



ARCHITECT NOTES

REHABILITATION OF THE FLAGS BUILDING

1. REHABILITATION PRINCIPLES

A rehabilitation was concluded based on the principals of its missive and international recommendations. The "Letter of Kharkov 2000 - Principles for the Conservation and Restoration of the Built Heritage", by recognizing its architectural, historical and artistic values and the intervention of teams with multifaceted projects was the only way to make it possible for the rehabilitation to take place.

1.1. Intervention Feasibility

It was conducted with the owner the definition of a program to be adapted in building and an analysis of all the types of incentives available for the rehabilitation.

To implement this program the project team, with a vast curriculum in rehabilitation, namely the Museum of Sacred Art of Braga's Main Cathedral, Camões Campus - Braga's Regional Centre of the Portuguese Catholic University in the historic center of Braga - rehabilitation of Cardoso da Saudade's 7 buildings, the SAOM - Historic Center of Porto, ..., managed to present a workable proposition.

1.2. Diagnostic Study

We analyzed the condition of the building and conducted an intervention strategy to meet the defined program.

- 1.2.1. Through a historical survey of the building, from initial design criteria and changes made to the building;
- 1.2.2. Analysis of existing elements, written and drawn;
- 1.2.3. Conducting surveys and measurements;
- 1.2.4. Identification of the conditions and state of degradation;
- 1.2.5. Methodologies for intervention;

1.3. Definition of Strategy

Through the diagnosis the contractor obtains the necessary elements to submit to the owner workable solutions and an estimated unit cost of the rehabilitation work.

1.4. Project Execution

After approval of all architectural and specialties proposals Project Execution was implemented.



The group conducted the detailed drawing of a set of pieces intended to represent the details of the work, written submissions describing every moment of the work being performed, including the description of the materials used and the desired quantities.

1.5. Supervision

With the assistance of an audition team a selection of the best company at the best price was possible as well as the Building Intervention program.

1.6. Contractor

A team with a curriculum in rehabilitation, an experienced crew capable of achieving excellent results implementing the program without setbacks.

2. CHARACTERIZATION OF THE BUILDING

2.1. Foundation

Executed in stone masonry reaching deep until finding solid ground.

2.2. Exterior Walls

The design of the façades in Mouzinho and Bainharia were changed in the 1950's.

Increased openings in both façades altered the initial design.

The proposed rehabilitation would put forward the same design. Walls executed in granite freestone with much of its surface containing several aligned gaps representing a harmony between the dimensions of the walls and the geometric design representative in the elements of the façade.

2.2.1. Interior Linings

The inside walls fixed with lime mortar, sand and gravel, with a stucco finish and painted white.

2.2.2 Exterior Finish

Exterior walls covered with tile. We examined the original tile and found the original mold in an old factory that still exists. The entire tile panel has been replaced by a brand new version of the earliest and manufactured with the same techniques.

2.3. Walls in Masonry

The walls are in full granite laid in lime mortar sand and gravel, the total thickness ranging between 30cm and 60cm.

2.4. Floors Structure

A floor structure comprising a framework of logs of 26cm in diameter and 5.5m in length .



The framework is supported from the walls moiety with a supply of approximately two-thirds of its thickness. The trunks are arranged parallel to each other with a gap between them of 50cm, starting and ending against the wall outside.

2.5. Indoor Surfaces.

The floors are covered by pinewood with a thickness of 2.5cm, 16cm wide and 5m length. The application was performed by male-female attachment and nailed to the timber with a sanded and polishing ending.

2.6. Ceiling

The only ceiling possible to recover was the 1st floor. Keeping the roof with stucco finish under fasquio white and decorated with ornate designs which lie in the center.

2.7. Coverage

Four waters roof with a central intersection and roof tile settled on the dust cover. The structure comprises a frame with two legs arranged in the type of a scissor and supported on a transverse beam which rests on the walls.

2.8. Skylight

A skylight that existed in the vertical access wasn't the original thus it was decided to change the skylight drawing to a circular-shaped small glass dome using the old methods.

2.9. Guttering

The façade of Mouzinho da Silveira, the building of the flags, was the only one who lacked the fascia and its gutter. A new element was introduced adding a component of continuity to the side elevations.

2.10. Partition of the Inside Walls

In all 4 floors the partition walls were recovered and the timber at the bottom of the walls, replacing the mortar for plasterboard. In the third floor the partition wall remained in fasquio lined with a spacing of 3cm for the mortar's retention.

2.11. Exterior Spans

Recovery of the exterior spans keeping the same wood, hardware and introducing a fence in the opening spans.



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Bibliography
Freitas Vasco Peixoto Support Manual for the Projects of Rehabilitation
of Old Buildings, OE, 2012

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Subtitles
1. Fachada de Mouzinho da Silveira Antes 2012
2. Fachada de Mouzinho da Silveira Depois 2012
3 e 4. Aplicação do Azulejo na Fachada de Mouzinho da Silveira
5. Parede de meação em granito
6 e 7. Vigamento de troncos de madeira
8 e 9. Pavimento interiores soalho de madeira
10. Estuque sob fasquio
11 e 12. Cobertura
13 e 14. Claraboia circular
15. Platibanda
16. Parede de tabique interior
17 e 18. Vãos exteriores