REHABILITATION 3.0



An imposing palace along the sea, restored to become the owner's private residence and a meeting place between art, design and international cultural education.

Tradition vs Innovation through restoration of a monumental palace, capable to according private exigencies, tutelage and new architectural design & technological innovation

### Type of intervention

X Restoration Rehabilitation / Renovation

## Concerned elements on the intervention project

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

Site	Butera Palace, Palermo, along the waterfront of Palermo, Italy
Objectives	Restoration and reconversion into house for owners, museum and art gallery, centre for art and culture.
Property	Private: Massimo e Francesca Valsecchi, Butera Foundation
Designer	Architectural project: Eng. Marco Giammona, Arch. Tomaso Garigliano, Arch. Giovanni Cappelletti
Date	2015 still today, with the annexation of the neighbouring <i>Piraino</i> Palace





















Fig.1: View of one of the inner courtyard of the palace, after the restoration works. © Francesco Renda

General coordination Eng. Marco Giammona

Architectural project: Eng. Marco Giammona, Arch. Tomaso Garigliano, Arch. Giovanni Cappelletti

Museographic project: Arch. Giovanni Cappelletti

Construction supervision: Eng. Marco Giammona, Arch. Tomaso Garigliano, Arch. Giovanni Cappelletti

Structural design: Eng. Marco Giammona, Eng. Alessandra Giammona, Eng. Dionisio Spitalieri

Integrate services design: Eng. Giuseppe Di Natale, Eng. Marco Giammona (collaborator Giampiero Urone)

Collaborators: Dario De Benedictis, Salvatore Pagnotta with Alexia Messina, Amalia Randazzo

Building works ATI Gangi Impianti s.r.l./Emmecci s.r.l. - Technical manager Santino Patti - Technical director Roberto Ciralli

Restoration works carried out by Vittoria Maniscalco

Building works carried out by ATI Gangi Impianti s.r.l./Emmecci s.r.l.

Technical manager: Santino Patti

Technical director: Roberto Ciralli

Site Manager: Gaetano Alaimo

### Background to the intervention

In this historical moment, with its extensive migration and globalisation, Europe appears to be in the grip of an identity crisis. What may rescue Europe from its crisis is a reinvigoration of its deep rooted traditions of openness and hospitality.

Sicily, with its history of millennial migrations, offers a rich and seasoned point of departure to imagine again the European identity. Indeed, for 3000 years, migration has shaped Sicilian culture.

From the earliest sailors crossing the Mediterranean Sea, many different cultures have landed on Sicily's shores; Phoenicians, Ancient Greeks, Christian Byzantines, Aghlabid and Fatimid Muslims. With its political centre on the royal court in Palermo, through the reigns of the Norman kings and, later, the Viceroys linked to the Crown of Aragon, Sicily became a cultural crucible of diversity. Creative and destructive encounters between people have generated a unique anthropological synthesis, still visible nowadays in the streets of Palermo where hospitality and integration are practiced with time-honoured and daily persistence.

These historical and cultural stratifications are still visible inside the *Kalsa*, an Arab district on the seafront of central Palermo. Palazzo Butera is located on the old main street of this district and has been recently acquired by Francesca Frua de Angeli and Massimo Valsecchi. They have undertaken with personal fundings an extraordinary work of restoration of this estate. Today, the palace is an open laboratory, drawing together history, art and culture in an interdisciplinary exercise aimed at finding solutions for social development.

Open to the city of Palermo and the world beyond, the ground floor will offer a reference library and many galleries for temporary exhibitions from both home and abroad. The first floor contains conference and events rooms. This area houses the Palace's 18th century library. The second floor will accommodate a museum, displaying the Francesca & Massimo Valsecchi Art Collection.

Other international museums will also be invited to display their collections in this part of the palace. Finally, artists, curators and other cultural stakeholders, will find comfortable and contemporary accommodation available in the guesthouse, allowing them access to the events at Palazzo Butera, and connect with other cultural and academic institutions of the city of Palermo.

Palazzo Butera collaborated with the peripatetic Manifesta European Biennialle, opening its first exhibition spaces to artists celebrating Palermo as Manifesta's 2018 City of Culture.

[https://palazzobutera.it/en/project]

### Description of the building

Interested owners and managers of cultural heritage sites are The palace, located in the heart of the ancient Palermo's district of *Kalsa*, was built from 1692 on a design of the architect Giacomo Amato. Nowadays, it is considered one of the most fascinating residences in all Sicily for the grandeur of the Baroque layout and for the magnificence of the decorative elements.









Fig.2: Historic photo of the noble palace and view of waterfront. © https://palazzobutera.it/en/palazzo-butera









Fig.3: Façades along the waterfront (© Project Designers) & along Butera street, before the restoration interventions.
© https://gds.it/foto/cultura/2016/06/07/palazzo-butera-una-nuova-vita-come-museo-darte-classica-e-moderna-fab32a4e-be7f-43df-af83-e9d7dae2244d/9/





Fig.4: Butera palace, survey of the ground floor before the restorations. © Project Designers







Fig.5: Butera palace, architectural section before the restorations. © Project Designers









Fig.6: Butera palace, one of the rooms located at ground floor, before the restorations (left) and after (right). © Project Designers & Luisa Lombardo



Fig.7: Butera palace, details of a wooden floor and the vaulted ceiling, before the restorations. © Project Designers





# The Diagnosis of the building (values and state)

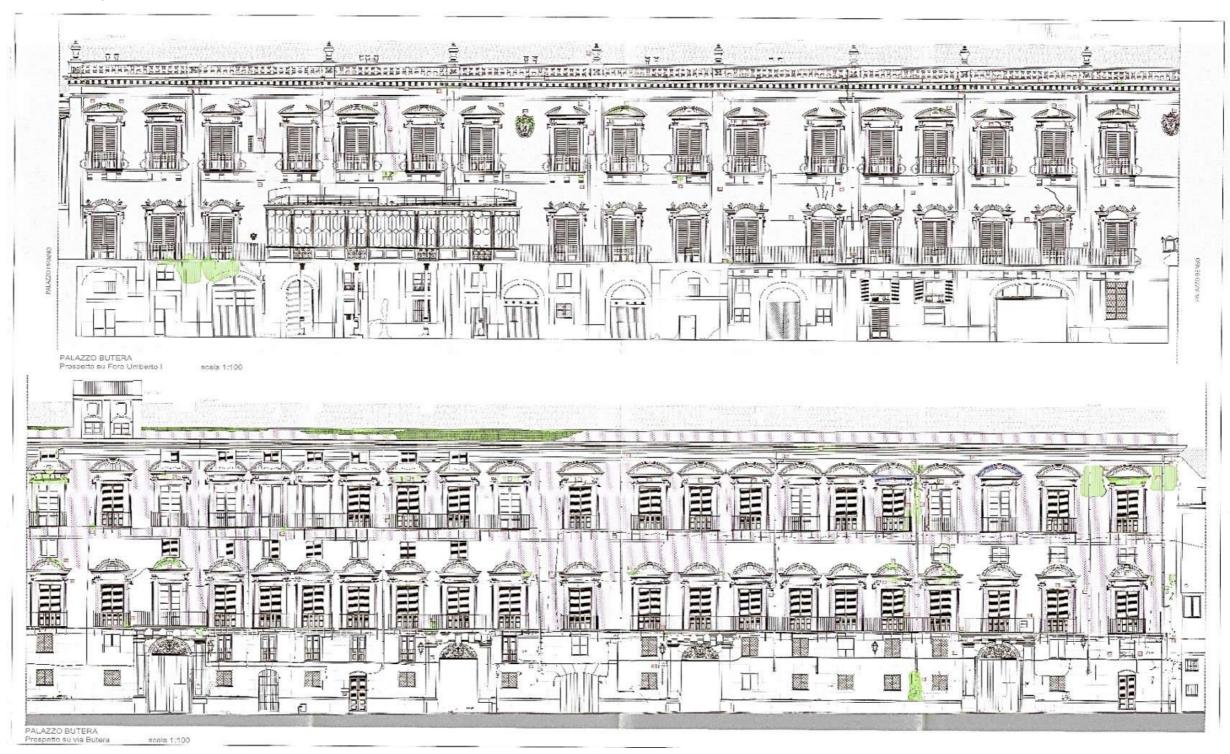
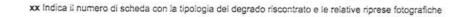


Fig.8: Thematic mapping of the structural collapses and decay of the waterfront façade. © Project Designers





#### STATO DEI DEGRADI INTERVENTI DI RIPRISTINO PATINA BIOLOGICA - Strato sottile, morbido e PATINA BIOLOGICA - applicazione di biocida e omogeneo, aderente alla superficie e di evidente natura successiva rimozione meccanica, a pennello, a spruzzo o biologica. Di colore variabile, per lo più verde. La patina biologica è costituita prevalentemente da microrganismi cui possono aderire polvere, terriccio, ecc... CROSTA - Strato superficiale di alteraz1one del materiale CROSTA - rimozione applicazione di compresse imbevute lapideo o dei prodotti utilizzati per eventuali trattamenti. Di di soluzione satura di sali inorganici, carbonato o spessore variabile, è dura, fragile e distinguibile dalle parti bicarbonato di ammonio e la successiva rimozione sottostanti per le caratteristiche morfologiche e, spesso, meccanica dei depositi solubilizzati mediante pennellesse. per il colore. Può distaccarsi anche spontaneamente dal spazzole, bisturi, specilli substrato che, in genere, si presenta disgregato e/o pulverulento. PRESENZA DI VEGETAZIONE - Strato sottile, morbido e PATINA BIOLOGICA - applicazione di biocida e omogeneo, aderente alla superficie e di evidente natura successiva rimozione meccanica, a pennello, a spruzzo o \* biologica. Di colore variabile, per lo più verde. La patina con siringhe biologica è costituita prevalentemente da microrganismi cui possono aderire polvere, terriccio, ecc.. DISTACCO - Soluzione di continuità tra strati superficiali DISTACCO - ristabilimento dell'adesione tra supporto del materiale, sia tra loro che rispetto al substrato; prelude murario ed intonaco mediante iniezioni di adesivi riempitivi in genere alla caduta degli strati stessi. Il termine si usa in di malta idraulica, la stuccatura delle crepe anche di particolare per gli intonaci e i mosaici. Nel caso di piccola entità e successiva eliminazione dell'eccesso di materiali lapide naturali le parti distaccate assumono prodotto dalle superfici spesso forme specifiche in funzione delle caratteristiche strutturali e tessiturali, e si preferiscono allora voci quali crosta (v), scagliatura (v.), esfoliazione (v.). DISGREGAZIONE - Decoesione caratterizzata da DISGREGAZIONE - consolidamento delle superfici in distacco di granuli o cristalli sotto minime sollecitazioni materiale lapideo decoese con silicato di etile meccaniche. FRATTURAZIONE O FESSURAZIONE - Degradazione FRATTURAZIONE O FESSURAZIONE - distacco ed che si manifesta con la formazione di soluzioni di incollaggio delle parti lesionate mediante l'utilizzo di resine cont1nuità nel materiale e che può implicare lo epossidiche bicomponenti e/o mediante l'utilizzo di barre spostamento reciproco delle parti. in vetroresina di sezione idonea adeguatamente fissate alla struttura resistente MANCANZA - Caduta e perdita di parti, il termine. MANCANZA - reintegrazione delle lacune presenti sulle generico, si usa quando tale forma di degradazione non è superfici con malte di idonea granulometria e descrivibile con altre voci del lessico. Nel caso particolare pigmentazione degli intonaci dipinti si adopera di preferenza lacuna (v.) ELEMENTI ESTRANEI - presenza di elementi metallici ELEMENTI ESTRANEI - Accurata rimozione degi. ancorati al paramento murario per il sostegno di elementi ancorati al paramento murario e successivo impiantistica quali chiodi, tasselli, staffe, tubi, ecc. ripristino dello stesso mediante stuccatura con malta pigmentata con colorazione analoga all'originale a base di calce idraulica ed inerti selezionati. ELEMENTI ESTRANEI - presenza di elementi metallici ELEMENTI ESTRANEI - Accurata rimozione degli ancorati al paramento murario per il sostegno di elementi ancorati al paramento murario e successivo



impiantistica quali chiodi, tasselli, staffe, tubi, ecc.

XX

Fig.9: Thematic mapping of the structural collapses and decay of the waterfront façade. © Project Designers

ripristino dello stesso mediante stuccatura con malta pigmentata con colorazione analoga all'originale a base di

calce idraulica ed inerti selezionati



Fig.10: Decay of interior spaces. © Project Designers







Fig.11: Façade damages of stone and stucco or plasters. © Project Designers



Fig.12: Decay of metal structures and elements in the internal façade overlooking the internal courtyard. © Project Designers



Fig.13: Decay of the indoor and outdoor majolica paving. © Project Designers



Fig.14: Deterioration of wooden window frames. © Project Designers





### Restoration works

The building will become "a new gateway to the sea for the historic centre of Palermo, because art, history and culture could become a new source of life for the city", said Massimo Valsecchi, art & design collector, owner and *deus ex machina* of the restoration design and transformation of Palazzo Butera.

Massimo Valsecchi bought the building together with his wife Francesca Frua De Angeli in 2015. The building - to date still a construction site with the further acquisition of the neighbouring *Piraino* palace which will become a place of study and cultural meetings - partially opened to the public in its new identity as a museum space in conjunction with *Manifesta 12 Palermo* (the travelling biennial of contemporary art held in the city from 16 June to 4 November 2018), but it lives far beyond with a concrete commitment and articulated in several phases that has a continuity in the future.

Art has the fundamental function of promoting the transmission of knowledge, precisely through a different intertwining of knowledge and experience. This transversal view finds an adequate level of expression in Valsecchi's collection of art's objects. Through the combination of objects of art that are always of high quality but of different periods and styles, it is possible to stimulate the formation of a vision capable of embracing and integrating cultural differences. From here, Massimo and Francesca Valsecchi also understand that it was important to open their collection to the public in some way, to show it and, through it, to indicate the possibility/necessity of an open look at the variety of experiences.

The purchase of Butera Palace responds precisely to this need. With its slightly délabré appearance, the palace was the starting point from which a complex and articulated project began, which transformed the desire for grandeur and the arrogance of the Butera princes, who wanted this palace between the seventeenth and eighteenth centuries. which, with a 110 metres

long facade and a development of 7,000 square metres, deprived citizens of the visibility of the sea, in a space open to the public and crossed by a path that reconnects the relationship between the sea and this part of the city: a door open to the Mediterranean.

The demonstration that such intervention in a complex and risky context is really possible, with excellent results. The same intervention modifies the image that the city projects towards the outside and, at the same time, becomes a possible reference model offered as an encouragement to other private realities - Italian but above all foreign - to face similar interventions. A very positive fact to underline in the restoration intervention was the harmony of intent found between the construction management and the Municipality and the Superintendence in setting up the project process.





Fig.15a-b: The inner courtyards after the restoration, during the visit of *Smart Rehabilitation 3.0 Erasmus+ project*, Staff Training Course, happening in Palermo, September 2021. © Luisa Lombardo









Fig.16a-b: The rooms at ground floor, hosting art collection and with the introduction of a new steel and structural glass staircase after the restoration, during the visit of *Smart Rehabilitation 3.0 Erasmus+ project*, Staff Training Course, happening in Palermo, September 2021. © Francesco Renda



Fig.17: Massimo Valsecchi, Eng. Marco Giammona and Arch. G. Cappelletti explain the concept of the restoration design and the building yard, during the visit of Smart Rehabilitation 3.0 Erasmus+

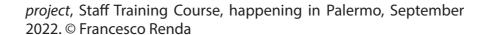




Fig.18: The root room, located at ground floor, with the large root left exposed through the creation of a structural glass flooring inserted in the Venetian concrete beaten floor. View of one of the internal courtyards. © Francesco Renda





Fig.19a-b: The original stable, before and after restoration. © Project Designers & Francesco Renda





In the perspective of the transformation of a large private historic residence into a public good shared with the community, since the beginning of the construction site in 2016, the response from these institutions has been positive and resulted in an acceleration - simplification of procedures bureaucratic-administrative for authorizations, rare enough to be granted to a private individual.

This has made possible a speed of execution of the works which is quite unusual in sites of this importance.

The owners and restoration designers listened to what the building had to say through its pre-existing structures. This suggested the themes to work on, and it was as if all the interventions subsequently designed had autonomously devoted themselves to extracting the latent potential in the building.

But this with an approach that is not only conservative, but innovative.

The dialogue has always been between a datum coming from history and an intervention made on it in order to be able to pass it on in history. And this intervention has become a linguistic fact that, in order to function fully, we must take into account our contemporaneity without obliterating the original language of the building.

The strength of the project is based on essential distributive transformations made differently functional with few and targeted interventions; architectural detail solutions that help simplify reading the monument by linking certain relationships in a clearer way; solutions dictated by "discoveries" during the construction site - such as that of the so-called "Root room" on the ground floor - which, originally not foreseen, were born from the discovery of unusual situations that resulted in a new design

idea: the root of a large Jacaranda inside one of the courtyards that had infiltrated the original water canal/pipe and which has been exposed and preserved.

To give unity and recognition to the interventions, it was made the choice to use few materials for them: iron left in its natural state and polished concrete. The first was used for the new doors, the new stairs, and the furnishing of the courtyards also. The latter, instead, was used for the construction of all the new floors of the exhibition spaces on the ground floor. Both these materials communicate an unexpected softness of tones that harmonises with the ancient stones. In summary, there was a mixture that produces a consonance result on a different level. That was also favoured by the fact that the building has a distributive structure - a monumental staircase in red marble initially built on the basis of a design by the architect Giacomo Amato, perhaps the greatest architects of the Palermo Baroque, and a service staircase located on the opposite side. Speaking of the staircase, that has made the building easily suitable for conversion into a museum/foundation open to public use on three levels towards the sea and on five towards the city (considering the two mezzanines).

A ground floor intended for temporary exhibitions (mainly of contemporary art but not only), with spaces for educational activities and a refreshment area. A first mezzanine, with four reception-residences for scholars and artists.

A first noble floor - excluded from the public visit route - where Francesca and Massimo Valsecchi's private residence is located, which will integrate spaces reserved for site-specific projects by contemporary artists in the complete perspective of the house-museum (within these, the so-called Gothic Room object of the intervention by Anne and Patrick Poirier was only the first example) alongside areas and spaces that will host conferences, workshops and summer schools.

On the second main floor there will be rooms dedicated to the exhibition of the collection of Francesca and Massimo Valsecchi.

Then, the second mezzanine will include four other generous single-room apartments for guests and a path - open to the public - between the trusses and wooden beams of the restored attics, which remains one of the most interesting experiences in the all-round circular route of visit.







Fig.20a-b: Re-visitation of inner passage corresponding to main monumental staircase, using an original parapet and new steel corbels and glass floor and metal fan above one of the entrance portals to the building. © Francesco Renda e Luisa Lombardo





Fig.21a-b: The monumental staircase of the palace, after restoration works. © Francesco Renda e Luisa Lombardo





Fig.22a-b: Decorated thin sheet bricks vaults hidden by other wooden ceilings, before restoration, restoring frescoes in the reception rooms of the palace. © Project Designers & Francesco Renda.



Fig.23: *Manifesta 12* painting installation on walls, during the restoration works. © Project Designers

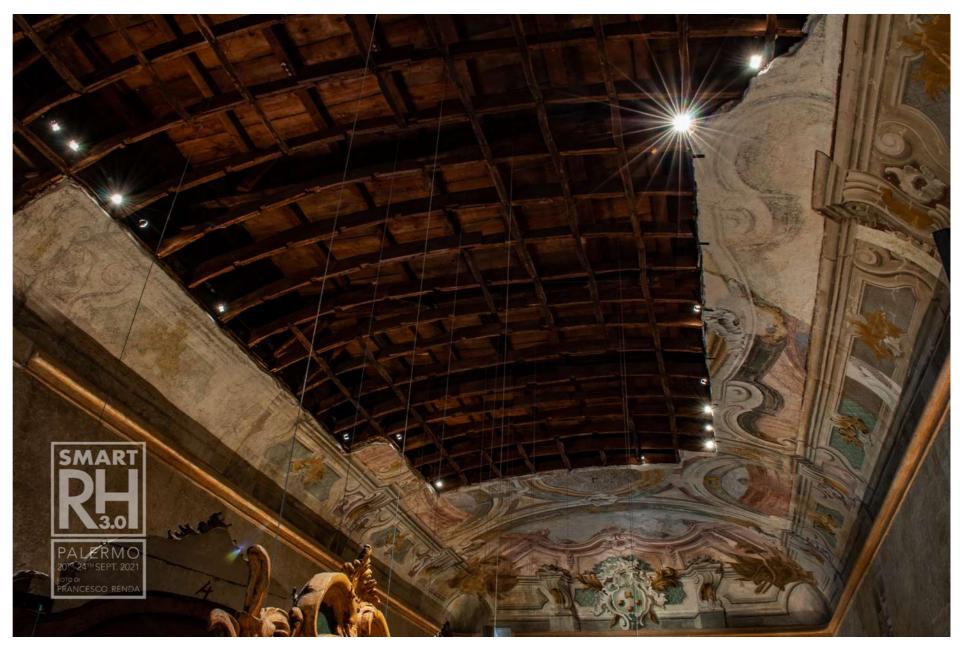


Fig.24: Restoration of a great wooden vaulted ceiling, without completing intrados plaster finishing, but with the centering and listel structure left on sight. © Francesco Renda





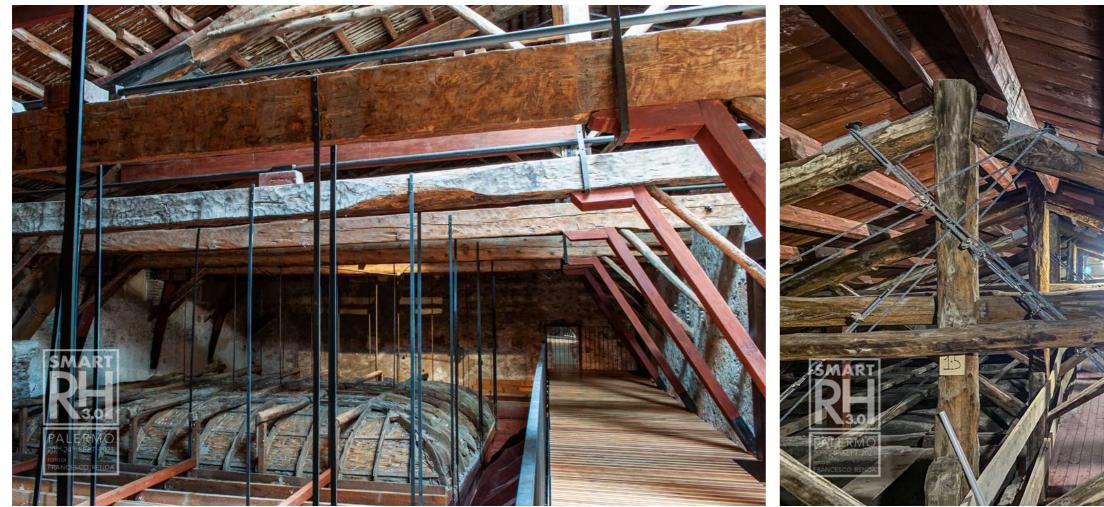


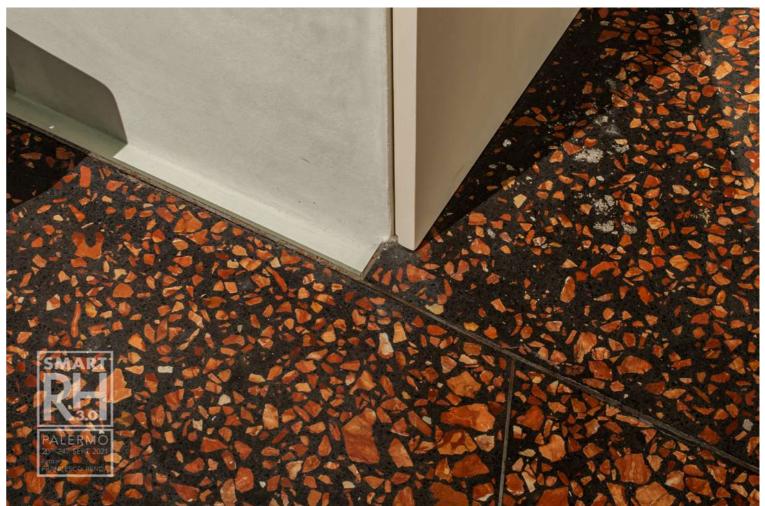


Fig.25: Restoration of wooden ceiling and trusses; structural restorations, addicting new steel reinforcements. © Francesco Renda





Fig.26: Restoration concept of not rebuild some timber vault's ceilings while leaving on sight the Fig.27: New paving in Venetian concrete and red marble splinters. © Francesco Renda superior timbered roof. © Francesco Renda



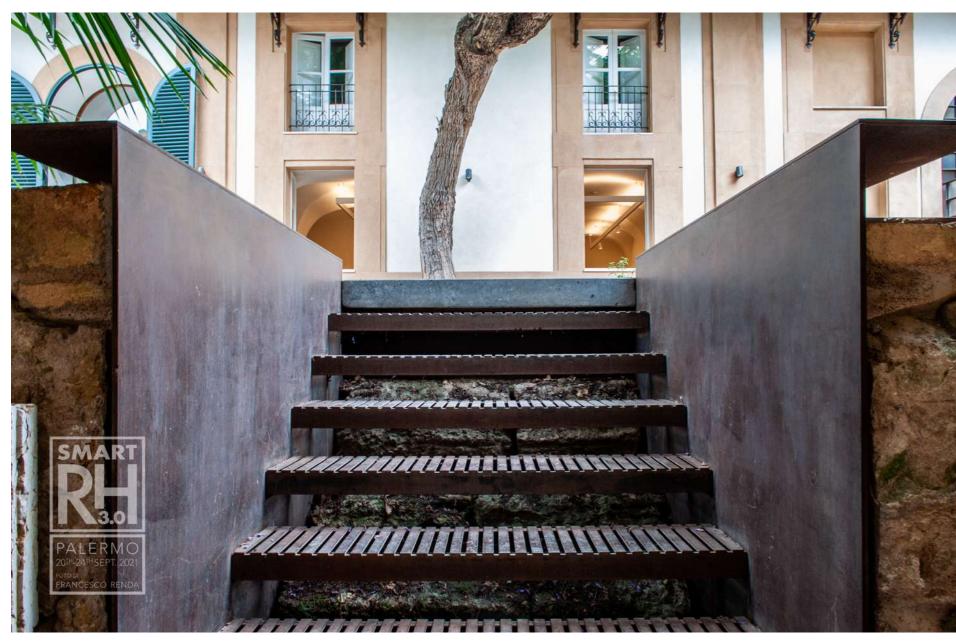




Fig.28a-b: New steel stairs and hoops in correspondence of openings. © Francesco Renda





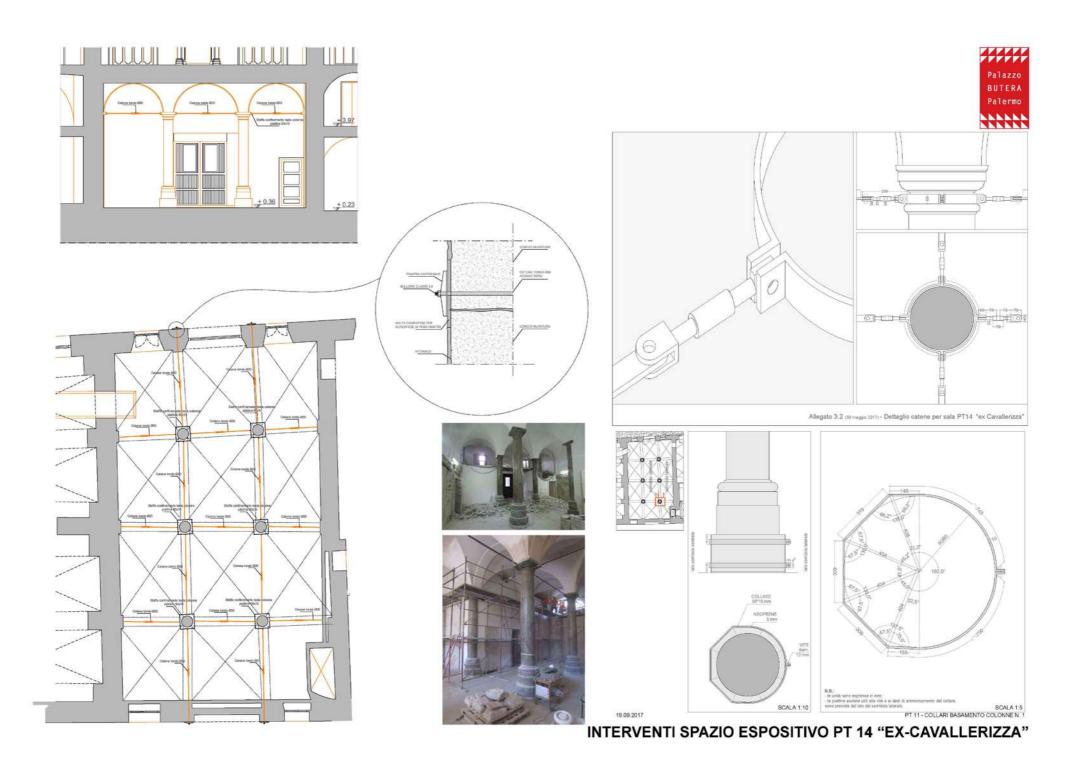


Fig.29: Ex Stable - Table of intervention related to the insertion of steel rod tie. © Project Designers





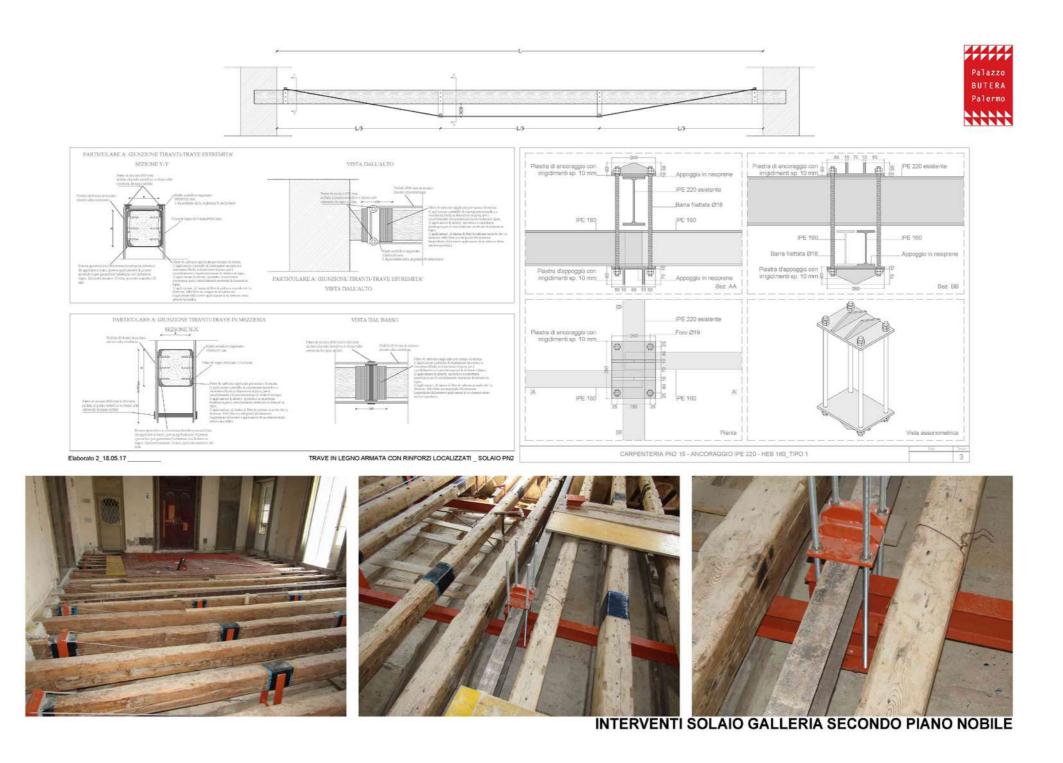


Fig.30: Intervention of structural consolidation on wooden floor. © Project Designers





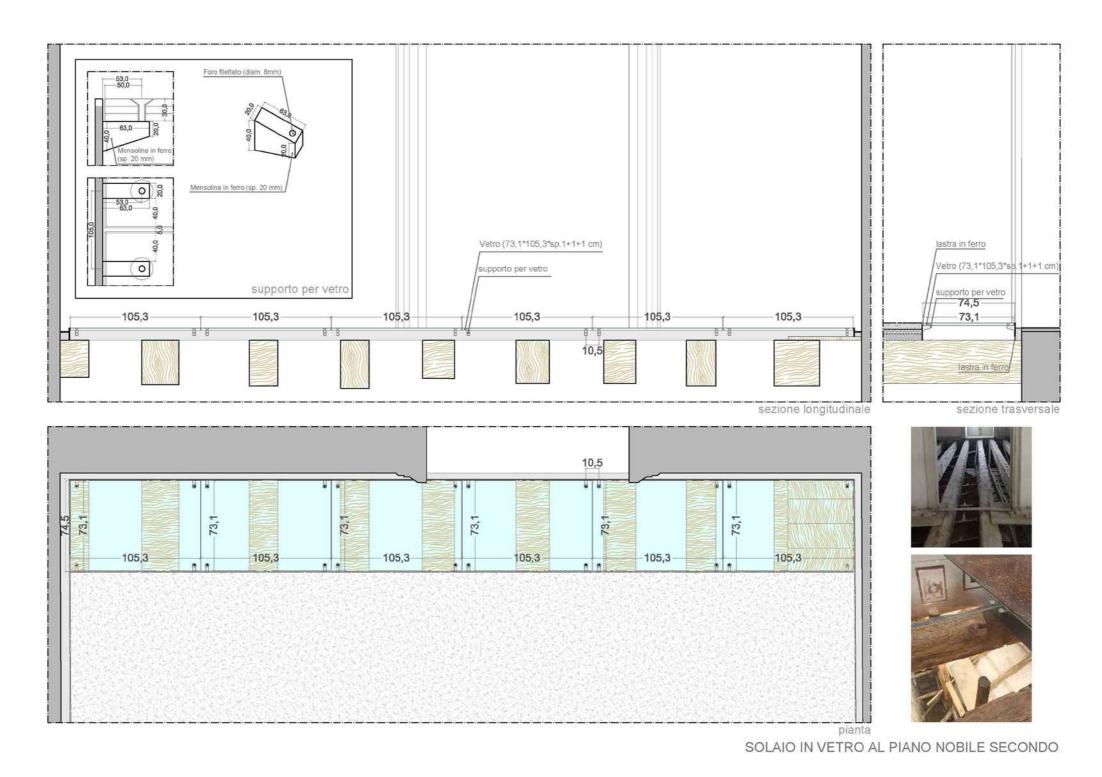


Fig.31: New structural glass floor located at the nobler second floor. © Project Designers



Fig.32: Restoration of the wooden roof © Project Designers



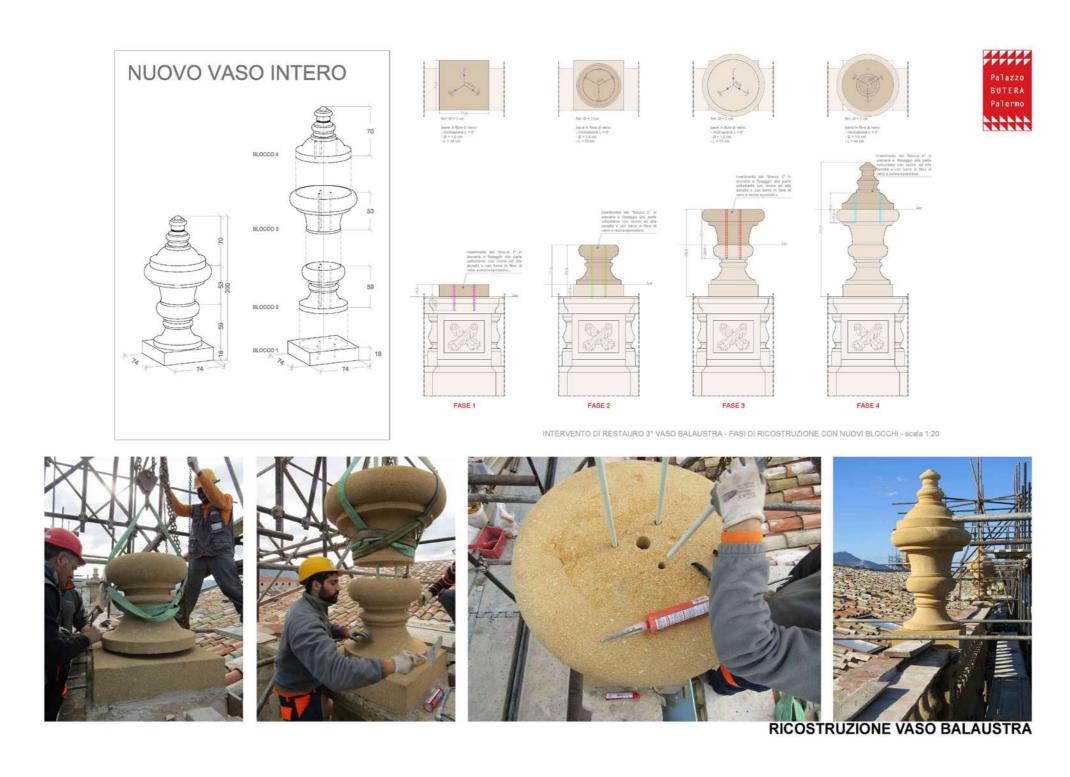


Fig.33: Reconstruction of a big stone vase located on the attic wall. © Project Designers





### Assessment of the results

The impressive restoration project includes:

- structural interventions aimed at the restoration of the existing materials and construction systems and the adaptation to museum;
- strong plant integration for the conversion of works of art into a museum and exhibition gallery (safety and fire prevention, lifts, heating, cooling and lighting, etc.);
- interventions aimed at improving the building energy efficiency;
- interventions aimed at "design for all" and accessibility of fragile users;
- technological innovation with the introduction of new materials, in the construction of floors, false ceilings, etc.;

### References

The information contained in this sheet has been collected with the kind permission of Prof. Massimo Valsecchi and through the kind collaboration of Arch. Giovanni Cappelletti and Eng. Marco Giammona who are acknowledged for their precious collaboration.

https://www.internimagazine.it/progetti/domus-magna-2-0/

https://palazzobutera.it/it

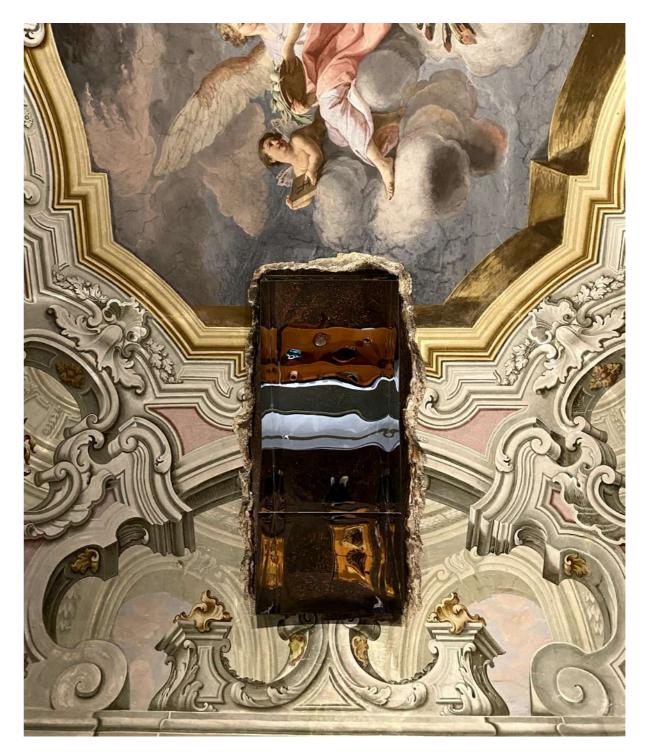


Fig.34: Hole in a vaulted ceiling and insertion of a mirror to insertion of a mirror to enlarge the space and reflect the images. © Project Designers





