













### Quaderni di Assorestauro



YEARS 09 | NUMBER 02 September 2020

> Edited by: Sonia Vallese Alessia Losa Andrea Griletto

Authors: Briselda Calliku Serena Buongiorno

**Graphic Project** 



Blumorgana | Viviana Maria Lucia Volpini info@blumorgana.it

© copyright 2015 - Assorestauro Servizi Srl ISSN 2499-1864 (Print) - ISSN 2499-1503 (Online)



WWW.ASSORESTAURO.ORG

### PROJECT PRESENTATION

_ PRESENTATION OF " ICE AGENZIA"	
_ PRESENTATION OF "ASSORESTAURO"	
_ PRESENTATION OF "RESTAURO MADE IN ITALY"	
_ PRESENTATION OF "RESTORATION WEEK ONLINE EDITION	

### RESTORATION WEEK 2020

### 21<sup>RD</sup> SEPTEMBER | AMATRICE

_ CULTURAL HERITAGE'S CO	NSERVATION AND RECOVERY	
IN THE SMALL TOWNS AFF	ECTED BY THE 2016 EARTHQUAKE.	
THE CASE OF AMATRICE		10

### 22<sup>TH</sup> SEPTEMBER | L'AQUILA-SANTO STEFANO DI SESSANIO

EUROPEAN HERITAGE AWARDS - BASILICA DI COLLEMAGGIO	16
THE REBORN MEMORY OF A "MINOR" CULTURAL HERITAGE.	

THE CASE OF SANTO STEFANO DI SESSANIO	20
ΩΊΩΤΛΙΝΛΒΙ Ε "CONCEDVATION"· ΤΗΕ DELICE ΔΕ ΠΙΩΤΩDIC BIIII DINGS	

### 23<sup>RD</sup> SEPTEMBER | ROMA

\_ ENHANCEMENT AND RESTORATION OF SILVESTRI-RIVALDI PALACE IN ROME ....... 26

### 24<sup>TH</sup> SEPTEMBER | ROMA

_ THE CHURCH OF SAN GIUSEPPE DEI FALEGNAMI IN ROME.	
RESTORATION AFTER THE ROOF COLLAPSE	

### 25<sup>TH</sup> SEPTEMBER | ROMA

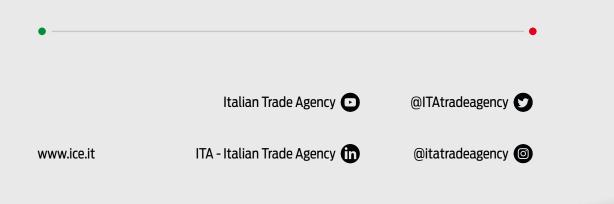


### **ITALIAN TRADE AGENCY**

ICE - Agenzia per la promozione all'estero e l'internazionalizzazione delle imprese italiane

ITA - Italian Trade Agency is the Governmental agency that supports the business development of our companies abroad and promotes the attraction of foreign investment in Italy.

With a motivated and modern organization and a widespread network of overseas offices, ITA provides information, assistance, consulting, promotion and training to Italian small and medium-sized businesses. Using the most modern multi-channel promotion and communication tools, it acts to assert the excellence of Made in Italy in the world.





**associazione italiana per il restauro architettonico, artistico, urbano** italian association for architecture, art and urban restoration

Project coordinator: Andrea Griletto

### WHO IS ASSORESTAURO ?

Established in 2005 as the first Italian association of manufacturers of materials, equipment and technology, suppliers of services and specialized companies, Assorestauro represents the Italian sector of restoration and conservation of material heritage. To date, it is the sole association and a reference in the national and international market for anyone willing to start working in the conservation sector in Italy. This field is a synthesis of the various disciplines involved, of the professional specialists, of the available technology and of the growing business community. If examined as a whole, the sector accounts for a large market share and has a meaningful impact on tourism, industry and bioconstruction.

### WHAT ARE ASSORESTAURO'S GOALS?

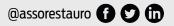
Assorestauro is the National Trade Association for the Restoration Sector, representing manufacturers of materials, equipment, technology, specialist companies, designers and suppliers of services for analyses, surveys and diffusion. The Association offers its members information, assistance, advice and training both directly and through its partners, with a view to building a consistent and unitary orientation to the different sectors of the restoration industry at a national and international level.

As a national association, Assorestauro aims at coordinating, protecting and promoting the interests of the restoration sector. Moreover, it represents the outer market, in Italy and abroad, the common positions in technical and economic issues, as well as an image. In fact, it carries out targeted activities such as relevant ads of the sector, information and communication, protection of common interests (economy, image, standards), research, development and promotion.

### WHAT DOES ASSORESTAURO DO ?

Several activities aimed at promoting the professional skills in the restoration sector fall in the scopes of the Association. They include diagnostic analysis, design and on site execution, producing technology and materials, as well as contribute technological Innovation, with the support of Institutions, Universities, Agencies for the protection of cultural heritage and ICE, the Agency for the internationalization and the promotion abroad of Italian businesses. This type of activities includes both promotions in Italy (conferences and training seminars, trade exhibitions, courses and similar initiatives) and abroad (foreign missions, training, b2b encounters, restoration sites). In such occasions the member companies are involved and they are offered the chance to study and penetrate foreign markets through projects co-sponsored by national and international bodies.





# project RESTAURO NADE IN ITALY





"Restauro Made in Italy" is a **wide project aimed at promoting the sector of Italian restoration abroad**, launched by Agenzia ICE and organized by Fiera Ferrara and Assorestauro by means of technical and promotional initiatives and activities to be held in Italy and abroad in 2020/2021.

The objective of the project is to strengthen – in terms of increased business volume and penetration of third markets – the sector of Italian restoration, the enterprises working in the sector, the training institutions and academies offering skill building, and the local authorities supporting the sector. Considering the high degree of specialization of the sector in Italy and abroad, it is urgent to take the unmissable opportunities now arising from an increased demand in the cultural field worldwide, especially from the most industrialized country, where cultural resources and restoration are rated as a new and growing economic asset.

The first steps of the project are developed as an alternation of actions of technical promotion and spreading of the Italian methods and technology in the reference market. These actions will come as complex application projects and commercial penetration initiatives, including the participation to trade shows and networking events to support the technical actions.

### **INNOVATIVE CONTENTS OF THE PROJECT**

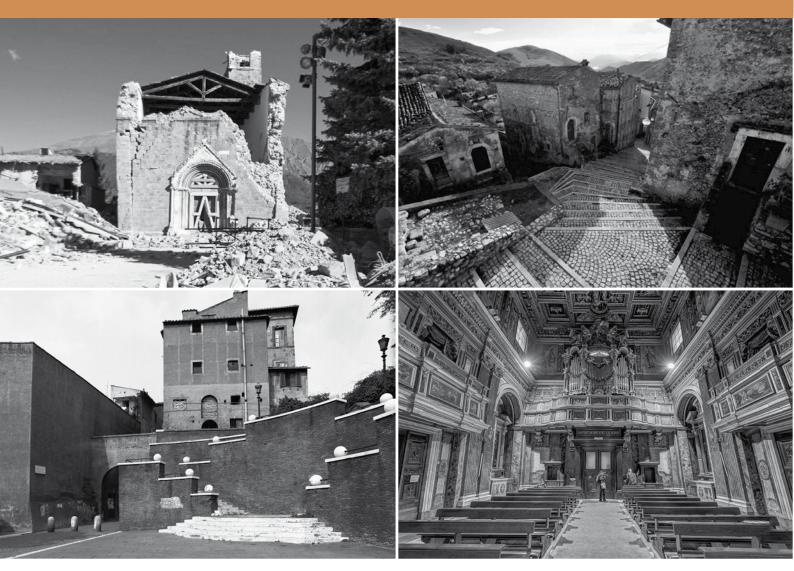
The project owns an innovative strategy, combining different technical and commercial actions aimed at building a model for business promotion and penetration for the Italian SMEs to operate abroad. These coordinated and synergic actions offer concrete opportunities for the Italian enterprises (manufacturers of materials and technology, suppliers of services catering for analysis, survey, engineering and communication, and the sector businesses) to expand their sales network and prospective customers in the reference market, and to improve the commercial penetration of products and services "Made in Italy", to which Restoration of cultural heritage belongs by all rights.

The technical and operational actions developed in Italy offer the chance to spread the Italian practices, methods and technology in the third markets, and create virtuous examples of "good practice". Training actions help build a background of functionaries, technicians, professionals and operators that will be capable of appreciating, using and asking for the peculiar methods of the Italian restoration business.

The partnership with the "International Exhibition of Restoration, Museums and Cultural Business" of Ferrara – the reference trade show for Assorestauro – helps build marketing opportunities in Italy and in the target Countries, and enhance the international appeal of the Italian restoration business.

# RESIDENCE STRATEGY ST

Italian trade Agency and Assorestauro are glad to present an international event in Italy, the Restoration Week 2020. A week rich of activities and meetings dedicated to the excellence of Italian restoration. The event will be focused on strategic restoration worksites in Central Italy along a path from Rome passing through L'Aquila, Santo Stefano di Sessanio, Cittaducale and Amatrice. During the week, the audience will have the opportunity to take part in virtual tours in restoration sites and attend to live streamed conferences.



### Rome, Italy

### 7:30 to 9:00 pmGMT+2

WELCOME CEREMONY: Welcome cocktail and dinner, greeting to the guests and presentation of the week, Rome

### Amatrice (RI), Italy

10:30 am to 12:00 pmGMT+2

VISIT TO: Central Italy earthquake Area - Artworks storage Scuola Forestale Carabinieri di Cittaducale (RI)

3:00 to 4:30 pm<sup>GMT+2</sup>

### VISIT TO:

Amatrice Red Zone - Worksite of San Francesco Church Policies for the post-earthquake reconstruction and Project of Don Minozzi reconstruction, Amatrice

### Santo Stefano di Sessanio (AQ), Italy

### 9:30 to 11:30 amGMT+2

VISIT TO: L'Aquila city centre buildings, Basilica di Collemaggio

### 3:00 to 4:30 pmGMT+2

### **CONFERENCE:**

Sustainable "Conservation": the reuse of historic buildings or site for the development of cultural tourism at Santo Stefano di Sessanio (AQ)

### Palazzo Silvestri Rivaldi, Rome, Italy

3:00 to 4:30 pm<sup>GMT+2</sup>

Palazzo Silvestri Rivaldi worksite, Rome

TOPIC: Analysis, preliminary studies and planning of a restoration

### Church of San Giuseppe dei Falegnami, Rome, Italy Thursday 24 September

### 3:00 to 4:30 pm<sup>GMT+2</sup>

VISIT TO: Church of San Giuseppe dei Falegnami, Rome TOPIC: Reconstruction of structures and surfaces

### Conference and Round Tables, Rome, Italy

### 9:00 am to 12:45 pm GMT+2

### SECTORIAL PANELS AND ROUND TABLES

International organization: European Commission, Europa Nostra, UNESCO, World Monument Fund

### 3:00 to 6:30 pm<sup>GMT+2</sup>

### **CONFERENCE:**

International policies for the protection of built heritage Location: Italian Trade Agency headquarter Rome

**PANEL COUNTRY:** Albania, Saudi Arabia, Egypt, Tajikistan

TOPIC: Economy of Cultural Heritag

### TOPIC:

Sustainable tourism: The recovery of territories and sites of historical value

**Tuesday 22 September** 

Wednesday 23 September

Friday 25 September



# **R**=stor

### Sunday 20 September

Monday 21 September

TOPIC:



### **CULTURAL HERITAGE'S CONSERVATION AND RECOVERY IN THE SMALL TOWNS AFFECTED** BY THE 2016 EARTHQUAKE. THE CASE OF AMATRICE

### AUTHORS

Briselda Calliku School of Specialization in Restoration of Monuments -Polytechnic of Milan

### **INTERVIEW TO**

Paolo Iannelli Soprintendente Speciale per le aree colpite dal sisma

PREMISE The theme of post-earthquake reconstruction is extraordinarily complex and linked to a diversity of cultural issues, expressly referred to landscape, urban and architectural problems. In addition to the theme of the recovery of a single building or monument, there is the problem of the recovery of the whole, in its architectural and urban aspects, as well as in the cultural and social ones. The reconstruction, therefore, poses the problem to identify a set of strategies for reoccupation and urban development that are sustainable for cities that have already suffered an earthquake. The theme is fundamental for the reconstruction of the widespread architectural heritage of the small historic villages. It is even more relevant when the areas hit by the earthquake are affected by the problem of progressive depopulation. Rebuilding in these contexts, therefore, means encouraging reviving policies that can recreate a social and economic network capable of attracting the population and the investments, leading to the rebirth of increasingly marginal territories. These reflections emerge when we think about the reconstruction of the Apennine areas of Central Italy affected by the seismic sequence of 2016-2017.

As Giovanni Carbonara writes: "The question is how to rebuild? How not to erase the architectural, as well as the urban signs of the inhabited centres affected by the earthquake? How to conserve even the poor 'material testimonies' of old buildings without razing them to the ground, as is now happening in several places?".<sup>(1)</sup>

How to direct the conservation works, the integration with the existing ones and the new constructions, it's a problem that arises from the moment in which the reassembling rubble are selected. In the process of reconstruction, the practices of preservation and restoration can give tools capable of making a more attentive design of the new. In a place like the Municipality of Amatrice, deeply affected by the earthquake of 2016, August 24<sup>th</sup>, where the historical urban fabric has almost completely disappeared, the first intervention actions are essential for the safeguarding of the cultural heritage, as well as for the drafting of a conscious reconstruction plan.

(1) G. Carbonara, Earthquakes, reconstruction and monumental heritage, in Conservation Science in Cultural Heritage, 2018



Fig 01-02. Historic centre of Amatrice after the earthquake of 2016, August 24<sup>th</sup>

Fig 03. Sant'Agostino Church after the earthquake of 2016, August 24<sup>th</sup>

> Fig 04-05. works to secure the church of San Francesco in 2017

In the particular case of Amatrice, the prompt intervention of the Ministry of Cultural Heritage, Activities and Tourism (MiBACT), together with the Civil Protection, Fire Brigade, Army, Carabinieri of the Command for the protection of Cultural Heritage and the Carabinieri Forest School of Cittaducale and volunteers, was decisive in carrying out all the necessary monitoring and first intervention activities for the safety of the monumental historic buildings.

Particularly significant, in the municipality of Amatrice, were the works carried out under the direction of MiBACT on the Church of San Francesco, Chiesa Santa Maria Assunta and the Cola Filotesio Museum. On this matter, we report the considerations of Eng. Paolo Iannelli, Special Superintendent for the areas affected by the earthquake of 2016, regarding the "first aid" interventions on artworks and architectural works, which, heterogeneous in materials and state of conservation, have been removed from the damaged buildings and transferred in Cittaducale. Currently, the cataloguing process and the restoration laboratory of the rescued assets are still ongoing, integrating new digital technologies into the broader theme of reconstruction.

### CONSIDERATIONS OF PAOLO IANNELLI, SPECIAL SUPERINTENDENT FOR THE AREAS AFFECTED BY THE EARTHQUAKE OF 2016

Faced to the emergency events caused by natural disasters, arises the question of the protection of the fragile and not replicable cultural heritage, widespread throughout our territory. The damage and loss of a cultural asset represent a wound to the community and to future generations who risk being deprived of their cultural heritage. Studies of preventive action, to mitigate the impact of these often-unpredictable events, have been carried out by MiBACT, according to its institutional mission. Strategic emergency management guidelines have been outlined following the earthquake events of 2012, May 20<sup>th</sup> and 29<sup>th</sup>, and codified after various passages in the Directive of the Minister of Cultural Heritage and Activities and Tourism of 2015, April 23<sup>rd</sup>. This directive identifies a network, within the offices of the Ministry, which in the event of calamitous events, it's activated, operating in parallel with ordinary institutional activities <sup>(2)</sup>. All the territorial divisions of MiBACT, in particular the Superintendencies, are actively involved in the management of the emergency.

(2) Directive of the Ministry for Cultural Heritage Activities and Tourism (MiBACT) of 2015, April 23<sup>rd</sup>, published in the Official Journal of the Italian Republic on 2015, July 8<sup>th</sup>.



Cola Filotesio Museum in 2019 The 2015 directive implemented a coordinated system of territorial operating units, equipped with adequate management procedures of emergency activities. They deal with the activation of the operational and communications system, coordination with the civil protection structures, the relief of damage to cultural heritage, the interventions for the safety of buildings and movable assets, the management of temporary deposits, laboratories emergency response on movable property and information management. The operations provide also scheduling and IT tools for the collection of information related to cultural heritage's damage, monitoring all the operations activated in the emergency phase and archiving the data relating to the damage to churches, protected buildings and damaged movable property. In this way they have immediate information on the state of damage to the entire cultural heritage, on the safety measures and the estimate costs of the necessary interventions.









The emergency management is therefore implemented through a general and flexible strategy that traces a unitary path from the first interventions to the reconstruction phase. The seismic events that since 2016, have involved Abruzzo, Marche, Lazio and Umbria, have induced a severe and widespread level of damage to the cultural heritage of these regions, which affected approximately 5.100 buildings of cultural interest. In Lazio, the most affected municipalities were Amatrice and Accumoli, almost destroyed. The emergency management was implemented from the very first moment with the activation of all the emergency structures of the MiBACT, and the coordination with the National Civil Protection System by immediately carrying out inspections in the various municipalities affected. Approximately 5.200 expeditious surveys were carried out, some of which repeated more than once, to ascertain the extent and type of damage and to define the first safety measures.

The 2016 seismic event has demonstrated, perhaps more clearly than others, that next to the safety of the architectural heritage it is essential to take timely action to ensure the safety and recovery of the mobile cultural heritage belonging to the buildings, that are fundamental elements of the reconstruction. The activity of securing the mobile cultural heritage, in addition to the implementation of provisional roofing with unique structures and protective sheets by the Fire Brigade and by the Army, was implemented also with the removal and placement of these assets in temporary deposits. This activity involved about 5.000 immovable properties of cultural interest, mainly churches, about 20.0000 historical-artistic and archaeological movable assets, over 4.500 linear meters of archival



Fig 06. Warehouse and restoration laboratory at Cittaducale

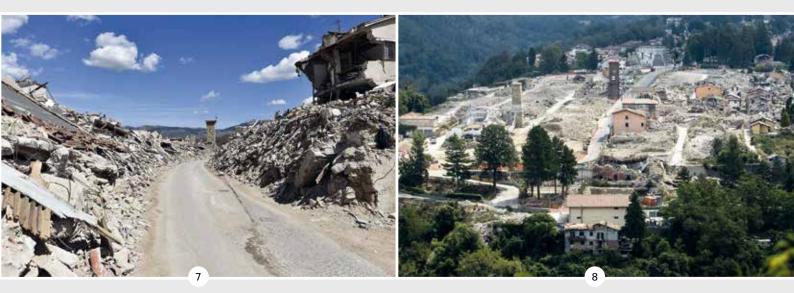
> Fig 07. Historic centre of Amatrice in 2018

Fig 08. Historic centre of Amatrice in 2019 heritage and 10.000 of library volumes, stored primarily on the State Archives of Rieti and Spoleto.

The MiBACT has carried out for the province of Rieti the recovery of the movable property in many of the churches damaged by the earthquake. An emergency depot was set up by MiBACT at the Carabinieri Forestry School in Cittaducale to shelter the cultural assets from the affected municipalities in the province of Rieti. To date, 3.306 assets have been hospitalized in this depot and for each of them every intervention has been estimated on the urgency defined by their state of damage and conservation. To date, 798 cultural assets are ready to be returned to their legitimate owners. Some are currently being tendered for restoration work, while others are still being checked. Some movable assets were assigned to the ENAV depot of the "G. Ciufelli" in Rieti, also managed by MiBACT. Other deposits of rubble and movable property are managed by the Diocese, the GARC and the Municipality of Amatrice. The remaining ones are located in the containers of Amatrice's "red zone".

Raising funds for safety and restoration interventions was another important issue. The movable cultural heritage is not financed by the orders of the "Extraordinary Government Commissioner", like the immovable heritage, so other sources of financing had to be found. For this purpose, the decree-law n. 189 of 2016, October 17th, extended the Art-Bonus in favour of MIBACT for maintenance, protection and restoration interventions on the cultural heritage of religious interest present in the Municipalities affected by the earthquake. The Office of the Special Superintendent for the areas affected by the earthquake of 2016, has developed some specific projects for the safety and restoration of the movable cultural heritage financed through Art Bonus fundraisers.

The synergistic collaboration between the various institutions operating in the area were also of great importance; of all those put in place for the Rieti area, I remember the agreement with the Varrone Foundation of Rieti, which allowed the creation of a restoration laboratory in Rieti in which several works, recovered from the collapses of Amatrice and Accumoli, are currently being restored.





### AUTHORS

Serena Buongiorno School of Specialization in Restoration of Monuments -Polytechnic of Milan

Alessandra Vittorini Soprintendenza Unica Archeologia, Belle Arti e Paesaggio per la Città di L'Aquila e i Comuni del cratere



### EUROPEAN HERITAGE AWARDS - BASILICA DI Collemaggio

### THE BASILICA OF SANTA MARIA DI COLLEMAGGIO. Post- seismic reconstruction: excellence for the rebirth

The Basilica of Santa Maria di Collemaggio, which is part of the most important sites of the built heritage of L'Aquila, was severely damaged by the earthquake in 2009 on April 6th. As a symbol of the recovery of an entire City, the administration intended to return the building to the community. The restoration, designed and directed by the Soprintendenza per L'Aquila e Cratere, represents one of the most methodical and fast realizations of the post-seismic reconstructions. This is one of the reasons why the restoration received the European Heritage Awards/Europa Nostra Awards 2020 edition, moreover it was the only italian project awarded in the "conservation" category.

Since 1294, the Basilica is expression for the local community, because of the celebration of the Perdonanza Celestiniana (Celestinian Forgiveness). In 2019, It was inscribed in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.



1

### R=storation week



Fig 01. Facade of the Basilica, with the medieval tower on the right-side hand

> Fig 02. Basilica with baroque asset, coffered ceiling, round arches, cruciform pillars and decoration with stuccoartworks

### THE HISTORICAL BACKGROUND The transformations caused by époques and seismic events

It was 1275 when the hermit Pietro Angelerio, later crowned pope with the name of Celestino V, built the Basilica and the adjoining monastery. The historical site is located on pre-existing fortifications of which remain the octagonal tower next to the façade (Fig 01). On August 29<sup>th</sup>, 1294, the year of his coronation, Celestino V indicted the Bull of Forgiveness. The Holy Door, symbol of the religious event, is located on the left-hand side of the perimetral wall.

In the XIV century, the church was completed with the three naves, the transept and the three apses. The broad aisle was surrounded by octagonal columns sustaining pointed arches and the interior wall surfaces were decorated with paintings all over. The façade was finished with the three rose windows, three Romanesque-Gothic Portals and adorned with white and light pink stones arranged to create crosses with inscribed squares.

The Baroque is the period of substantial changes (Fig 02): The pointed arches were transformed in round ones; the octagonal pillars were hidden by cruciform shaped coating; the walls were decorated with artistic stucco; the aisles were adorned with new altars; the coffered ceiling was built. 1703 was the year of a heavy earthquake that caused the collapse of the roof of the transept, part of the nave and presbytery. After three years the reconstruction was carried out with the addition of a dome for the transept and the reduction of the nave's masonry height.

After the deterioration of the building due to the Napoleonic monastic suppression, the XX century was the period of the restorations. The earthquake of 1915 damaged the upper-left edge, to avoid future damages, the restoration constisted of the reinforcement with the use of a hidden frame. Among the 1960-1964, the dome was reconstructed with reinforced concrete. The restoration of the '70s, directed by Mario Moretti, was the most drastic. the Baroque additions were removed to return to the Romanesque settings.



Fig 03. Situation of the transept after the earthquake

Fig 04. Temporary roof of the collapsed area

### THE EARTHQUAKE Damages and securing

## After the strongly criticized restoration, a new project was designed for the basilica, in 1998. The facade was a building site when the earthquake of 2009 struck the region.

The dome, the barrel vault of the transept, the triumphal arch and compound pillars collapsed (Fig 03). The seismic movement of the left-hand side masonry caused the compression of the pillars, some deep cracks and the partial ashlar's ejection. All the decorations were seriously compromised.

The works for safety began with the removal of unstable and hanging parts afterwards, the archaeologist and other experts started the stratigraphic recovery of all the rubble and its recording.

After freeing the church from the ruins, the safety plan started: the pillars were kept together using lashing straps; all the arches were borne by steel structure and connected to the opposite masonry by steel tie-beams.

The most important structure was the temporary roofing of the central part of the transept and the apse: a steel truss beam held by four pilasters (Fig 04). The basement was balanced by reinforced concrete blocks suspended on wood formwork.

These actions allowed the community to celebrate the most important religious events in the church, as a symbol of rebirth.

### THE RESTORATION PROJECT

### Fast realization and continuous monitoring

The Soprintendenza per L'Aquila e Cratere designed the restoration project with the support of three Universities: Polytechnic institute of Milan, the University of L'Aquila and the University La Sapienza of Rome. The project was funded by the partnership between the Municipality of L'Aquila and Eni company, which offered their knowledge about building site and management. The collaboration was laid down in the signing of the protocol named "Ripartire da Collemaggio" (Restart from Collemaggio).

The aim was to avoid severe damages in case of new seismic activities. The barrel vaults

### R=storation week



Fig 05. System of scaffolding for the suspension of the walls and restoration of the pillars

Fig 06. Phase of disassembling and control of the ashlars

Fig 07. The Basilica after the restoration were reconstructed, while the collapsed dome was replaced by wooden trusses. The recognition of the actual condition of each pillar was possible thanks to the monitoring system. Some of them were rebuilt, while others were subjected to a local reconstruction, always using the recovered original materials. For disassembling these pillars, a steel supporting structure were erected, wich allowed the suspension of the walls (Fig 05-06).

A careful restoration of the stuccoworks allowed to rediscover the original chromatic scheme and gilded details of the baroque chapels. The organ, which had been reduced to rubble by the collapse of the transept, was painstakingly reconstructed, recovering its magnificence.

Nowadays the restoration of the paintings and sacred furniture is still in progress. The reconstruction, carried out in two years (2016-2017) (Fig 07) with the direction of the Soprintendenza, was possible only thanks to the synergy between the various parties. The monument will be kept under observations. There's a continuous monitoring system that allows to control the seismic and mechanical behaviour of the Basilica.





### AUTHOR

Briselda Calliku School of Specialization in Restoration of Monuments -Polytechnic of Milan



### THE REBORN MEMORY OF A "MINOR" CULTURAL Heritage. The case of santo stefano di sessanio

### PREMISE

In the Apennine areas of southern Italy, the progressive depopulation of some peculiar small ancient villages has left more and more space for tourist and commercial occupation, aimed at reviving these places during the holiday seasons. Unfortunately, the generic tourist re-functionalization has often irreversibly compromised the original relationship between the village and the surrounding agricultural landscape.

In fact, the process has encouraged new urbanizations on the edge of towns and renovation works in the historic urban centre. In the absence of an adequate planning, most of the work has compromised the integrity of the territory and the historical heritage, by removing traces settled over the centuries and essential parts of local identities.

Paradoxically, depopulation is the real reason why some villages of the Apennine mountains have residually preserved their integrity. One of the most interesting cases is Santo Stefano di Sessanio, a fortified medieval village built in the mountains of Abruzzo at over 1250 meters a.s.l., within the Gran Sasso e Monti della Laga National Park. Here, the desire



to preserve territorial identities led the Sextantio Albergo Diffuso (Scattered Hotel) project to enter into specific agreements with local authorities. Attention in conservation policies and respect of territory led the Municipality to formalize a document, the first of its kind in the history of urban planning, to preserve architectural heritage and relationship between the historic village and the agricultural landscape. Based on the recovery and transmission of the territory's identity, a conservation and cultural project was carried out, focused on repurposing some aspects of ancient material cultures.

This approach focused on protecting the landscape and historical heritage, in addition to its cultural value, have become driving projects for the economy of the territory. A new development model, based on a private project, has led to exponential results under multiple variables. A quality re-destination has seen an exponential increase in the number and turnover of individual private businesses, which has brought travellers from all over the world to this small village lost in the Abruzzo mountains. Today, despite the earthquake of 2009, in Santo Stefano di Sessanio the hotel-type accommodation facilities have multiplied from 3 to over 20, by renovating abandoned parts of the village without adding any new concrete construction. Of all these, the Sextantio Scattered Hotel represents about 30% of the rooms.



### THE CONSERVATIVE APPROACH

The recovery project followed guidelines aimed at preserving the original cubature, the number and dimensions of the openings (doors and windows), the conservation of the internal divisions and possibly the historical intended use of the rooms. In its private part, the project preserves the original domestic organization, hides new installations and technology, using exclusively recycled architectural material and poor furniture from the Abruzzo mountains.

The conservative approach aims to preserve all the traces left by human experience on buildings, sedimented on plasters and constructive stratification.

Preserving the patinas on the walls, the small windows, the uneven floors, but also choosing individual details of artisanal production has kept unaltered the archaic spaces. To protect the integrity of the interiors and avoid the over-use of contemporary material, native objects stored in museums or, where necessary, recycled fragments, even decontextualized, were used.

The need to insert elements historically not present, from bedside tables to wardrobes, which were rare in rural homes, led to handcrafting the necessary parts with recycled materials of everyday use that intimately interact in shape, colour, patina, touch and smells with the identity of the place.

### **CULTURAL PROMOTION**

The village ties together several aspects of local cultures, which speaks to us of a heritage deeply linked to the material life of the Abruzzo mountain populations, which have their origins in the forgotten pastoral civilization. The accommodation facility offers services re-





lated to local cultures, from habits expressed in the domestic sphere, to popular food and crafts, brought to light by ethnographic research carried out over the last ten years with the Museum of the People of Abruzzo and with the help of local elderly's historical memory.

Some buildings have been restored to accommodate a restaurant and a food tasting space, such as the Cantinone, a historic cellar now used for a faithful re-proposition of local dishes. The food project is still in an experimental phase but the investigation goes up to the ritual, symbolic and affective aspects of food, related to these populations always on the verge of material subsistence.

Research on domestic crafts, especially weaving, takes place with the restarting of shops and the revival of age-old instruments, according to a precise philological criterion. An example is the Bottega dell'Artigianato, which evokes a domestic space typically experienced by women, with the large loom in the centre. In addition to a great variety of self-produced fabrics, there are ancient fabrics made by Abruzzo weavers. Some artefacts strictly belong to the traditions of the Abruzzo mountains and have been assisted by ethnographic research on historical memory and iconographic sources.

Focusing on a small-scale project, exact and attentive to the local culture, has led to the preservation of the ancient village, deviating from the typical commercial operations that aim only to exploit the territory in its more folkloric connotations. This approach, together with the promotion of international and high-level cultural events, has brought a diversified cultural interest to the place. "Ensemble in Residence" is one of these events, which is a a musical project where a group of artists is "adopted" and hosted by a village of particular historical or cultural significance to which it offers a series of concerts or contemporary art events. Any fundraisers are intended for non-profit associations and initiatives.





### Sustainable Week "Conservation": the reuse of historic buildings or site for the development of cultural tourism

### 22 September 2020 Santo Stefano in Sessanio (AQ)

The conference will take place in one of the most emblematic villages of central Italy, abandoned throughout the twentieth century and returned to the local context thanks to new hospitality models more suited to the conservation of the built environment and the protection of local culture.

The conference is aimed at discussing sustainable models of reuse of buildings and historical contexts that we have had a significant impact at the local level thanks to the triggering of new tourist or economic dynamics in general, starting from Italian models and then confronting with examples brought by organizations and from the invited guest countries as Saudi Arabia, Egypt and Tajikistan.

In conclusion we'll focus on Sustainability applied to the preservation of historic building, through the protocol of the Green Building Council Italy, GBC HB, which represents the only world example of a certification system for the sustainability of historic buildings, an essential measurement tool that can give an assessment of respect for value historical building.





### 3:00 to 3:20 pmGMT+2

Daniel Kilgren Sextantio in Matera and Santo Stefano di Sessanio

### 3:20 to 3:40 pmGMT+2

Alessandra Vittorini Soprintendenza Unica Archeologia, Belle Arti e Paesaggio per la Città di L'Aquila e i Comuni del cratere

### 3:40 to 3:55 pmGMT+2

Lorena Aldana Ortega Europa Nostra

### 3:55 to 4:10 pmGMT+2

Heidi Shalabi National Organization for Urban Harmony, Cairo Egypt

### 4:10 to 4:25 pmGMT+2

Adam Wilkinson Atturaif Site Director Diriyah Gate Development Authority, Kingdom of Saudi Arabia

### **4:25 to 4:40 pm**<sup>GMT+2</sup> Andrea Dall'Olio *Wolrd Bank - Tajikistan*

### 4:40 to 4:55 pmGMT+2

Cristina Menegazzi Senior Project Officer UNESCO Amman Office

### 4:55 to 5:05 pmGMT+2

Salvatore Ranucci Stil'è magazine - attached to Sole 24 ore







### AUTHOR

Serena Buongiorno School of Specialization in Restoration of Monuments -Polytechnic of Milan

### ENHANCEMENT AND RESTORATION OF SILVESTRI-RIVALDI PALACE IN ROME

### PREMISE

### An abandoned palace for educational aims

In 2015, the Ministry of Cultural Heritage and Activities instituted the Directorate General for Education and Research. The aim was to create a National Educational Plan in collaboration with the Superior Council of Cultural Heritage and Landscape.

The actualization consists of pacts, partnerships, formative initiative. The intent is to involve people of every ages and roles, in particular the students of Specialization Schools, in the management and protection of cultural places.

The Silvestri-Rivaldi Palace (Fig 01) is placed in via del Colosseo, Rome. It is property of the Institutes of Santa Maria in Aquiro (I.S.M.A.), a Public Institution for the Social Care and Beneficence of Lazio (I.P.A.B).

On February 1th, 2018, the ISMA signed an agreement with the Ministry of Cultural Heritage and Activities, the Soprintendenza Speciale for Archeology, fine Arts and Landscape of Rome and the State Property Agency. The treaty had as purpose the enhancement and renewal of the historical complex.

Two month later, the palace was formally delivered to the Directorate General for Education and Research.



Fig 01. View of the entire complex

Fig 02. Palazzo Silvestri – Rivaldi and its garden before the construction of Via dei Fori Imperiali

> Fig 03. Excavation f the Velia hill in Rome 1931/32 - Visible the structures of a Domus

### BACKGROUND

### From the construction to the present-day status

the Silvestri – Rivaldi Palace was designed by Antonio da Sangallo il Giovane in the XVI century, on Classical rests between the Flavio amphitheatre and the Macellum, overlooking the Imperial Forums. (Fig 02)

The Palace stands on the corner of Colosseum street and Temple of Peace Street, delimiting a first inner court of four levels. The external area consists of large spaces enriched with nymphs. Before the project of Imperial Forum Street in 1932 (Fig 03-04), the gardens connected the Palace to the Basilica of Massenzio, passing through the Velia Hill. The paths were decorated by structures, nymphs, stairs and fountains.

The commissioning was Eurialo Silvestri, secretary of Papa Paolo III Farnese. He obtained the permission to build the residence thanks to his sister, who gave birth to the sons of the Pope. The design of the ceiling was commissioned to the same artists of Farnese Palace, as sign of gratitude for the Pope generosity.

During the centuries, the site underwent various transformations. When it became property of Ascanio Rivaldi, the palace was converted into a refugee for women, orphans and suffering people. In 1909, another edification was added to the original one, creating one more inner court.

Nowadays the Palace is a restoration site, thanks to the attention of the institutions that wants to recover the site from its abandoned status. (Fig 05-06)

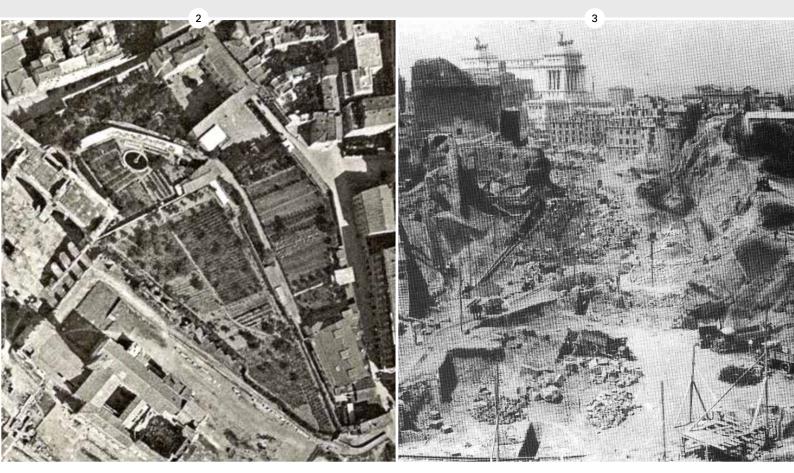


Fig 04. Rivaldi Palace, view from via dei Fori imperiali Source:https:// upload.wikimedia. org/wikipedia/ commons/b/bf/ PalazzoSilvestri.jpg

> Fig 05. View of the Palace from the street

Fig 06. Inner court the palace, with the presence of the Classical nymph

### THE WORKSITE SCHOOL

### Definitions and context of the purposes

As part of the Educational Plan, the directorate decided to introduce some activities related to the restoration worksite. This School worksite is concerned as a laboratory, a temporary work area, where students and researchers can learn about restoration and heritage by doing activities about it.

The educational programme is formed by a flux scheme based on: the definitions of strategic actions; studies and researches; analysis and diagnostic activities; planning of the resources and identification of fund.

Morover, the researches focused on the possibility to create connection between all the knowledges. The intent is to create a database using advanced digital support to share all the information.

The laboratories, concerning different disciplines, can be considered as separate "worksite" school. All the laboratories will be supported by digital and multimedia technologies, to make easier sharing contents.

Each activity will be focused on specific aspect of digital data management: history of photography and the archive's arrangement of the photographic documents; individuation of photographical technics; inventory of documentation by catalogues; maintenance programme to avoid the degradation the documents' materials; digital platform of paper document; promotion of archival assets; archival cyber security.

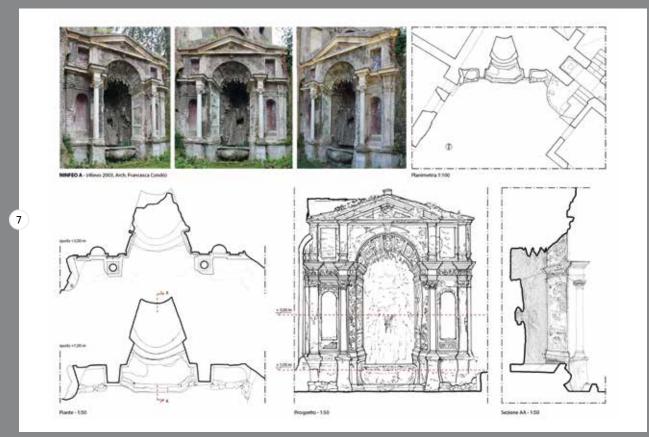
### **PLAN AND ACTIONS**

### Management and planning for Rivaldi - Silvestri Palace

Rivaldi Palace is a place of experimentation in several disciplines, linked to the art and architecture. The project begins with the planning of the actions and the individuation of the tools to implement the plan. The actions can be distinguished in five steps: identification







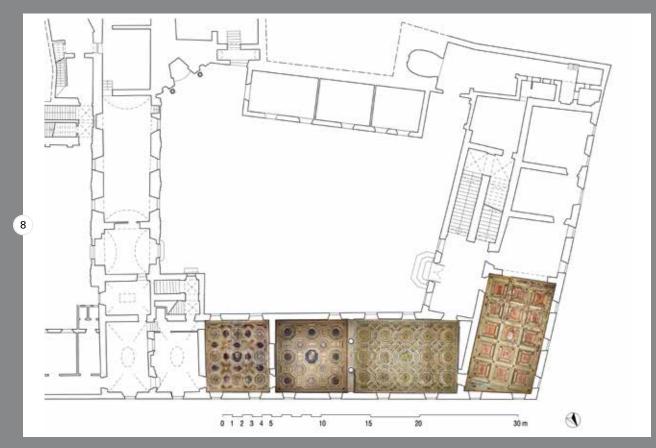




Fig 07-08. Survey and drawings of Ninfeo Piccolo (Little Nymphaeum), by Susanna Pacchetti

> Fig 09. View of the Upper Garden

of the work areas according to a timeline; studies designed to define the state of conservation of the entire complex; preparation of the restoration and enhancement project; setting of a multimedia platform.

The actions take the form of specific tools: definition of the work areas through the awarding of the safety works and safety plan; tendering and awarding of the restoration works following the preliminary/definitive design with timeline, supported by MiBAC funds and others; creation of a multimedia platform for divulgation purposes with relative awarding of the communication services; drafting of a management plan for Villa Silvestri Rivaldi with awarding works again using MiBAC funds or other institutions.

Since 2018, following the first areas made safe, there have been several worksite schools, mainly research and study activities carried out by universities and restoration institutes (Fig 07-08). The site is a concrete place where university lecturers do educational visits to illustrate the management of the restoration site. Moreover, the building offers the opportunity to develop theses and workshops in Restoration. The institutes mainly involved are: the CNR - National Research center; the Sapienza University of Rome - graduate school of architectural and Landscape Heritage; the University of Roma Tre - Master in Heritage Culture; the Central Institute of Restoration MiBACT; OPD - Opificio delle Pietre Dure of Mi-BACT; ICPAL - Central Institute for archives and book pathologies; the Polytechnic of Milan. The participation of students and researchers in the restoration activity has already been a restitution of the building to the public. The restitution of a space to the community is no longer seen as the ultimate goal of the process, but already begins with the planning of ideas on recovery and enhancement.





### THE CHURCH OF SAN GIUSEPPE DEI FALEGNAMI IN Rome. Restoration After the Roof Collapse

### PREMISE

### AUTHORS

Briselda Calliku School of Specialization in Restoration of Monuments -Polytechnic of Milan

Alessandro Bozzetti Studio Croci e Associati

> Fig 01. The collapse of the roof in a photograph of August 30th, 2018, taken by the local Fire Department

Fig 02. Photograph of the construction site from above On August 30<sup>th</sup> 2018, the sudden collapse of the roof in San Giuseppe dei Falegnami church led to the fall of an essential part of the wooden structure and the decorated coffered ceiling below. All the procedures necessary for the building's safety and all the artworks kept at it were promptly activated. In fact, on September 6th, thanks to the professionalism of the technicians in charge of the design and the companies involved, it was possible to start the operations to secure the belfry, which was strongly damaged, and the west tympanum. Subsequently it was possible to prepare the temporary roof to ensure the safekeeping and conservation of the part of the building not involved in the collapse.

The aid of a laser scanner survey carried out before the collapse and the meticulous collection of the rubble on the floor allowed to recover most of the coffered ceiling's parts in order to reassemble them according to the anastylosis method. Thanks to these methods and the accurate analysis of the building, it was possible to redesign all the missing parts. At the same time as the restoration works begin, investigations into the causes of the collapse were started, but the current presence of legal proceedings does not allow to give further information on the matter.



# Restoration week.

3

LEGNAN

57271

...?

Fig 03. Photograph of the construction site from above

=

### **WOODEN STRUCTURES RESTORATION**

Two different companies carried out parallel the structural works of the roof and restoration works of the coffered ceiling. GER Srl performed the first works, and Leonardo Srl the second ones.

The construction site begins with the laying of a new and higher temporary roof and the start of restoration works of the roof and the coffered ceiling. The chestnut wood processing started with constructing a new pair of trusses that had to replace the collapsed ones. The selected beams were suitably shaped and mounted temporarily to check every detail then the trusses were disassembled for the phase of treatment of the wood against biological attacks carried out by immersion, a type considered best for purposes of effectiveness.

First assembled in the ground, the trusses were placed in the lost ones' original position, increasing the support base by two solid chestnut wood shelves. This integration reduces the free span of the bottom chords, which in this case, functions as a support beam for the coffered.

The diagnostic investigations carried out on the ancient chestnut timber of these two trusses still in place, recommended the replacement of both the top chords and the king post. Only the original pair of bottom chords have been kept in place, considering most conservative and risk-free their conservation in situ due to the presence of the underlying coffered.

Fig 04. The situation of the nave after the collapse of the roof

> Fig 05. The temporary cover made for t he safety of the building

These trusses and the new ones have been improved from the original design by adding the struts, whose timber was obtained from the original top chords. Therefore, what remains in place are the two original bottom chords and the two struts, whose chestnut timber dates back to 1600.





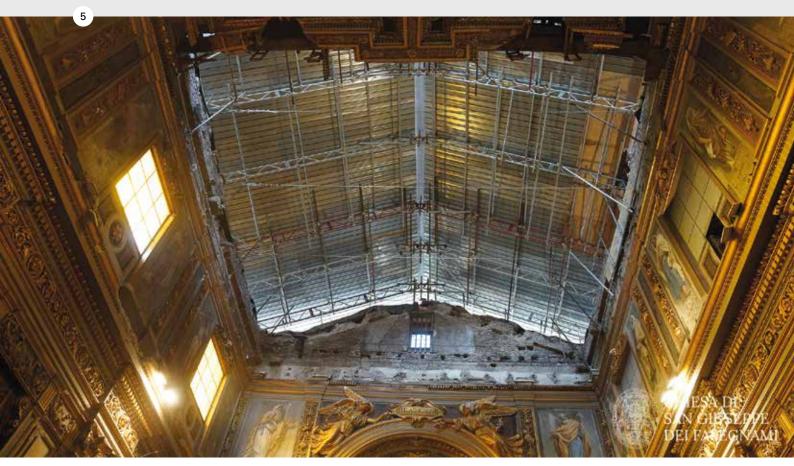
### **COFFERED CEILING'S RESTORATION**

After the collapse, the first works included the meticulous recovery of all the wooden elements found on the floor. The entire surface of the church hall was divided into six chromatically distinct regions. Each recovered wooden part was characterized by the colour of the area where it was found and cleaned, identified, and distinguished even before being taken to the deposit set up in the annexed Oratory. Then it was catalogued with alphanumeric codes based on its original location and then placed in the shelves in the Oratory hall. The indexing of each recovered piece was carried out starting from the data acquired by laser scanning with high-resolution images performed a few years ago on behalf of the Vicariate. The laser scanner survey, integrated with a study of the non-collapsed extrados, made after the disassembly of the roof, was instead the basis for the 3D computerized modelling (BIM) of the entire structure. All these methods combined allowed them to understand the existing geometry and the design of the missing parts.

The anchoring of the sculptural elements was carried out using smooth stainless steel bars with terminal thread, taking advantage of the presence of the original holes present on the statues themselves. Subsequently, the anchoring holes were hidden at the end of the installation with appropriate plastering and gilding.

### **GROUND FLOOR ATTIC RESTORATION**

The entire floor in Carrara and Bardiglio marble was disassembled to consolidate the vault below and reconstruct the part of the damaged flooring. All the marble slabs damaged by the collapse were recovered and reassembled to replace them in new marble with the same original shape.







7



Fig 06. Process of reconstruction and repositioning of the coffered parts with the help of the laser scanner survey

Fig 07. The archiving and cataloguing of the recovered coffered ceiling's fragments

Fig 08. Completed reconstruction of the coffered ceiling

Fig 09. Laying of the collapsed elements in their exact location with the help of the laser scanner survey

36

9





From the very first stages of the existing floor's removal, it was evident that the vault below the flooring was subjected to extremely high loads. For this reason, it was decided to perform an overall lightening of the slab, as well as the reconstruction of the collapsed portion. The weights of the mud-brick filling material, that can be estimated at around 1600/1800 kg/mc, were therefore unloaded from the vault. The stratigraphic reconstruction of the slab involved the laying of lightening blocks in aerated concrete and a completing cast, weighing approximately 600 kg/mc. The intervention, therefore, allowed a lightening of about 1000/1200 kg/mc with a consequent increase in the bearing capacity of the floor and a good connection between the walls

### **GBC HISTORIC BUILDING PROTOCOL**

The church of San Giuseppe dei Falegnami is the first religious building registered for certification according to the GBC Historic Building® protocol. This protocol allows assessing the level of sustainability in renovation and restoration works that stems from the Italian experience in historical and conservative restoration, combined with the expertise of the international LEED protocols. The evaluation system is organized into environmental categories, such as Historical Valence, Sustainability of the Site, Water Management, Energy and Atmosphere, Materials and Resources, Internal Environmental Quality, Innovation in Design and Regional Priority.

Focusing on waste control, the restoration works of the church recovered as much material as possible on-site to reduce the demand for raw materials and waste production. Materials that couldn't be reused were transported and subsequently recycled in specialized collection centres to ensure a waste collection that minimizes waste disposal in landfills or incinerators.

Respect for historical significance was carried out by analyses and investigations to understand the building and orient the design better. The creation of a BIM model allows integrating all the new decorative elements with the existing ones, without damaging them, and identifying the new parts from the existing ones.

### Bibliography

Chiara Falcini, Alessandro Bozzetti, LA CHIESA DI SAN GIUSEPPE DEI FALEGNAMI A ROMA. Dal crollo del 2018 al cantiere avviato il 3 giugno 2019. In RecMagazine Recupero e conservazione n.154, July-August 2019

Don Pierluigi Stolfi, LA CHIESA DI SAN GIUSEPPE DEI FALEGNAMI A ROMA. La ricostruzione della copertura crollata nel 2018. In RecMagazine Recupero e conservazione n.155, September-October 2019

Giovanni Carbonara, LA CHIESA DI SAN GIUSEPPE DEI FALEGNAMI A ROMA. Il completamento di un restauro esemplare. In RecMagazine Recupero e conservazione n.156, November-December 2019

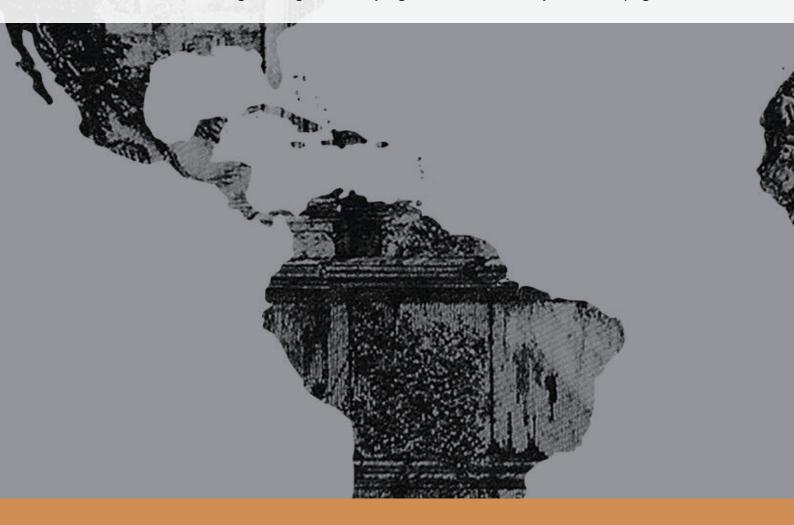
> CHIESA DI SAN GIUSEPPE DEI FALEGNAMI



# International policies for the protection of built heritage

### 25 September 2020 | Sala Pirelli, Italian Trade Agency, Rome

The Restoration Week 2020 involves the most important International Organizations which are playing and active role in promoting and financing the Restoration of Cultural Heritage and Historic assets with testimonial value, as a driver for the development of the tourism, occupation and social life of local territories. The conference to be held on the 25th of September in Rome, is hosting expertise from the main active Italian and International Organization and aims at creating useful future synergies and collaboration among the participants, as a side-support to the Restoration Sector and the promote a strategic bridge of dialogue and new synergies with the "Made in Italy Restoration" programme.







**3:00 to 3:10 pm**<sup>GMT+2</sup> Carlo Maria Ferro *President of ITA Agency* 

**3:10 to 3:20 pm**<sup>GMT+2</sup> Manlio Di Stefano Under-Secretaries Italian Ministry of Foreign Affairs

**3:20 to 3:30 pm**<sup>GMT+2</sup> Sarkis Khoury Lebanese Directorate General of Antiquities

**3:30 to 3:50 pm**<sup>GMT+2</sup> Giulia Facelli *European Commission* 

**3:50 to 4:10 pm**<sup>GMT+2</sup> UNESCO World Heritage Centre

**4:10 to 4:30 pm**<sup>GMT+2</sup> Sameh Naguib Wahba Global Director, Urban, Disaster Risk Management, Resilience and Land Global Practice World Bank

**4:30 to 4:50 pm**<sup>GMT+2</sup> Jonathan Bell Ph.D.Vice President of Programs World Monument Found

**4:50 to 5:10 pm**<sup>GMT+2</sup> Sneska Quaedvlieg-Mihailović Secretary general Europa Nostra Guy Clausse Executive Vice President Europa Nostra

**5:10 to 5:30 pm**<sup>GMT+2</sup> Italian Agency for Development Cooperation

**5:30 to 5:50 pm**<sup>GMT+2</sup> Ermete Realacci *President of Fondazione Symbola* 

**5:50 to 6:10 pm**<sup>GMT+2</sup> Alessandro Bozzetti *President of Assorestauro* 

**6:10 to 6:30 pm**<sup>GMT+2</sup> Debate and Conclusion of the Conference





### quaderni di assorestauro



### YEAR09NR02