

CURRICULUM VITAE



PERSONAL DETAILS

Name

This curriculum has been compiled in accordance to the Italian Legislative Decree n. 196/2003 art.4, and Legislative Decree n. 33/2013 art. 26.

MARCO VAILATI

MAIN WORK EXPERIENCES

- Date
- Name and address of employer
 - Type of employment
 - Main activities

SINCE 2001

Public and private companies

Freelance professional

Assessment and retrofitting of Ministry of interior affairs 7-story building in Kabul, Afghanistan (2021)

International competition for the strengthening of the Hypogea and the realization of the new decking level of the Colosseum's Arena, Rome (2021)

Seismic vulnerability assessment and strengthening of Tuscany regional head quarter RAI Television Centre, Florence (2020)

Seismic improvement of rehabilitation project of the S. Benedetto's Cathedral of Norcia, Perugia, Italy (2020)

Seismic isolation with LRB devices of viaduct Arena S. Antonio, ring road E-O of Naples, NA (2016-19)

Seismic improvement of rehabilitation project of the Mausoleum of Augusto and Augusto Imperatore's square, RM (2015)

Base isolation with lead rubber bearing and sliding bearing for building public housing in south of Italy, Ortona sud, FG (2014)

Structural design for the restoration of church S.M. Paganica after the earthquake of April 6, 2009, AQ (2013)

Structural design for the restoration of church S.F. Martire after the earthquake of April 6, 2009, Poggio Picenze, AQ (2012)

Seismic vulnerability Assessment of reinforced concrete/masonry building located in Corso Cavour 4, property Bank of Italy, BA (2012). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome*

Seismic vulnerability assessment of masonry building located in p.zza Kennedy 9, property Bank of Italy, AN (2012). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome*

Final design of restoration and strengthening of the industrial archaeological ensemble "Cartiera del Papa", Grottaferrata, Rome, RM (2012)

Master plan of seismic retrofitting of the nursery and primary schools "Stazione" and "Mazzini", municipality of Isola del Liri, Frosinone (2012)

Final design and working plan of a warehouse located in Soriano nel Cimino, Viterbo (2011)

Seismic vulnerability assessment and strengthening of the museum of Roman ships, located in Fiumicino, Rome. *Government department responsible for the environment and historical buildings, section of Ostia, Rome* (2010)

Seismic vulnerability assessment of some strategic buildings located in Rome, property of ANAS, Italian authority for planning, design, supervision and maintenance of road and highway networks (2010)

Base isolation with lead rubber bearing of the "Palazzo Fagnoni", a strategic building property of Autostrade per l'Italia, located in Campi Bisenzio, Florence (2010)

Seismic vulnerability assessment of masonry building cluster, located in Viale Trastevere 115/131, property Bank of Italy, RM (2010). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome.*

Seismic vulnerability assessment of reinforced concrete building in via M. Macereto 13, property Bank of Italy, RM (2010). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome.*

Seismic vulnerability assessment of masonry building in via Catanzaro 43, property Bank of Italy, RM (2010). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome.*

Seismic vulnerability assessment of masonry building cluster in via C. Rosso 10 e via C. Felice 49, property Bank of Italy, RM (2009). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome.*

Seismic vulnerability assessment of reinforced concrete structures in via N. Umbra 88, property Bank of Italy, RM (2008). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome*

Assessment of bearing capacity under special static loads of the concrete slab of the Rome's exhibition building, via Nazionale 194, Rome (2007)

Working plan of seismic retrofitting and restoration of masonry building cluster of Graziella, neighborhood of island of Ortigia, Siracusa (2007)

Preliminary and final design of the enlargement of the 2nd medical and surgery school of Sapienza University of Rome, Rome (2007)

Seismic vulnerability assessment of the reinforced concrete/steel building located in Largo Bastia 35-37, property Bank of Italy, RM (2007). *Contract with Department of structural and geotechnical Engineering, Sapienza University of Rome*

Working plan for the conversion to private hospital of an historic residence located in Monteverde Vecchio, in Rome (2006)

Working plan for static retrofitting of a part of masonry building located in the historic centre of Rome (2006)

Working plan for static retrofitting of a building under the effect of differential subsidence of foundation, located in Ponte Galeria, Complesso Commercium, Rome (2006)

Seismic isolation with elastoplastic devices of viaduct Arena S. Antonio, ring road E–O of Naples, NA (2006)

Working plan to building balconies on a multi floors building, located in Tor Marancia, Rome (2006)

Structural preliminary design of the church of SS. Elisabetta e Zaccaria located in Nuovo Salario, Rome (2006)

Structural Working plan for the restoration of a masonry building converted as first aid, located in the facility of Commercium, Ponte Galeria, Rome (2005)

Structural final design of the bridge "Ponte della Scienza" on the Rome's river "Tevere", in collaboration with the company EDIN srl and prof. G. Monti, RM (2005)

Base isolation with lead rubber bearing of a residential building, Ragusa (2004)

Fitting of the private club for live show in Rome's center, Rome (2003)

Structural working plan of a gym, located in Acilia, Rome (2002)

Structural working plan of an astronomic observatory, located in Cervara, Rome (2002)

- Date
- Name and address of employer
 - Type of company
 - Type of employment
 - Main activities

September 1999 – September 2001

PR.O.B.I. srl
Engineering company
Fixed-term associate
Design of land reclamation works, plumping and piping plan, infrastructures

- Date
- Name and address of employer
 - Type of company
 - Type of employment
 - Main activities

September 1998 – January 2000

GEOTECH srl
Engineering company
External advisor
Design of environmental remediation, management of mining activity, computer graphics

- Date
- Name and address of employer
 - Type of company
 - Type of employment
 - Main activities

July 1998 – January 1999

University of Rome Tre
Municipal engineering department
Fixed-term associate
Management of ordinary and extraordinary maintenance of the building property

- Date

September 1997 – July 1998

- Name and address of employer
 - Type of company
 - Type of employment
 - Main activities

Arch. Bruno Moauro, viale dell'Umanesimo 315, Rome
 Architectural firm
 External advisor
 Engineering and architectural Draftsman

EDUCATION AND VOCATIONAL TRAINING

- Date
• Title
Since 2019
Researcher at University of L'Aquila. Research title, "Strengthening of masonry walls with innovative materials".
- Date
• Title
2014-2019
Postdoctoral fellow. Research title, "Uncertainties on the assessment of seismic behavior of masonry and reinforced concrete structures".

Probabilistic assessment of existing structures; innovative infills with plastic joints;
- Main topics/skills
Department of structural and geotechnical Engineering, Sapienza University of Rome
- Name of institution

2013
Postdoctoral fellow through public procedure selecting. Research title, "Effects of Uncertainties on the Assessment of Seismic Behavior of Building Cluster". Announcement published on 06/02/2013
Modeling of uncertainties in seismic risk assessment, probabilistic assessment of MBC, limit analysis of circular shaped structure under seismic loads
Department of structural and geotechnical Engineering, Sapienza University of Rome
- Date
• Title
2011
Postdoctoral fellow through public procedure selecting. Research title, "Seismic Vulnerability Assessment of Masonry Building Cluster". Announcement published on 10/12/2010
Interaction among structural units, stiffness of decks, treatment of intrinsic and epistemic uncertainties
Department of structural and geotechnical Engineering, Sapienza University of Rome
- Main topics/skills
- Name of institution
- Date
• Title
2011
Ph.D. in structural engineering with dissertation of the thesis "*Effects of Intrinsic and Epistemic Uncertainties on the Seismic Response of Masonry Building Cluster: Formulation of a non Linear Analytical Procedure and Sensitivity Analysis*".
Downloadable at following link: <http://hdl.handle.net/10805/1193>
Research activities in the field of structural engineering: structural reliability, risk analysis, sensitivity analysis, structural modeling, structural strengthening with advanced techniques.
Department of structural and geotechnical Engineering, Sapienza University of Rome
- Main topics/skills
- Name of institution
- Date
• Title
2004
II level University Master Degree (grade: 27/30).
High proficiency in design and achievement of reinforced concrete structures under seismic loads, concerning new construction as well as restoration of existing building.
University of Rome Tre
- Main topics/skills
- Name of institution
- Date
• Title
2003
Civil engineering student (100 credits to the master degree on the total of 300)
In-depth knowledge of principal topics in civil engineering, especially in the field of earthquake engineering: structural mechanics, dynamic of structures, risk and sensitivity analysis, Modeling with software Adina, Sap, Cosmos, Straus.
School of engineering, Sapienza University of Rome
- Main topics/skills
- Name of institution
- Date
• Title
1999
Architect license n.12853, register of architects of Rome and province
Complete and independent management of the project of Architecture and Engineering
- Main topics/skills

• Name of institution Association of architects of Rome and province

• Date

1998

• Title

Master's degree in Architecture - Architectural Engineering (grade: 110/110)

• Main topics/skills

In-depth knowledge of principal topics in architecture, with particular attention to structural design

• Name of institution

University of Rome Tre

ABILITIES AND PERSONAL SKILLS

NATIVE SPEAKER

ITALIAN

FOREIGN LANGUAGE

ENGLISH

[PURSUANT TO THE COMMON EUROPEAN
FRAMEWORK OF REFERENCE FOR
LANGUAGES (CEFR)]

• Reading

B1

• Writing

B1

• Speech

A2

• Oral comprehension

B2

RELATIONAL SKILLS

GOOD SOCIAL SKILLS MATURED DURING THE ACADEMIC AND PROFESSIONAL ACTIVITIES, PARTICIPATING IN SEMINARS, CONFERENCES, RESEARCH GROUPS/INSTITUTIONS

ORGANIZATIONAL SKILLS

THE MANAGEMENT OF PROFESSIONAL PROJECT, THE ACADEMIC EXPERIENCE CONCERNING THE MANAGEMENT OF RESEARCH PROJECT, THE ACTIVITY AS A TUTOR OF DEGREE THESIS AND PH.D., THE TEACHING COURSES, HAVE HAD DEEP INFLUENCE ON THE PERSONAL ORGANIZATIONAL SKILLS OF THE AVAILABLE RESOURCES AND ABOUT THE ACHIEVEMENT OF SET GOALS

TECHNICAL SKILLS

THE PARTNERSHIP ACTIVITY WITH PUBLIC AND PRIVATE RESEARCH ORGANIZATION CONCERNED:

- processing of automatic procedure for structure safety assessment under seismic loads of special typologies as arches, vaults, domes
- numeric simulation in the field of civil engineering with FEA tools as COMSOL, ADINA, STRAUS, SAP2000
- basic technical programming with MATLAB, MATHCAD, MATHEMATICA
- mechanical and thermal tests on innovative walls made by recycled plastic joints
- tests on prototypes finalized to study the reinforcement FRP techniques
- seismic vulnerability assessment of isolated bridge/building and building in cluster
- algorithms to solving problems of numerical analysis of complex urban textures
- algorithms implementation in dedicated computer programs on windows operative system, in partnership with STS software house in Catania (see www.stsweb.it)
- architectural and structural design at any detail level, preliminary design, final design, working plan of complex structures and infrastructures

MONOGRAPHIC PUBLICATIONS AND CHAPTERS

1. Vailati, M., Monti, G., Di Gangi, G. (2018). Earthquake-safe and Energy-Efficient Infill Panels for Modern Buildings. In: Rupakhety R., Ólafsson S. (eds) *Earthquake Engineering and Structural Dynamics in Memory of Ragnar Sigbjörnsson*. ICESD 2017. Springer book series "Geotechnical, Geological and Earthquake Engineering", DOI 10.1007/978-3-319-62099-2_12. Springer, Switzerland, vol. 44, p. 233-261
2. Vailati, M., Monti, G. (2016). Earthquake-Resistant and Thermo-Insulating Infill Panel with Recycled-Plastic Joints. In: D'Amico S (ed) *Earthquakes and their Impact on Society*. Springer Natural Hazard, DOI 10.1007/978-3-319-21753-6_16. Springer, Switzerland, p. 417-432
3. Monti, G., Vailati, M., Marnetto, R. (2016). Base Isolation and Translation of a Strategic Building Under a Preservation Order. In: D'Amico S (ed) *Earthquakes and their Impact on Society*. Springer Natural Hazard, DOI 10.1007/978-3-319-21753-6_16. Springer, Switzerland, p. 433-448.
4. Vailati, M., Massa, L., (2013). *Tecniche di calcolo non lineare per la progettazione e l'adeguamento di edifici e ponti in zona sismica secondo le NTC-08*. GOING TO REVIEW

5. Marnetto, R., Massa, L., Vailati, M., (2004). *Progetto sismico di strutture nuove in cemento armato ai sensi dell'ordinanza n.3274 del 08/05/2003 e successive integrazioni n.3316*, Edizioni Kappa, Roma, pp. 1-150, ISBN: 88-7890-554-2

PUBLICATION ON INTERNATIONAL SCIENTIFIC JOURNALS

6. Bianco, V., Monti, G., Belfiore, N. P., Vailati, M. Multibody Kinematics of the Double Concave Curved Surface Sliders: From Supposed Compliant Sliding to Suspected Stick-Slip. June 2021. *ASCE Engineering Issues* 26 (3). DOI: 10.1061/(ASCE)SC.1943-5576.0000581
7. Vailati, M.; Mercuri, M.; Angiolilli, M.; Gregori, A. Natural-Fibrous Lime-Based Mortar for the Rapid Retrofitting of Heritage Masonry Buildings. *Fibers* 2021, 9, 68. <https://doi.org/10.3390/fib9110068>
8. Vailati, M.; Monti, G.; Bianco, V. Integrated Solution-Base Isolation and Repositioning-for the Seismic Rehabilitation of a Preserved Strategic Building. *Buildings* 2021, 11, 164. <https://doi.org/10.3390/buildings11040164>
9. Rahmat Rabi, R.; Vailati, M.; Monti, G. Simplified Pushover Analysis for Rapid Assessment of Shear-Type Frames. *Appl. Sci.* 2021, 11, 11711. <https://doi.org/10.3390/app112411711>
10. Khan, N.A.; Monti, G.; Nuti, C.; Vailati, M. Effects of Infills in the Seismic Performance of an RC Factory Building in Pakistan. *Buildings* 2021, 11, 276. <https://doi.org/10.3390/buildings11070276>
11. Angiolilli, M.; Gregori, A.; Vailati, M. Lime-Based Mortar Reinforced by Randomly Oriented Short Fibers for the Retrofitting of the Historical Masonry Structure. *Materials* 2020, 13, 3462. <https://doi.org/10.3390/ma13163462>
12. Di Gangi, G., Monti, G., Quaranta, G., Vailati, M., Demartino, C. (2020). *A simplified analytical procedure for seismic analysis of timber light-frame shear walls*. NED University Journal of Research, Special Issue on First South Asia Conference on Earthquake Engineering, pp. 173-180.
13. Vailati, M., Monti, G., (2012). *Strengthening of masonry walls by transverse connection through arfp rods: experimental tests and analytical models*. NED University Journal of Research, Thematic Issue on Earthquakes, pp. 61-72.

NATIONAL AND INTERNATIONAL CONFERENCE PROCEEDINGS

14. Di Gangi, G., Monti, G., Quaranta, G., Vailati, M., Demartino, C. (2019). A simplified analytical procedure for seismic analysis of timber light-frame shear walls. *Proceedings of the 11th South Asia Conference on Earthquake Engineering (SACEE'19)*. Karachi, Pakistan, February 21-22
15. Di Gangi, G., Demartino, C., Quaranta, G., Vailati, M., Monti, G., Liotta, M. (2018). Timber shear walls: numerical assessment of the equivalent viscous damping. *Proceedings of the 9th International Conference on Computational Methods*. vol. 5, p. 929-938, G. R. Liu, Patrizia Trovalusci, Rome, Italy
16. Vailati, M., Monti, G., Khazna, M.J., Realfonzo, R., De Luliis, M. (2016). Probabilistic seismic response analysis of existing masonry structures. *Proceedings of the 16th International Brick and Block Masonry Conference. "Masonry in a World of Challenges"*. June 26-30, Padova, Italy.
17. Vailati, M., Monti, G., Realfonzo, R., Khazna, M.J., De Luliis, M., Valeri, G. (2015). A simplified approach for the seismic assessment of existing masonry structures using few analyses. *Proceedings of the 4th International Workshop DISS_15. Dynamic Interaction of Soil and Structure*. November 12-13, Roma, Italy.
18. Vailati, M., Monti, G., Di Gangi, G. (2015). Multi-Performance Innovative Infill Panels. *Proceedings of 2nd ACE Advances in Civil and Infrastructure Engineering*, Vietri sul Mare, Italy, 12-13 June.
19. Vailati, M., Monti, G., Di Gangi, G. (2015). Seismic assessment of Masonry building cluster with a dedicated NLA software. *Proceedings of the 2nd International Symposium on Advances in Civil and Infrastructure Engineering*. Vol. I, Vietri sul Mare (SA), Italy.
20. Monti, G., Vailati, M., Marnetto, R. (2014). Seismic retrofitting of a strategic building through base isolation and translation. *Second European Conference on Earthquake Engineering and Seismology*, Istanbul, Turkey, August 25-29.
21. Monti, G., Vailati, M., Gaetani, A., Paolone, A. (2014). Analytical models for seismic assessment and strengthening of masonry arches. *Proceedings of the 9th International Masonry conference*, Guimarães, Portugal, July 7-9.
22. Vailati, M., Monti, G. (2014). Recycled-plastic joints for earthquake resistant infill panels. *Second European Conference on Earthquake Engineering and Seismology*, Istanbul, Turkey, August 25-29.

23. Vailati, M., Calusi, A., Monti, G. (2014). Environmentally friendly joints for seismic resistant infill panels. *Proceedings AICAP 2014: Structures in the urban environment*, Bergamo.
24. Vailati, M., Monti, G. (2014). Lo studio di aggregati edilizi con software di calcolo non lineare dedicato. *Atti del Workshop Safe Monuments*. Vol. I (in italian), Firenze.
25. Monti, G., Vailati, M., (2013). *VENUS: Un programma per l'analisi non lineare semplificata di aggregati edilizi*. 15TH convegno ANIDIS "L'ingegneria sismica in Italia", Padova, 30 giugno - 4 luglio 2013, vol. 1
26. Monti, G., Vailati, M., Gaetani, A., Paolone, A., (2013). *Modelli analitici di capacità per archi di muratura rinforzati soggetti ad azioni sismiche*. 15TH convegno ANIDIS "L'ingegneria sismica in Italia", Padova, 30 giugno - 4 luglio 2013, vol. 1
27. Monti, G., Vailati, M., Marnetto, R., Ducci, G., Schiavi, C., (2013). *Adeguamento sismico di un edificio strategico mediante isolamento alla base e traslazione*. 15TH convegno ANIDIS "L'ingegneria sismica in Italia", Padova, 30 giugno - 4 luglio 2013, vol. 1
28. Vailati, M., Monti, G., Khazna, M.J., Napoli, A., Realfonzo, R., (2012). *Probabilistic Assessment of Masonry Building Clusters*. 15TH world conference of earthquake engineering, Lisbon, Portugal, 24-28 september 2012.
29. Vailati, M., Monti, G., (2011). *L'analisi di aggregati edilizi con solai rigidi e flessibili*. 14TH convegno ANIDIS "L'ingegneria Sismica in Italia", Bari, 18-22 settembre 2011, Vol. 1.
30. Menegotto, M., Monti, G., Salvini, S., Vailati, M., (2010). *Improvement of transverse connection of masonry walls through AFRP bars*. 5TH international conference on frp composites in civil engineering, Beijing, China, 27-29 september 2010, vol. 1.
31. Vailati, M., Menegotto, M., Monti, G., (2010). *Solidarizzazione di muri ortogonali tramite barrette di afrp: modelli analitici di capacità e riscontri sperimentali*. Sicurezza e conservazione dei beni culturali colpiti da sisma strategie e tecniche di ricostruzione ad un anno dal terremoto abruzzese, Venezia, Università IUAV, 8-9 aprile 2010.
32. Menegotto, M., Monti, G., Salvini, S., Vailati, M., (2009). *Solidarizzazione di muri ortogonali tramite barrette di AFRP*. Wondermasonry 2009 workshop on design for rehabilitation of masonry structures, Lacco ameno, Ischia, 8-10 ottobre 2009, vol. 1
33. Monti, G., Vailati, M., (2009). *Vulnerabilità degli aggregati edilizi con incertezze intrinseche ed epistemiche*. Wondermasonry 2009 Workshop on Design for Rehabilitation of Masonry Structures, Lacco Ameno, Ischia, 8-10 Ottobre 2009, vol. 1
34. Monti, G., Vailati, M., (2009). *Analisi di vulnerabilità sismica di edifici in aggregato: un caso esempio*. 13TH convegno ANIDIS "L'ingegneria sismica in Italia", Bologna, 28 giugno - 2 luglio 2009, vol. 1
35. Monti, G., Vailati, M., (2009). *Procedura di analisi non lineare statica per la valutazione sismica degli edifici in aggregato*. 13TH convegno ANIDIS "L'ingegneria sismica in Italia", Bologna, 28 giugno - 2 luglio 2009, vol. 1

SPECIALIST POSTGRADUATE COURSES

2018/19 – Certified training course on OpenSees

2016 - Certified training course on COMSOL Multiphysics concerning Mechanics and fluid-dynamics

2009 – Course on masonry constructions "Modeling, seismic safety and conservation of ordinary and monumental buildings"

2009 – Course of "Seismic Reliability Analysis of structures"

2008 – Course of "Random dynamic"

2008 – Nonlinear structural analysis

2000 – 40 hours of the advanced Professional Training Course, at the International Centre for Mechanical Sciences (CISM) of Udine "Ordinary and pre-cast reinforced concrete structures, design with advanced techniques"

1999 - FEM-STRAUS course at University of Padova, faculty of engineering, "On the use of the Finite Element Software in linear and nonlinear analysis"

IMPORTANT ROLES IN ACADEMIC ACTIVITIES

2018 - Professor of retrofitting of buildings at Master EuroProject - Sapienza University of Rome - Director Prof. Giorgio Monti

2016 - Professor of retrofitting of buildings at Master EuroProject - Sapienza University of Rome - Director Prof. Giorgio Monti

2016 - Ph.D co-tutor, work's title "A simplified methodology to estimate the seismic reliability of masonry structures affected of high uncertainties"

2015 - Ph.D co-tutor, work's title "Seismic behavior of masonry buildings: probabilistic assessment"

by using a simplified procedure”

2013 – Reviewer of ASCE journal, American Society of Structural Engineering

2012 – Member of the national organizing committee of the 6TH International Conference on FRP Composites in Civil Engineering - CICE 2012

2012 – M.Sc. degree co-tutor, work's title *“Environmentally friendly joint for seismic resistant infill panels”*

2011 – Teaching. Lessons on masonry structures - II level University Master Degree PEC, *design, execution and control of building in seismic area*. Fondazione Campus Studi del Mediterraneo, LU.

2011 – Teaching. Lessons on masonry building cluster - II level University Master Degree, *assessment, control and reduction of seismic and environmental risk*. Sapienza University of Rome, RM.

2011/12 – Teaching. Lessons of structural analysis and design – Master's degree course, Faculty of Architecture “Valle Giulia”, RM.

2010/11 – Teaching. Lessons of structural analysis and design – Master's degree course, Faculty of Architecture “Valle Giulia”, RM.

2011 – Tutor of master's degree, title *“Seismic assessment of existing masonry buildings”*

2011 – Co-tutor of Ph.D. thesis, title *“ Probabilistic assessment of masonry building clusters”*

2011 – Tutor of master's degree, title *“Effects of uncertainties on seismic response of masonry building cluster”*

2010 – Tutor of master's degree, title *“Seismic vulnerability assessment of masonry building cluster located in Crotona, RC”*

2009/10 – Teaching. Lessons of structural analysis and design – Master's degree course in restoration, Faculty of Architecture “Valle Giulia”, RM.

2009 – Studies for restoration of historical center of Paganica, destroyed by earthquake of april 6, 2009, L'Aquila, AQ

2008/09 - Teaching. Lessons of structural analysis and design – Master's degree course in restoration, Faculty of Architecture “Valle Giulia”, RM.

2008/09 – Teaching. Lessons of structural analysis and design – Master's degree course in restoration, Faculty of Architecture “Valle Giulia”, RM.

PATENTS AND PROTOTYPES

2016 - *Plastilink. Earthquake resistant and eco-friendly plastic joints*. Application n. 102016000041131, ministry of economic development. More detail at: www.probeitalia.com

2016 - Small scale model of infill made by 3d print. Exhibited to Maker Faire Rome. More detail at: <http://www.makerfairerome.eu/it/>

2012 - *Environmental friendly joints made by recycled plastic, for seismic resistant infill panels*. Patent n.1380440, ministry of economic development. More detail at: www.probeitalia.com

2010 – *Roofing system of mobile panels with variable configuration, realized with environmentally friendly criteria and space compactions using a cylindric hinges system*.

Group ORGANICALTIME. Project realized with private financing and the patronage of municipality of Palermo.

2002 – *Inflatable roofing with horizontal ribs*. Group ALTERSTUDIO, realized by PLASTEKO Milano and exhibited to EUROSUN expo of Bologna.

LOCATION AND LAST REVISION

ROME, 30/03/2022

SIGNATURE

Marco Vailati