervention had to be considered in order to put most of the building into use

Description of the building

The Bella and Bernades tanneries, owned by the municipal government, are two modest examples of the architecture of the Rec neighborhood, without outstanding heritage value, but which represent an example of the typical typology of this urban enclave, with an important value from the social point of view and historical memory. The two buildings, three-story high and covered on a double slope, have a constructed area of

1.059m2 and were in a significant state of disrepair before the intervention.

The diagnosis of the building (values and state)

The Bella and Bernades tanneries are located in Rec street, in front of the historical channel. The two buildings form a single set built, and they are located in the southern end of the parcel where Igualada Leather Museum is placed, with which they share a patio. They are strategic buildings, since they are located at a point where the Rec, the Museum and the river and with a good connection with the local ring road. Therefore, the buildings are considered as singular, not for its prominent heritage values, but with a value due to the environment in which they are located.

The set of tanneries has its origins at the beginning of the XX century. The first building of the complex was begun to be built at the end of the XIX century on gardens bought at the farm of Cal Boyer, which was then a rustic farm. And from that first building they were added other built parts throughout history until conforming the current construction.

Bella and Bernades tanneries are owned by the municipality and are a typical type of local tannery. They are buildings of modest architecture and with pretty naked facades and simple invoice, which respond more to functional objectives than formal ones, usually with vertical rectangular windows arranged on a regular basis. East and west facades were completely blind and they were not considered as façades, and in north and south facades the openings were very modified throughout the history of the building.

In the interior, the sequence of spaces conformed by the structural elements, offered open spaces, without splits. The ceilings of the spaces showed the structure of beams and the walls were mostly bare and uncoated. Spaces designed for production and not for the exhibition, which were modified in parallel to the productive needs of each moment.

The building was (and is) a set of constructive solutions, as a result of the various extensions and modifications that it had throughout its history. The pre-existing construction systems, of different nature, explain the different phases of growth. Previous to the intervention, the building was in a very precarious state and demanded an important intervention to be able to respond to the new uses raised in considerations of security and comfort.



Fig.1: View of the existing conditions of the buildings' exteriors.
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Fig.2: View of the existing conditions of the buildings' exteriors from the main street. © Taller 9s Arquitectes



Fig.3: View of the existing conditions in the interiors of the buildings. © Taller 9s Arquitectes



Fig.4: View of the existing conditions of wall surfaces in the interiors of the buildings. © Taller 9s Arquitectes

Rehabilitation works

Reconnect the museum to weave the city. The rehabilitation of tanneries is not considered as the simple rehabilitation of an isolated building, detached from its urban environment. Its rehabilitation, which from a functional point of view, completes the Leather Museum, from an urban point of view it helps to reconnect the different buildings of the Regional Museum (Cal Boyer and Cal Granotes) and endows the city with an important pole of attractiveness. They did not want a closed building or turned over to the patio shared with

Cal Boyer, but a building-door, a building-gate, that both from its physical permeability and from the layout of the program, allows and generates a museum tour that makes the urban space itself participate.

Open to the ditch to build a walk. The buildings of the Bella and Bernades tanneries are located at the foot of the Rec. The project in turn proposes its opening to the Rec and the direct relationship with the adjacent public space, so that the new equipment acts as a motor in the recovery of the ditch as civic axis, as the backbone urban walk of the recovered neighborhood. The wall that encloses the courtyard is demolished, to make it the key element in the relationship of the building with the surrounding free space.

On the outside, dignify the urban landscape. The rehabilitation of the building is not understood from a point of view of strict restoration of the existing one. The strong presence of some silent party walls, without quality, forced to propose a more ambitious intervention, with the aim of integrating the building in a dignified way in the nearby urban landscape and endowing the building with the character of representativeness that was required for the new use. and always in a manner consistent with its heritage values. The building has just been dressed from the outside to provide it with adequate waterproofing and insulation features, protect the party walls and respond to the landscape of the neighborhood, where many tanneries still retain their coating. Likewise, the possibility of proposing an interior occupation in phases is resolved. The facades are returned to their original state: the dimensions and the rhythm of empty and full are recovered, new carpentry and wooden lattices are placed. It is committed to a double chromaticism, with the colors of the neighborhood (ocher and red ocher) that explain that the set is made up of two buildings.

Inside, explain time and memory. The pre-existing construction elements and the set of walls are preserved as they were found, with or without cladding, suitably cleaned up. The history of a factory building like this is expressed in its interior, where the variety of constructive, simple and functional solutions, the presence of reinforcements and openings that solved the needs of each moment, the wounds in the walls ... explain its growth and transformation over time. And in this sense, the intervention seeks to preserve this physical memory, avoiding masking, scratching, polishing ... The intervention on the existing structure (ceilings, walls ...) is proposed as a minimum operation, based on the need to make the most of all the existing elements, reinforcing them if necessary, with easy and inexpensive solutions. With this objective in mind, the response and operation of all the elements is studied in detail to find the most efficient and optimal solution for each one of them. The new reinforcements are sincerely expressed, being the expression of one more phase of the functional transformation of the building, in the same way as the pre-existing reinforcements, which are not hidden or disguised.

For the new program, overlapping boxes. The spatial configuration of the buildings is respected and the sequence of spaces and 'naves' that structure them is not distorted. We avoid splitting or merging spaces, deconfigure the wall structure and modify the slope of the floor slabs typical of the tannery typology. With the aim that the visitor understands the growth of the building from the recognition of its traces and spatial configuration. For the placement of the support spaces that the new program required (offices, services, facilities, etc.), elements that are discordant with the existing spaces, and that could distort their qualities, a set of 'boxes' are designed that are inserted in the current structure, without touching or engulfing it. These wooden boxes reproduce the construction system of the old clotheslines that colonized the

interior of the building and allow to solve the specific requirements at the level of walls, facilities, etc. of the service program.

Modest materials and visible installations. In the choice of materials and construction systems, we bet on simple and easy-to-implement solutions. The interior walls are left as they were, and the floorings are made of concrete, in the image of any industrial space. For the boxes, a prefabricated system of dry-mounted panels is used, executed with low-cost materials that are easily recyclable. The carpentry is designed austere, of the pine wood already present, and for the facades it is committed to improved traditional techniques, composed of an insulating coating based on lime. The set of facilities that run through the historical space, views are expressed, so that they appear as superimposed elements on the previous structures.

Assessment of the results

The main innovative contribution was the application on the exterior of the façade of an ecological coating based on hydraulic lime and cork (TERMOCAL V) with high thermal performance ($U = 0.044 \text{ W / m}^2\text{k}$) that allows to leave the interior walls visible. The product preserves the properties of traditional lime mortar (breathability) and is easy to apply when sprayed.

Its application made it possible to completely resolve the building envelope and to plan the interior intervention in phases.

References

Taller 9s Arquitectes

Catalonia Construction Award Finalist, 2016

International DOMUS Award Selection of the University of Ferrara, 2017/2018

Selection of Mostra Arquitectura Comarques Centrals, COAC, 2016

Posted in ON Diseño, Hic arquitectura, Archdaily, Arquitectura y Madera, Architizer, Fllornature, Divisare, Redfundamentos, among others.

Photos of the completed intervention



Fig.5-8: Photos of the completed intervention.. © Taller 9s Arquitectes



Fig.9-12: Photos of the finished interiors.. © Taller 9s Arquitectes



Fig.13-15: Photos of the finished interiors.. © Taller 9s Arquitectes

Plans & Drawings



REHABILITACIÓ DE LES ADOBERIES BELLA I
BERNADES
SITUACIÓ

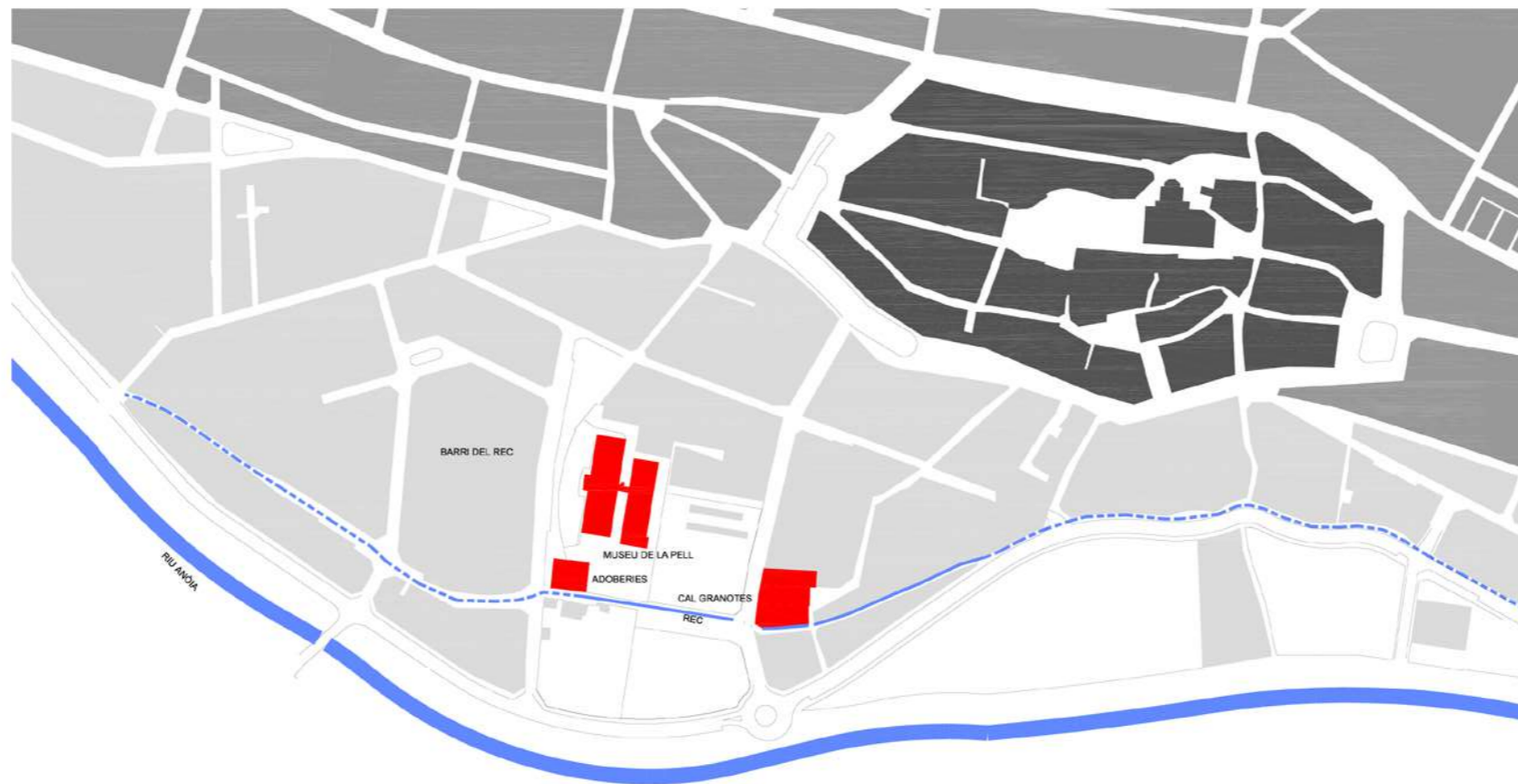


Fig.16-17: Site. The location of the building in the industrial quarter of the Rec.. © Taller 9s Arquitectes

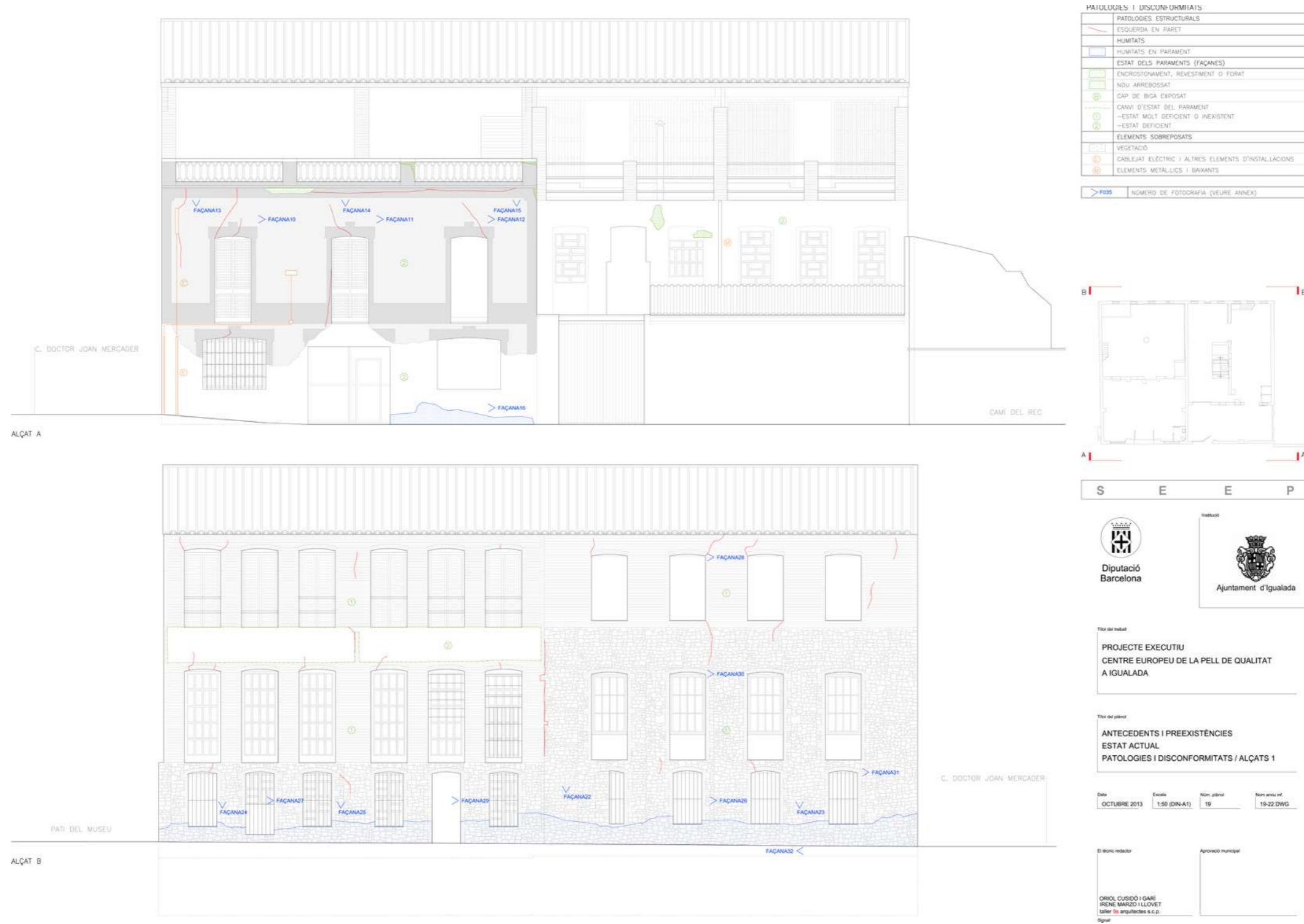


Fig.18: Study of the current state of the façades. Pathologies and facings.. © Taller 9s Arquitectes



Fig.19: Study of constructive and structural elements. Ground floor.. © Taller 9s Arquitectes



Fig.20: Pathologies and disconformities. First floor ceiling.. © Taller 9s Arquitectes

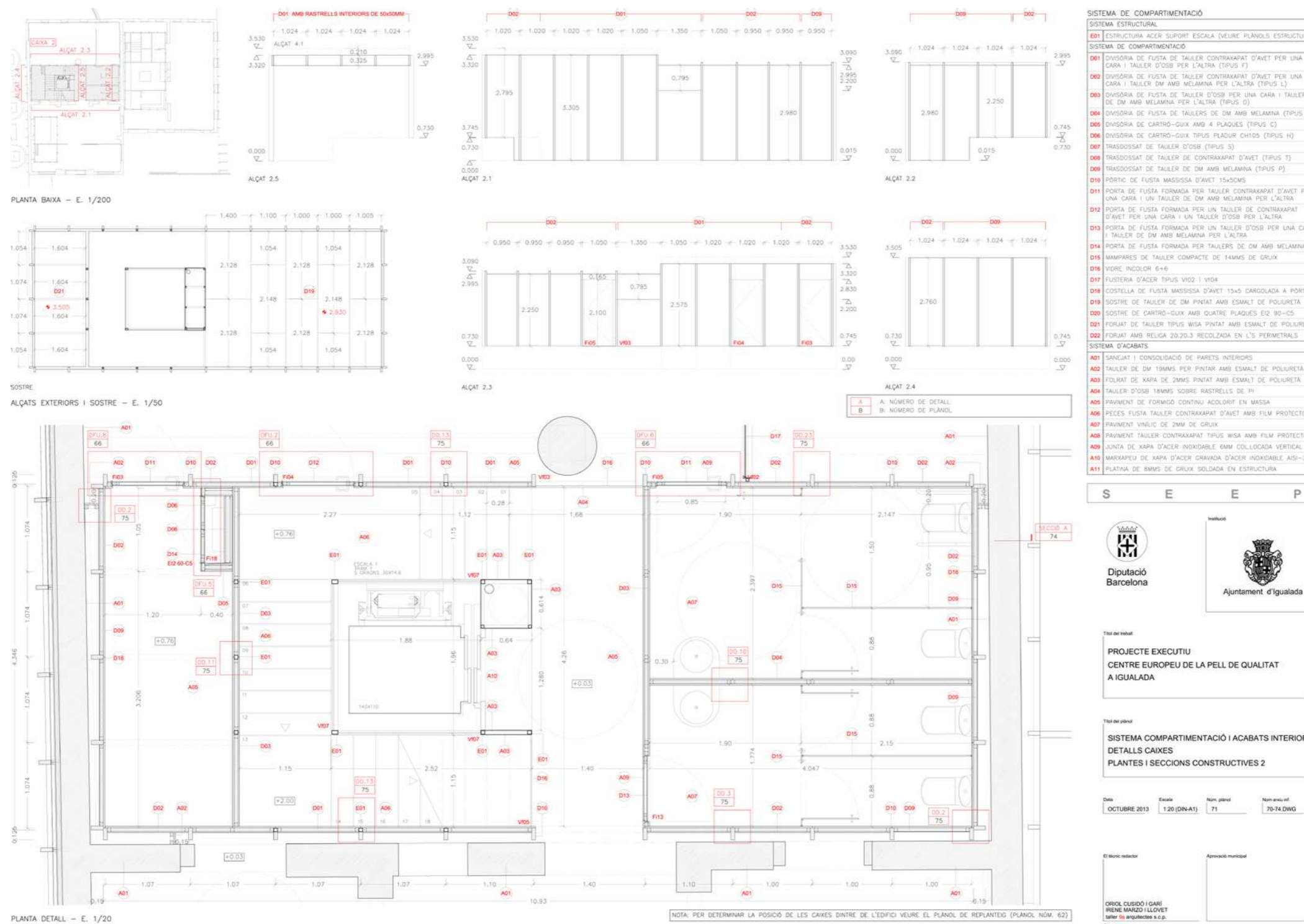
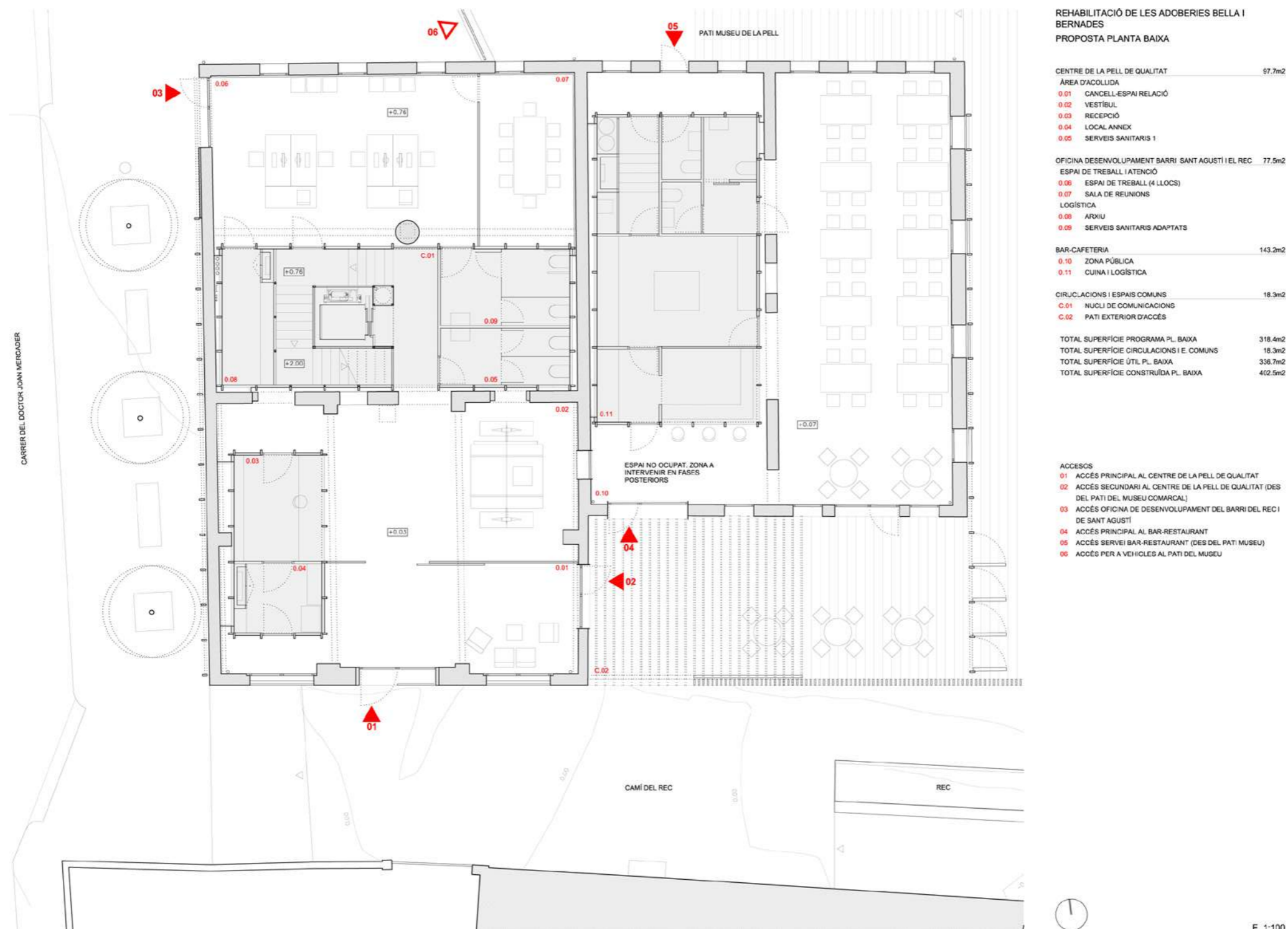


Fig.21: Assembly plan of the new semi-prefabricated wooden boxes. © Taller 9s Arquitectes



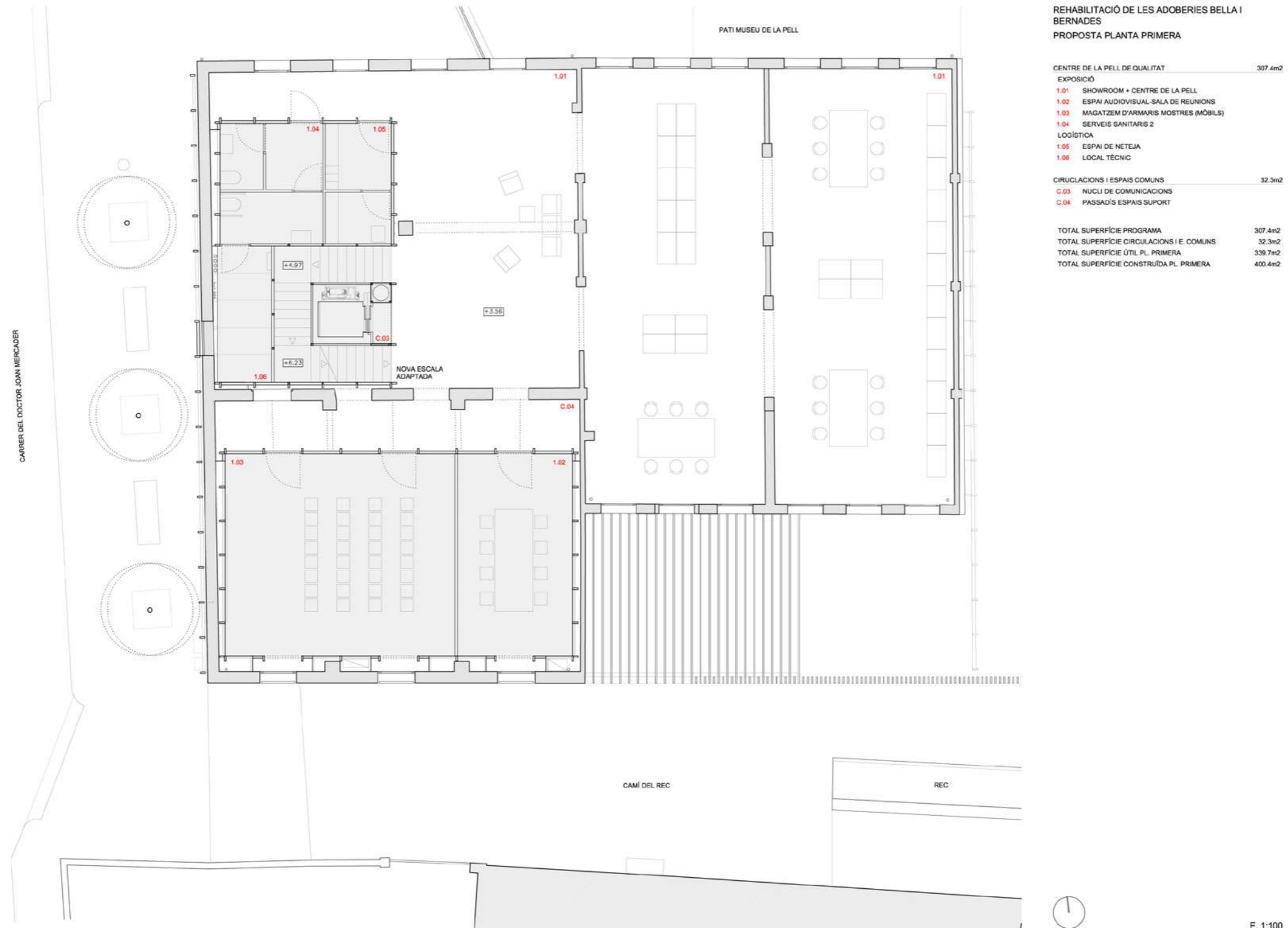


Fig.23: First-floor plan. © Taller 9s Arquitectes

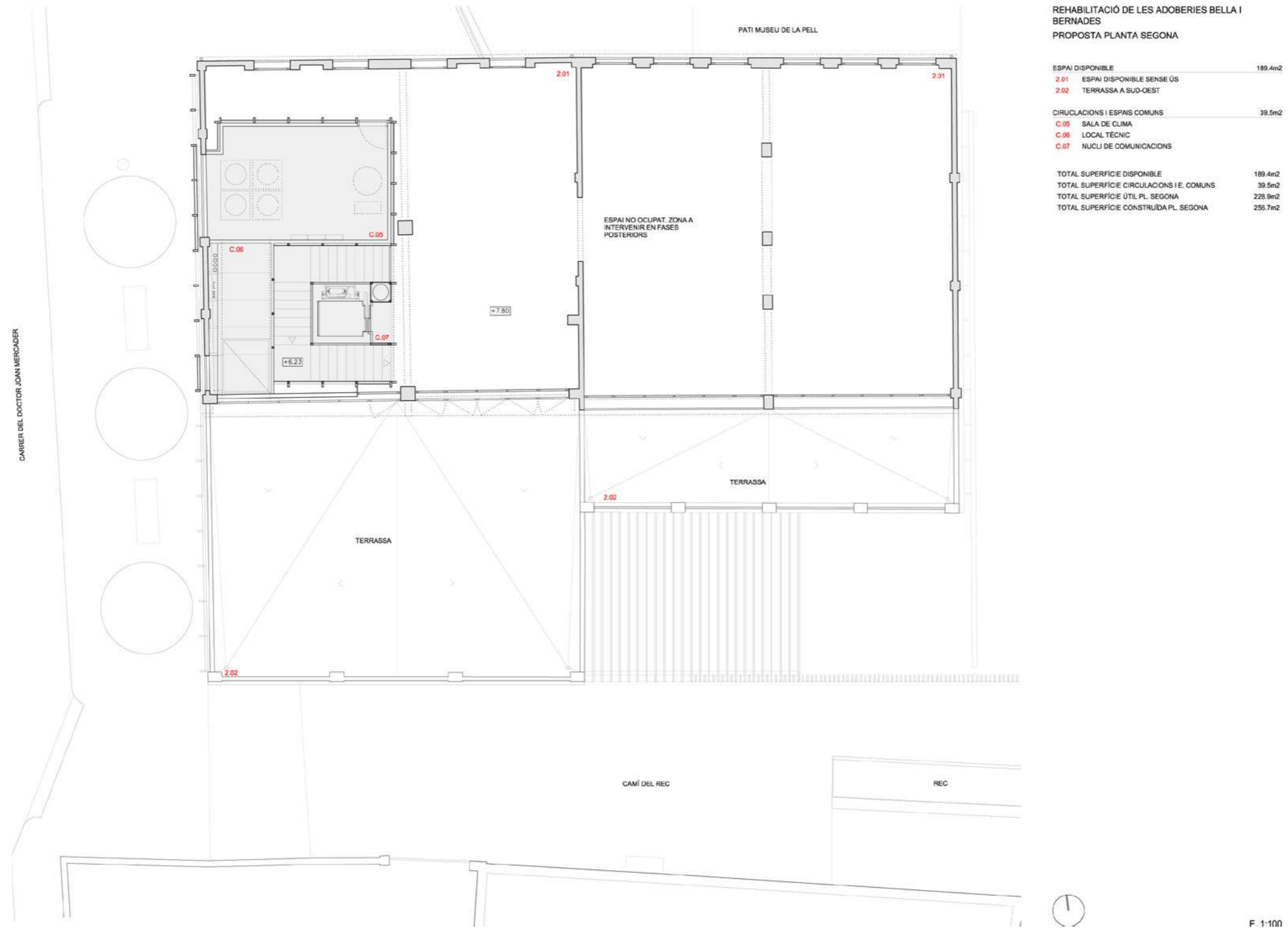
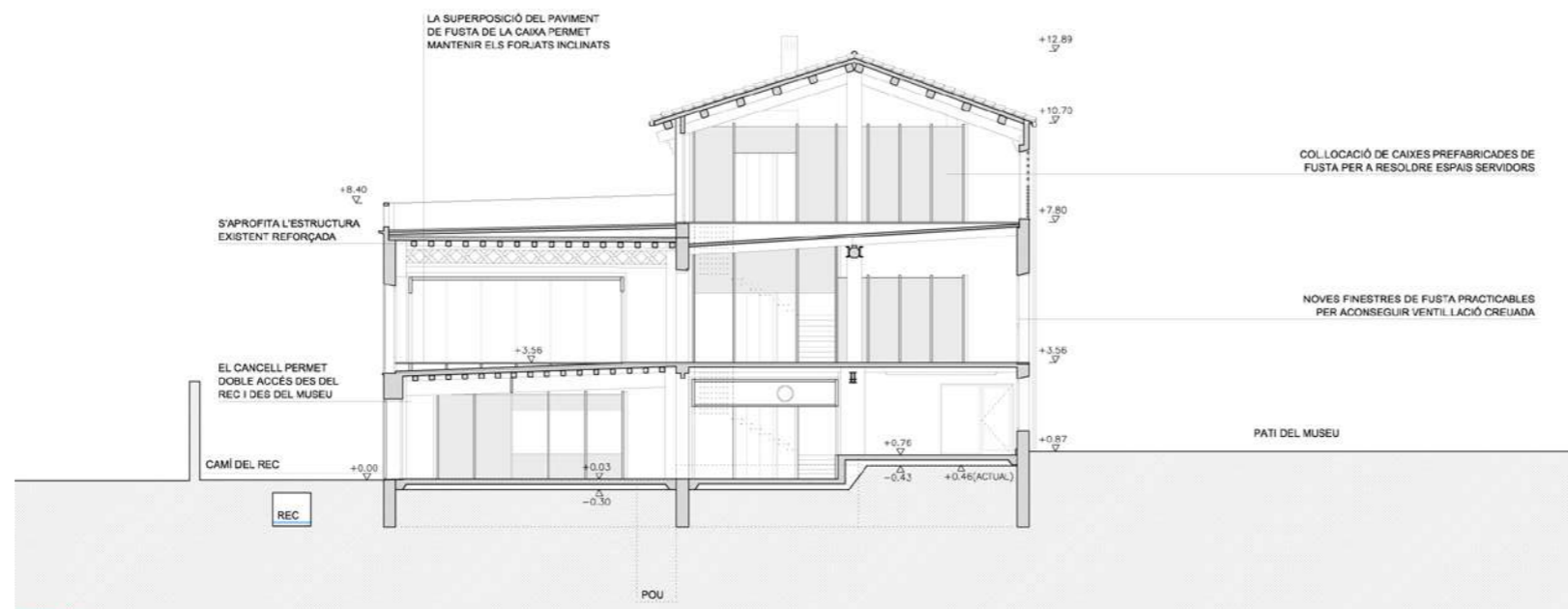
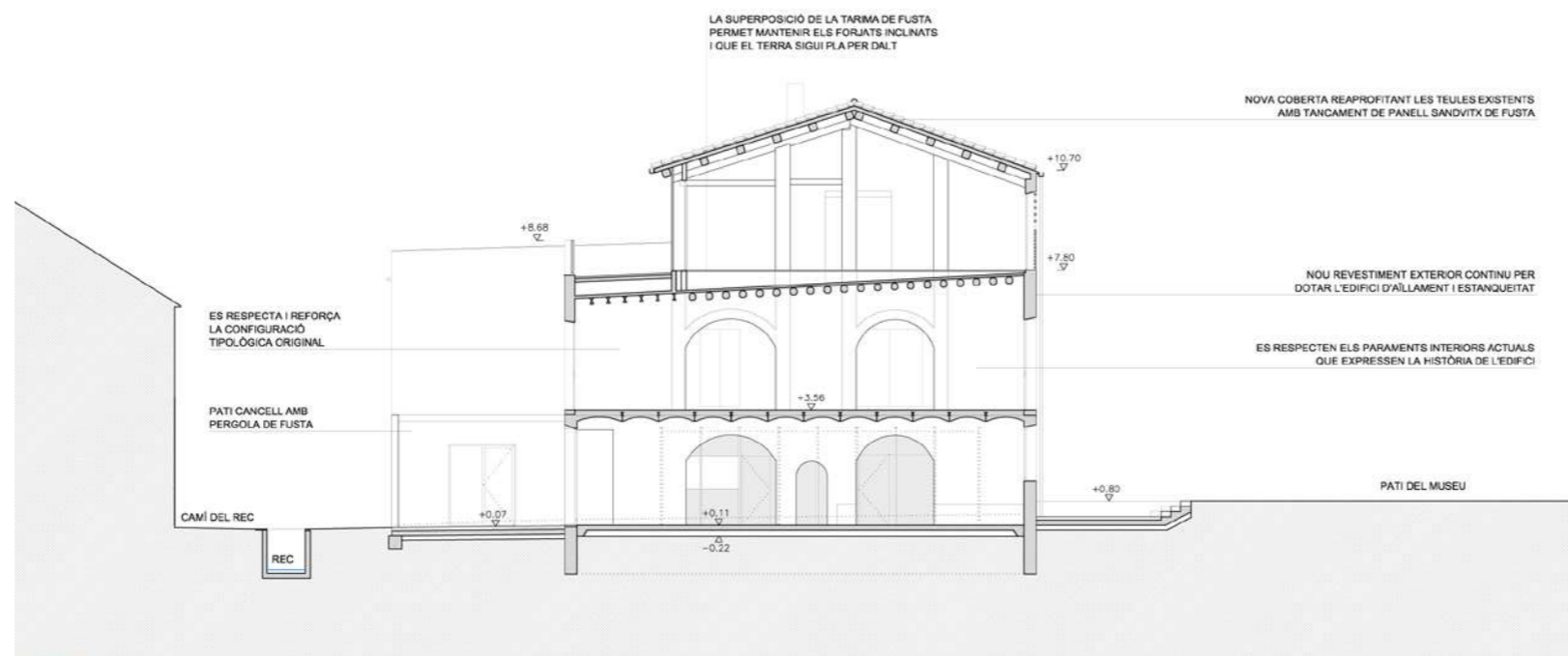
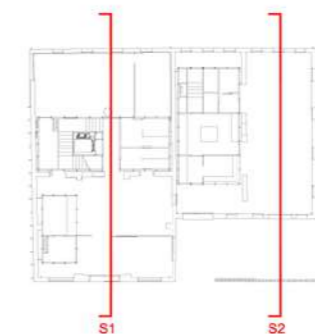


Fig.24: Second-floor plan. © Taller 9s Arquitectes



SECCIÓ S1

REHABILITACIÓ DE LES ADOBERIES BELLA I BERNADES
PROPOSTA SECCIÓNS



SECCIÓ S2

F. 1-150

Fig.25-26: General sections. © Taller 9s Arquitectes



F 1 60

Fig.27: Constructive section. © Taller 9s Arquitectes