CEAS

ADVISOR TO BUILD THE FUTURE

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VIALE GIUSTINIANO 10
20129, MILANO

About us

Advisor to build the future

A group of professionals.
A great experience of integrated
and multidisciplinary engineering.

CEAS means passion for the Project, the answer to complex challenges. CEAS means the application of integrated engineering at its highest standards of quality and sustainability. This means not only the maximum professional work performance for both large and small projects, but also long-term customer satisfaction.

CEAS is a team of professionals devoted to the continuous improvement of their work, thanks to the application of forty years of experience gained in the field that grows from day to day.
All this is CEAS, the maximum experience of vision becoming a feasible project.

TODAY

Today CEAS is the sole interlocutor for large and small projects of minimum and maximum complexity. A unique solution for project management and site supervision. A careful, scrupulous, but also creative and pragmatic partner.

43 years of experience

more than 60 experts

1.300 projects carried out in the third millennium

3.000.000 cubic meters under construction

550 million euros in works designed in the past 5 years

150 open work orders

OUR TEAM

A team of specialized professionals with significant experience in the realization of complex civil engineering works, both in Italy and abroad. Members of our team are passionate, motivated, and always consider work as an opportunity for personal and professional growth. Both when dealing with large, complex works, and when working on smaller, less elaborate projects.

Partners:
— Bruno Finzi
— Patrizia Polenghi
— Mauro Savoldelli
— Giovanni Canetta
— Lorenzo Mariani
— Luca Rossini
— Gianluca Pittelli
— Alessandro Sabato
— Maxine Finzi

A growing group

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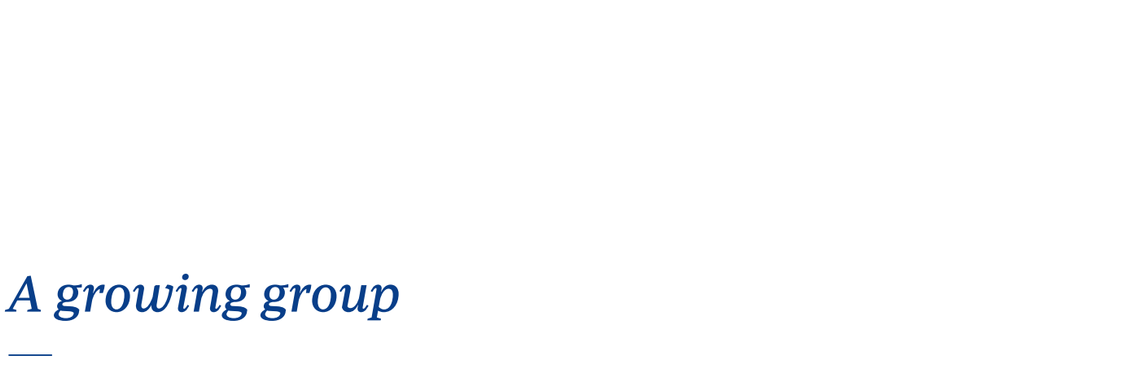
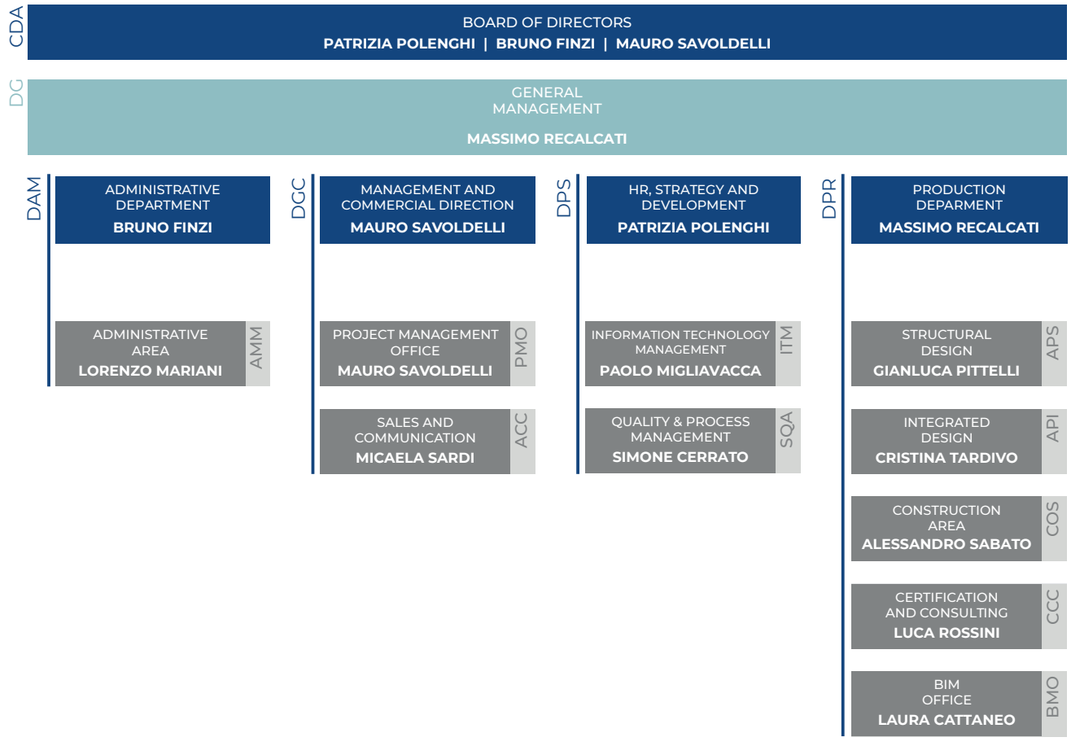
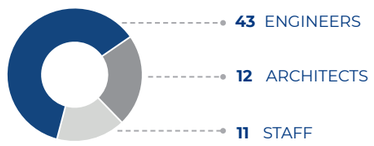


Manpower growth.



Company organization chart.



Vision

We design regeneration

We offer our skills and experience to contribute to a collective project, committing ourselves to tackling the real challenge of the future: urban regeneration.

CEAS believes that regenerating doesn't only mean reconstructing a building or redeveloping an abandoned area. Instead, it must be a real effort to make cities sustainable and more human-friendly, limiting land consumption and implementing infrastructures and services. For years now we have been working on the regenerative process, both from a professional point of view - by participating in some of the most important regeneration interventions in the city (*Fondazione Prada, Porta Nuova Garibaldi, Scalo Porta Romana, New Stadium Milan*), and by implementing cultural awareness and initiatives to generate a debate on the issue. We recently published the ebook *"Changing Cities. Ideas and reflections for an effective, sustainable and collaborative urban regeneration"*. Our goal is to translate the intentions and purposes of the projects into a language that can be understood by all the players, united in a single network: the revitalized city.

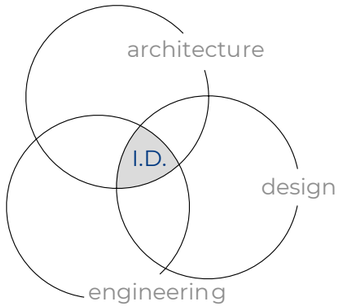
New Stadium of Milan.

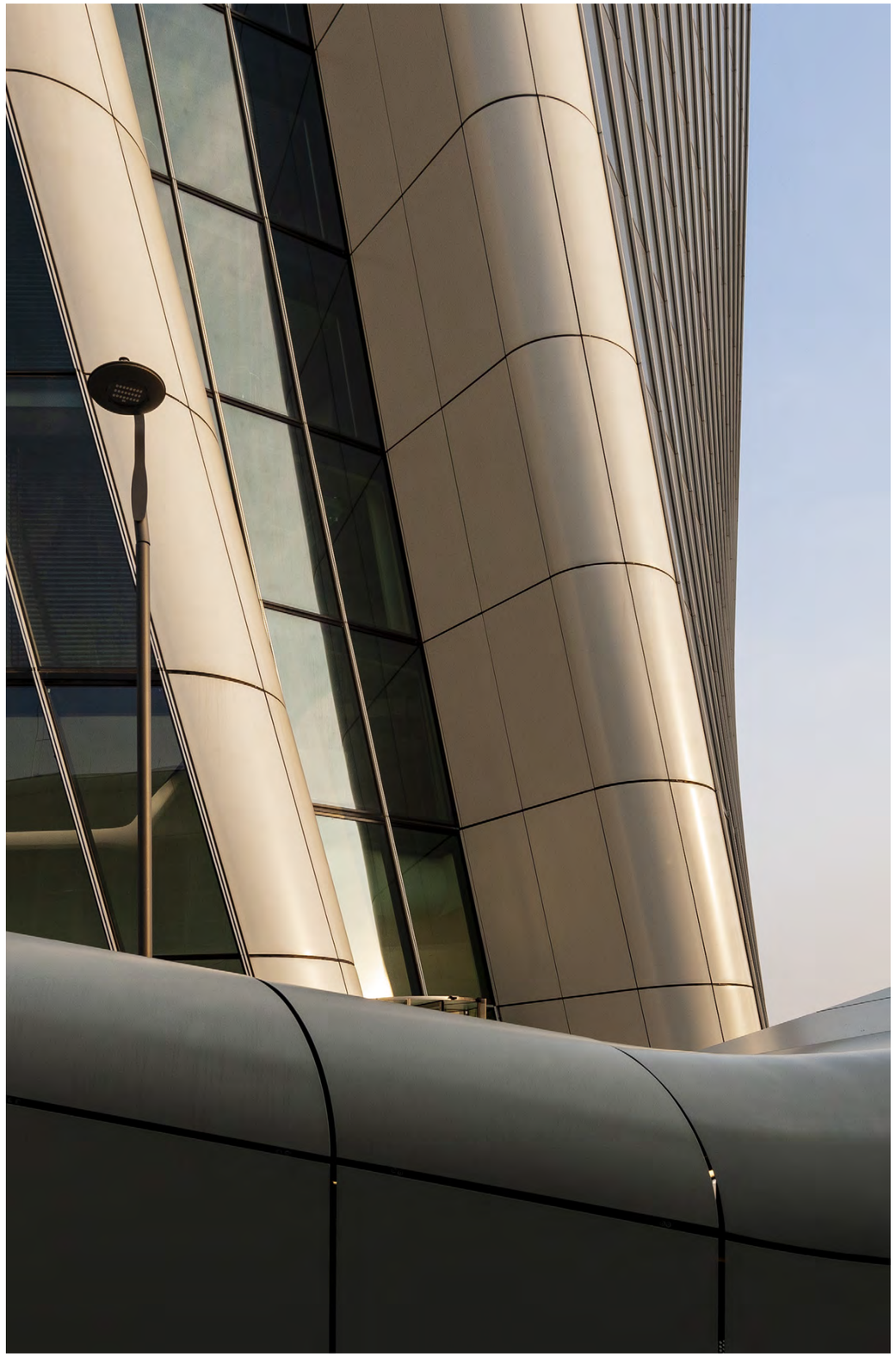
Our services

Integrated design

An integrated product embracing all disciplines, from architecture to structures, plants, environment, territory, and safety.

We acquired an important integrated design experience in infrastructure works, civil buildings and urban regeneration of former industrial areas. The final executive and structural design is carried out internally for all civil engineering issues; we also coordinate a well-established team of external experts. This ensures an integrated product in all the disciplines, from architecture to structures, plants, environment, territory, and safety.
We can follow the whole development of a work, from its design to its construction. We support the Artistic Direction in the conception of the work; we acquire the necessary building permits; we assist the client in the procurement phase and guarantee the project execution through a thorough construction supervision “DL”.





City Life Complex, Milan.

INTEGRATED DESIGN RESPONSIBILITY MATRIX

DESIGN PHASES

ACTIVITIES

	1. *Concept design*	2. *Schematic design*	3. *Detailed design*	4. *Construction design*	5. *Construction docs and superv.*
Architect					
Interior design					
Permitting	■	■	■	■	■
Coordination	■	■	■	■	■
Executive Architect	■	■	■	■	■
Structural design	■	■	■	■	■
Geotechnical design	■	■	■	■	
Geology	■	■			
MEP	■	■	■	■	■
Fire prevention	■	■	■	■	■
Acoustics		■	■	■	■
LEED/WELL certification	■	■	■	■	■
Construction supervision “DL”					■
Health & Safety (CSP, CSE, RL)		■	■	■	■
Environmental consultancy	■	■	■	■	■
Energy certification (APE)					■
MEP Certification & Commissioning					■
Final structural certification				■	■

ARCHITECT

CEAS

Activities performed by CEAS

Activities coordinated by CEAS and carried out by leading specialized companies

Structural engineering

Competence and experience allow us to conceive extremely performing solutions, functional to the needs and criticalities of the site.

In the field of civil works, we offer design services, works management and static testing. We have specific skills of structural material technology and a considerable experience in the redevelopment of damaged historical buildings. In the field of industrial facilities, the knowledge of production processes allows us to adopt extremely performing solutions, in compliance with the site requirements and its critical issues.
As to structural calculation, thanks to our historical origins, we offer expert advice on static, dynamic, linear and non-linear numerical calculation, supporting structural and geotechnical design in all engineering sectors.

Gae Aulenti Square, Milan.

Geotechnical engineering

The specific knowledge of construction methods today constitutes the basic know-how of our design.

We offer advice on the analysis of different types of foundations and, in general, on all types of structures interacting with the soil. The specific knowledge of building methods, acquired through many years of experience in the construction site, is today the essential know-how of our design. We can analyze and check the construction phases of tunnels and underground structures, providing optimized solutions like dimensioning and construction site set-up.

Intesa San Paolo Tower, Turin.

Civil and Construction engineering

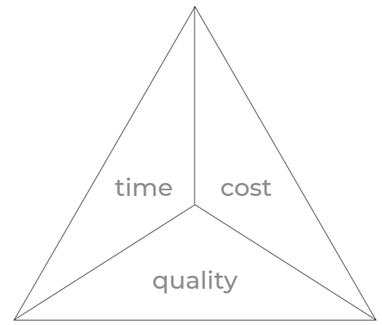
Customized solutions that respond to the performance of the project and meet the client's requirements.

Our team of engineers and architects can engineer all the architectural components of a project, from the material and formal transposition of the concept design to an integrated and congruent construction system of technological solutions, supplying the best answers to the project performances.
The experience in the science of conventional and innovative materials, as well as our knowledge of their production, processing and installation methods, guarantees the identification of customized and optimized solutions of both industrial and one-off products and components.

Project Management

We plan the execution of the project by checking and verifying the achievement of all its milestones and objectives.

In the field of Project Management we apply all of our knowledge. This, together with the personal skills and experiences of our Project Managers, translate into the achievement of the project objectives and the satisfaction of our client's requirements.
Our Project Managers accompany the project in all its phases, from design to construction. To us, each project is unique and complex. Through a continuous process of planning, execution and control of the various resources, we ensure compliance with the constraints of time, cost and quality, constantly ensuring communication among all stakeholders.



Construction supervision

We supervise the construction work to safeguard the successful completion of the project, compling with the relevant building regulations, quality standards and design provisions.

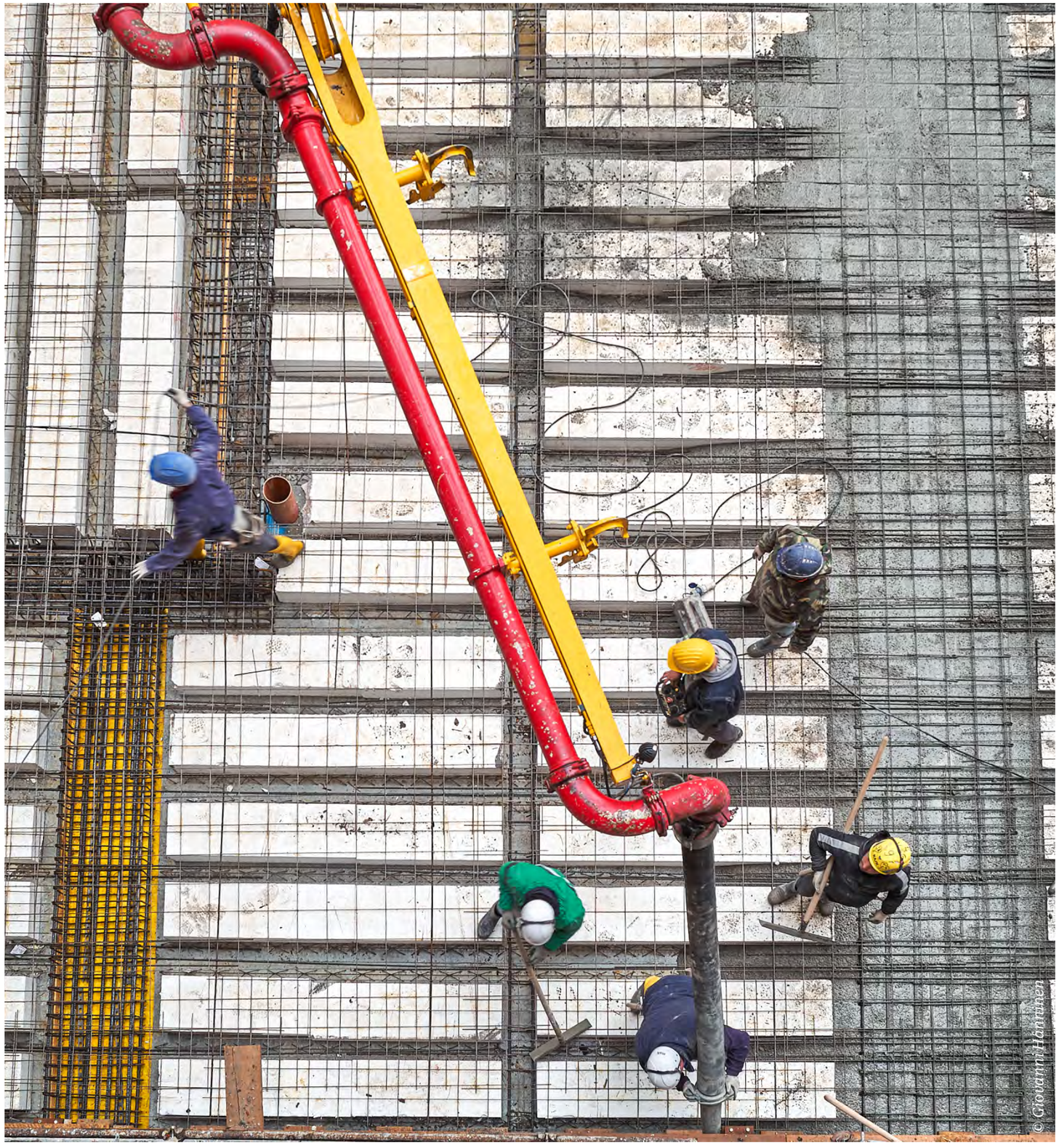
We provide professional construction supervision to implement and execute the client's project effectively and in-line with the specified technical documentation and Project Management guidelines. Our experienced team of experts ensure all work conforms to the construction permit, guaranteeing its realization in full compliance with current building and safety regulations. Throughout the construction process, we scrupulously monitor intervention times and costs, so that the final result meets the Client's objectives.

Torre Velasca, Milan.

Worksite safety

Our approach helps improve working conditions, increases site productivity and decreases the overall construction cost.

Our approach to safety is based on the principle of ensuring a climate of mutual respect and relaxation in the working environment, which reduces risks at the base, contributes to improving working conditions, increases the productivity of the construction site and decreases the overall cost of construction. Our activity of safety coordination in the design and construction phase of a work is based on a continuous cycle of analysis, evaluation, organization and control of all processes.
We have over 20 years of experience in the field, combining worksite experiences with the specialized knowledge of the different disciplines, in a process that we consider an integral and synergistic part of our design practice, for a result of quality and control of time and costs on behalf of our clients.

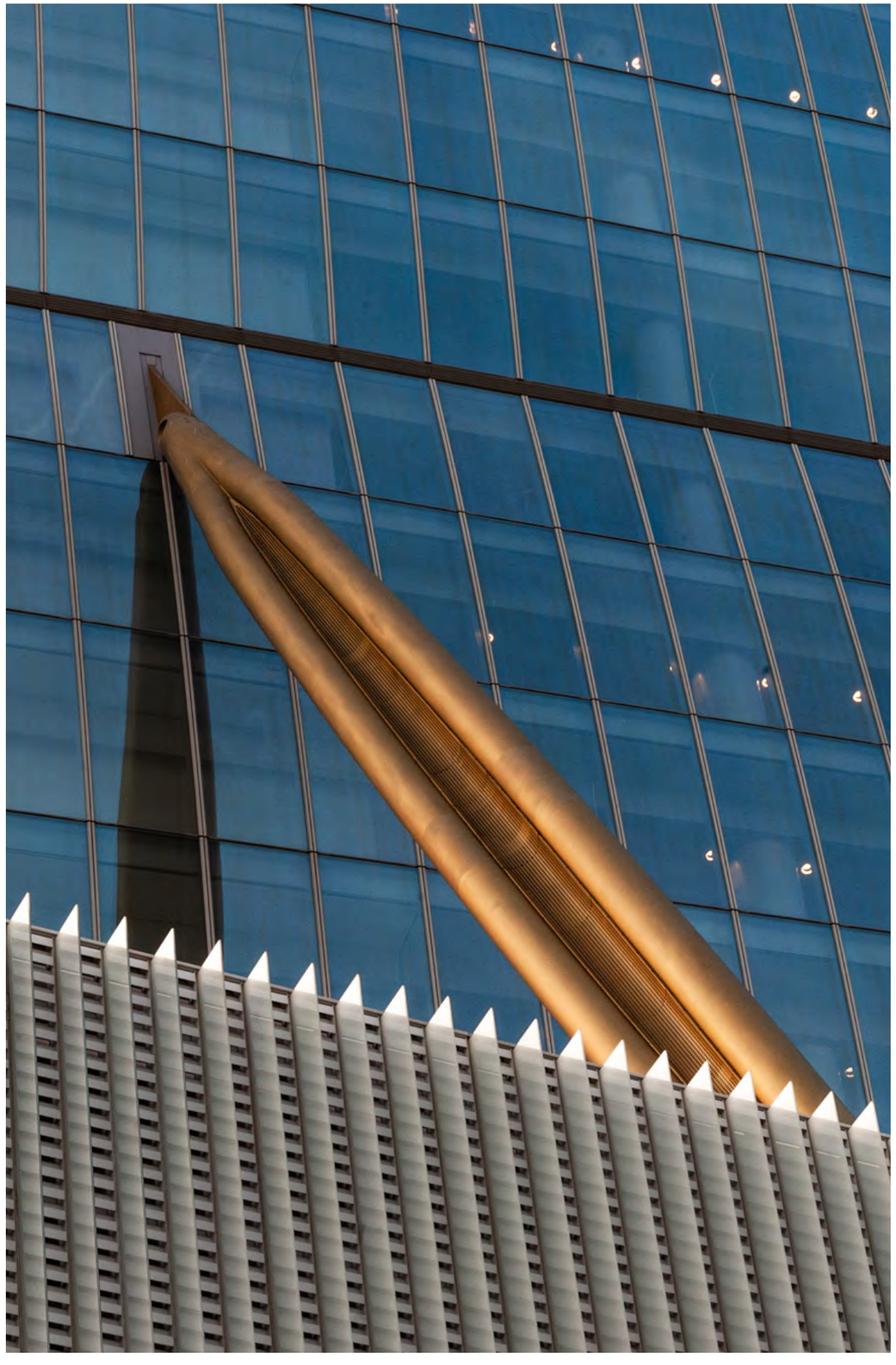


Bettinelli 3, Milan.

Structural certification, CIS and consulting

A complete service for evaluating the performance and adequacy of the work as defined by current building regulations.

We perform final testing of structures of various types according to Law 1086/1971 and the D.P.R. 380/2001. We gained extensive experience in the field of administrative and technical testing of public work aimed at verifying its compliance with the technical and economic requirements defined in the design phase. We also issue certificates of structural static performance according to the Building Regulations of the Municipality of Milan, by adopting the guidelines for the verification of buildings in force within the municipal area.
We also support our clients by offering technical advice and assessment consulting in the event of disputes relating to the building construction.

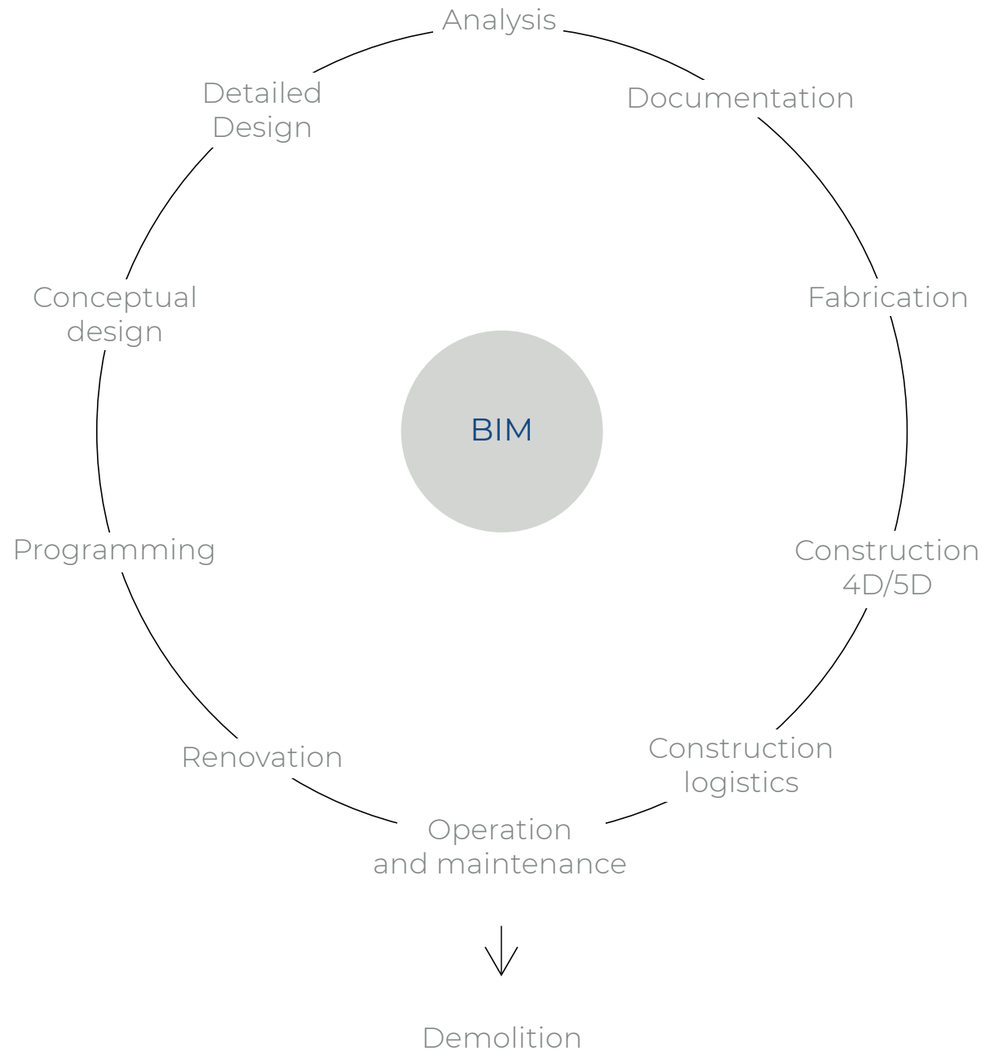


City Life Complex, Milan.

Building Information Modeling

The integrated management of all the geometric and informative data of the construction, throughout its entire life cycle.

With BIM we offer our clients the digitalized management of processes by developing a collaborative work approach. Thanks to this innovative tool, we guarantee the integrated management of all the geometric and informative characteristics of the construction, throughout its life cycle, from the programming and design phases, to those of construction and maintenance. We provide our clients with the IT infrastructure for the collection and organized management of data, ensuring accessibility, traceability and storage. This does not mean simple modeling of projects, but complete management potential, which stem by validating the models and thus elevating the design to much more than a simple three-dimensional representation of the future construction. At CEAS we have paved the way for a major change of mindset, offering our clients further opportunities for efficiency and quality.



BIM 45

Bim45 is the graphic sign conceived to inaugurate the fifth dimension of CEAS.
A sustainability and competitiveness statement that marks CEAS' 45th year of activity (1980-2025) and the adoption, by the Italian regulatory system, of the guidelines that CEAS practices and pursues, now summarized in Bim45.


GreenPeo

Our approach

Our approach

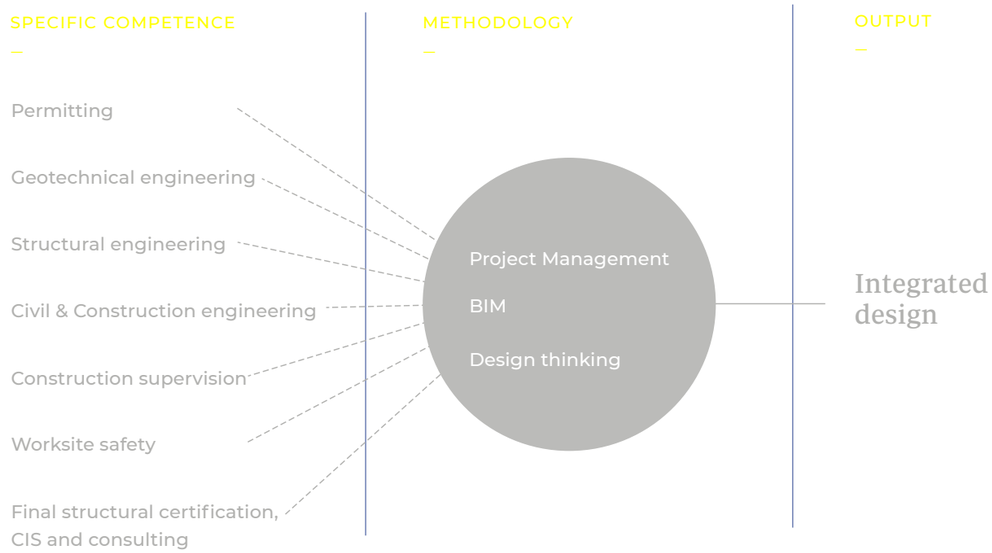
Construction, experience, devotion.

At CEAS, we're not just advisors; we're creative and pragmatic partners. Our team consists of diverse engineering and specialized souls that converge and work synergistically to deliver excellence in every project.

Similar to an orchestra, each professional skill set harmonizes seamlessly to unveil both complex and straightforward integrated engineering solutions, consistently meeting the highest standards of quality and sustainability.

OUR INTEGRATED SKILLS

At CEAS, we elevate our projects by seamlessly integrating specialized skills through advanced methods and tools. This approach ensures that we consistently deliver exceptional quality results.



Main areas

Main areas

A wide range of fields and applications.

We design buildings and structures that adapt to evolving demands – whatever the intended use of the asset, our distinctive design condenses our technical knowledge with the requirements of the architectural project, always taking into account sustainability and the impact on the community.
Creativity and flexibility allowed us to gain experience in the design and construction management of assets spanning from urban scale to infrastructure, workplaces, commercial, industrial, residential buildings and complexes.

RESIDENTIAL

Apartment complexes, villas, towers, student housing

COMMERCIAL

Retail, shopping centers, medical centers, restaurants

OFFICES

Business, research studios, laboratories

HOSPITALITY

Luxury hotels, SPA, guesthouses

GENERAL INTEREST

Exhibition centers, public halls, cultural hubs

INFRASTRUCTURAL

Roads, bridges, tunnels, underground parkings, railways

INDUSTRIAL

Manufacturing, heavy industrial buildings, research and development

LOGISTICS

Wearhouses, storage and distribution, data centers

SPORT & LEISURE

Sports halls, stadiums, outdoor and indoor halls

Gae Aulenti Square, Milan.


FONDAZIONE PRADA

Portfolio

Iconic projects

CEAS

City Life

Area
Commercial

Activities
- Final structural certification

7
Urban Regeneration

1
Urban Regeneration

Torre Intesa Sanpaolo BIM 45

Area
Commercial

Activities
- Control and verification of the structures' construction project
- Assistance to general construction supervision "DL" in the preparation of tenders
- Structural construction supervision "DL"
- Assistance to final structural certification

2
Sustainability

Eataly Green Pea BIM 45

Area
Commercial

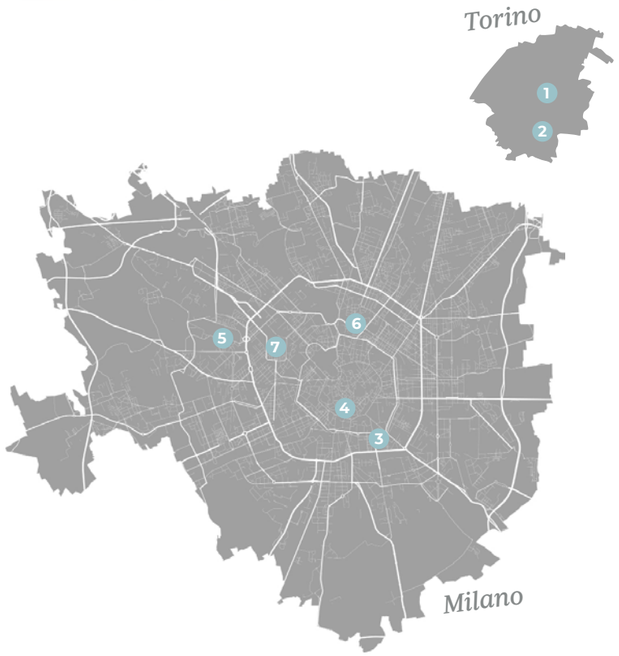
Activities
- Preliminary, developed and detailed structural and geotechnical design
- Structural construction supervision "DL"

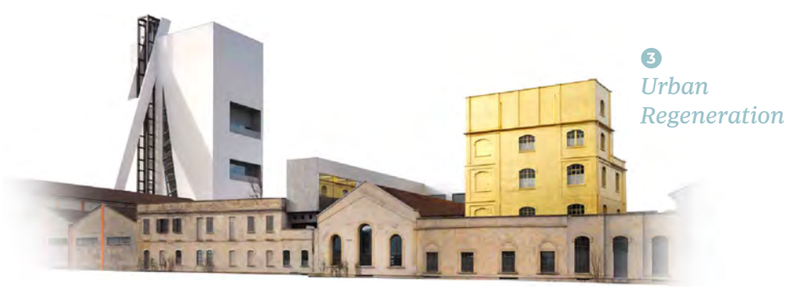
6
Urban Regeneration

Porta Nuova Garibaldi

Area
Commercial

Activities
- Structural construction supervision "DL"
- Monitoring of present and adjacent buildings
- Assistance to the construction site
- Assistance to the in-progress structural certification
- Study of flows / viability of the underground car park





3
Urban Regeneration

New Milan Stadium

Area
Sport

Activities
- Development of the Economic Technical Feasibility Study (PFTE)
- Technical coordination of the project team during the Public Debate

5
Urban Regeneration

4
Redevelopment

Torre Velasca BIM 45

Area
Commercial

Activities
- Preliminary, developed and detailed structural design
- Façade renovation project
- Construction supervision "DL" for restoration, façade renovation, and structural work

Fondazione Prada Museum

Area
Exhibition

Activities
- Developed design for the issue of the building permit
- Coordination of construction documents design
- General and specialistic construction supervision (structures, mechanical and electrical systems, civil works)
- Safety design and safety inspection coordination

Intesa Sanpaolo Tower

Harmonizing space, light and functionality

BIM 45

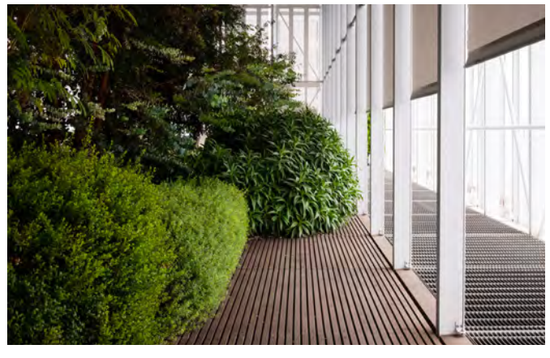
Activity
3D modeling of structures.
Document management in the construction supervision “DL” phase.

Division
Structural design

Design phase
- Structural construction supervision

Software
Tekla

Lead engineers
- Technical manager: Ing. B. Finzi



Location
Corso Inghilterra 3, Torino

Year
- Construction supervision “DL”: 2008 – 2015

Client
Jacobs Italia SpA

Concept design
Renzo Piano

Area
Offices

Activities
- Control and verification of the structures’ detailed project
- Assistance to general construction supervision “DL” in the preparation of tenders
- Structural construction supervision “DL”
- Assistance to final structural certification

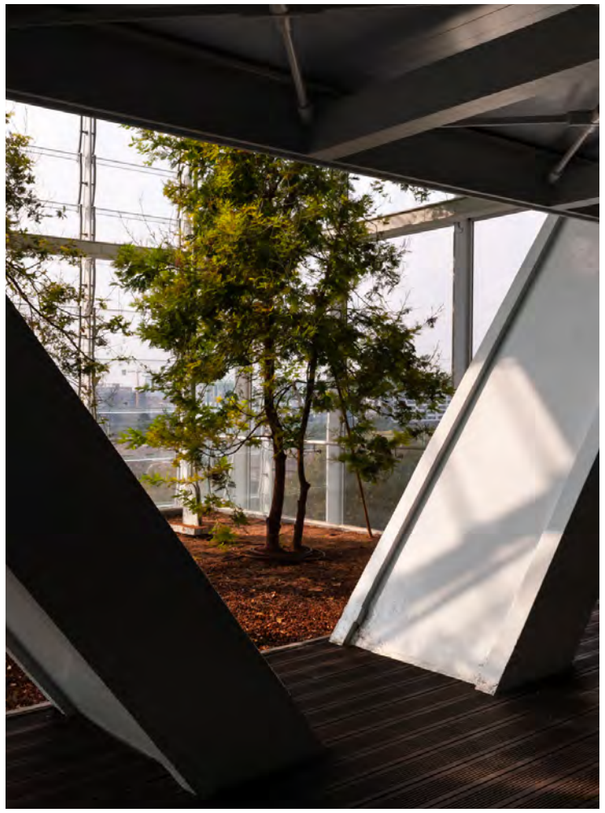
Project cost
300.000.000,00 €

Structure cost
112.600.000,00 €

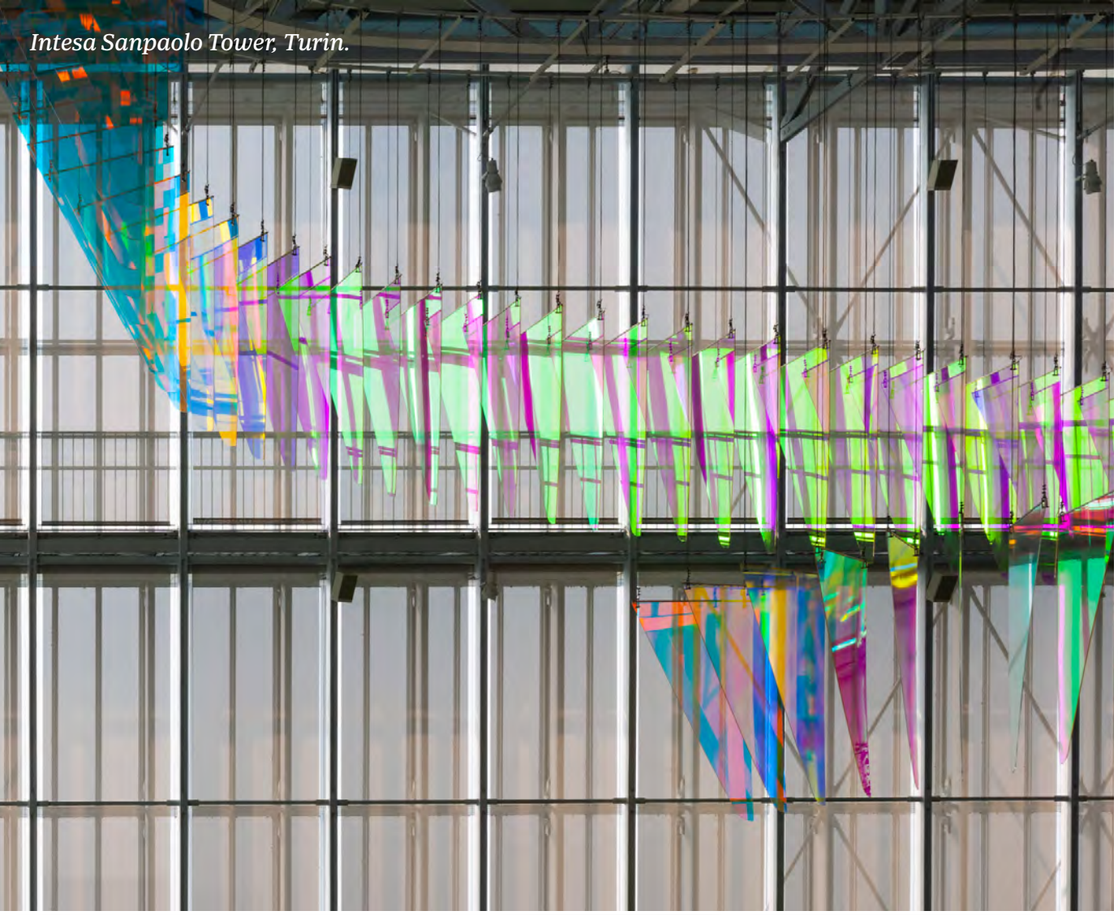
Size
- GFA: 50.000 sqm
- GDA: 107.500 sqm approx.
- n. underground floors: 6 - n. floors above ground: 37
- Height: 160 m approx.

Certifications obtained
LEED Platinum “sustainable building management” category

Lead engineers
- Ing. Bruno Finzi
- Ing. Luca Rossini



Intesa Sanpaolo Tower, Turin.



Eataly Green Pea

Total energy sustainability

Location
Turin

Year
- Design: March 2018 – June 2020
- Execution: September 2019 – December 2020

Client
Eataly Real Estate s.r.l.

Concept design
Negozio Blu Architetti Associati / ACC Naturale Architettura

Area
Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Structural construction supervision “DL”

Project cost
25.000.000,00 € (est.)

Structure cost
9.000.000,00 €

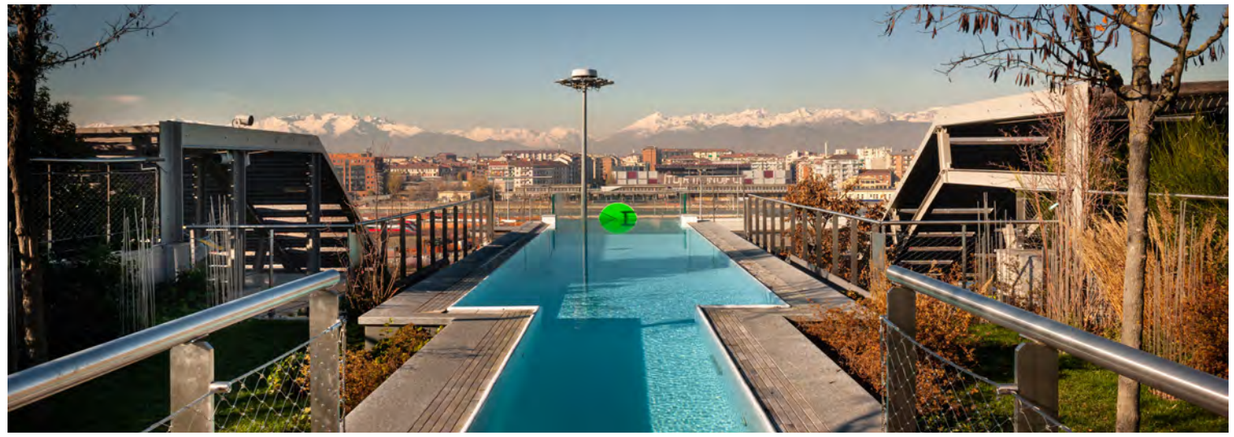
Size
- GFA floor: 10.500 sqm - GBA: 24.000 sqm - Sales area: 5.600 sqm
- Services, restaurant and wellness area: 4.900 sqm
- N. retail spaces: 35 - N. parking: 620

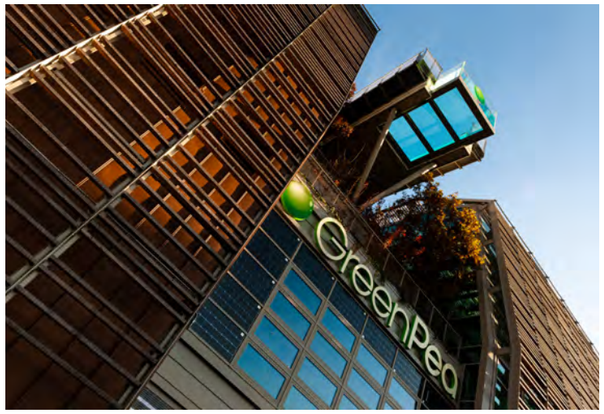
Certifications obtained
Protocollo ITACA

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
New construction

Sustainability
The choice of steel as the main material is due to its mechanical performance, but also by its features of reuse and contribution to the circular economy





BIM 45

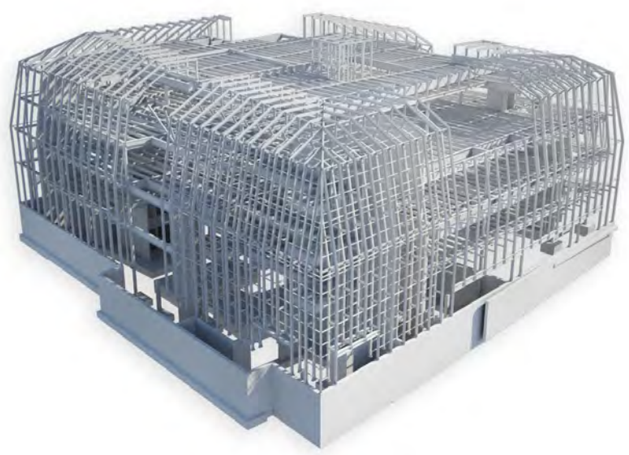
Activity
3D modeling of structures.
Exctraction of documents from model.
Coordination with the architectural and plant engineering disciplines

Division
Structural design

Design phase
- Preliminary design
- Developed design
- Detailed design

Software
Tekla

Lead engineers
- Technical manager: Ing. B. Finzi
- Senior engineer: Ing. M. Savoldelli
- BIM Coordinator: Ing. L. Cattaneo



Eataly Green Pea, Turin.

Fondazione Prada Museum

Multidisciplinary application in the multicultural space

Location
Largo Isarco 2, Milan

Year
- Construction supervision “DL”: 2010 – 2017

Client
Prada SpA

Concept design
OMA - Rem Koolhaas

Area
Exhibition

Activities
- Developed design for the issue of the building permit
- Coordination of construction documents design
- General and specialistic construction supervision “DL” (structures, mechanical and electrical systems, civil works)
- Safety design and inspection coordination

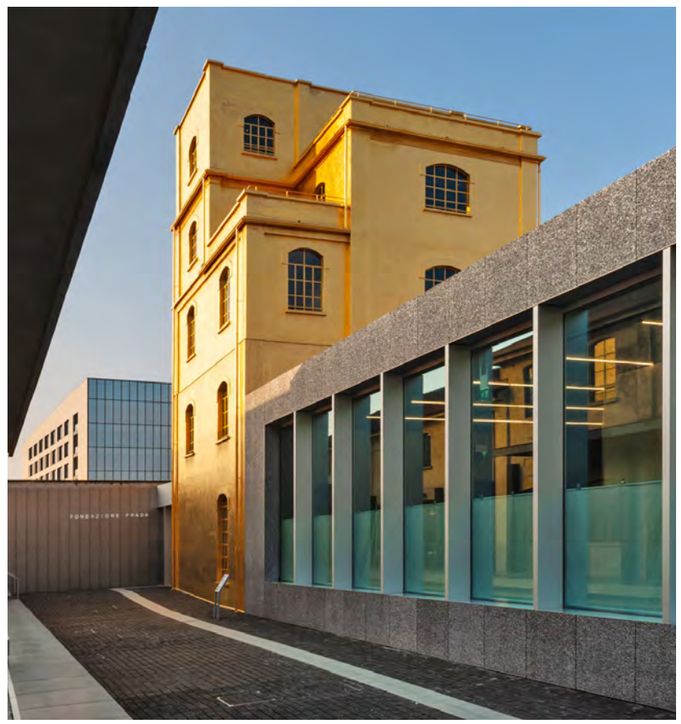
Project cost
75.217.225,71 €

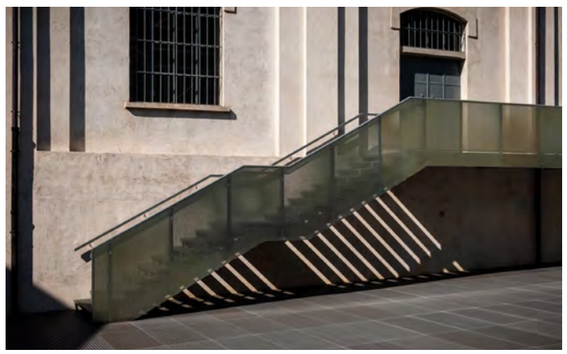
Structure cost
29.242.150,18 €

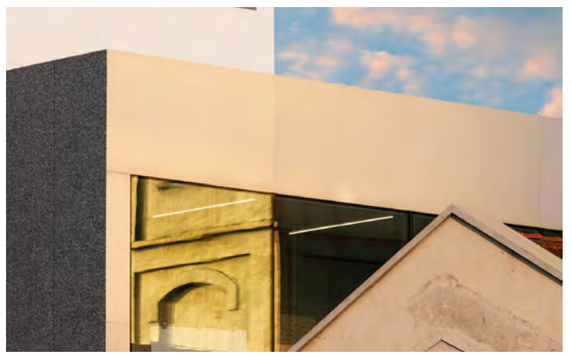
Size
- 19.000 sqm
- 10 buildings

Lead engineers
- Ing. Patrizia Polenghi
- Ing. Bruno Finzi
- Ing. Valter Carni

Regulatory framework
Building renovation and new construction







Fondazione Prada, Milan.

Torre Velasca BIM 45 LEED

Refurbishment of an icon

Location
Piazza Velasca, Milan

Year
- Design: November 2019 – July 2021
- Construction supervision “DL”: November 2020 – ongoing

Client
PRELIOS SGR

Concept design
Studio BBPR

Area
Offices
Residential

Activities
- Preliminary, developed and detailed structural design
- Façade renovation project
- Construction supervision “DL” for restoration, façade renovation, and structural work

Size
- GFA: 18.971 sqm
- GBA: 25.755 sqm

Certifications obtained
LEED Gold

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
Seismic retrofit

Porta Nuova Garibaldi

Reuniting the city, redeveloping the urban fabric

Location
Piazza Gae Aulenti, Milan

Year
- Construction supervision “DL”: 2008 - 2012

Client
Hines Italia SGR SpA

Concept design
César Pelli

Area
Offices

Activities
- Structural construction supervision “DL”
- Monitoring of present and adjacent buildings, verticality checks of Tower A
- Assistance to the construction site
- Assistance to the in-progress structural certification
- Study of flows / viability of the underground car park

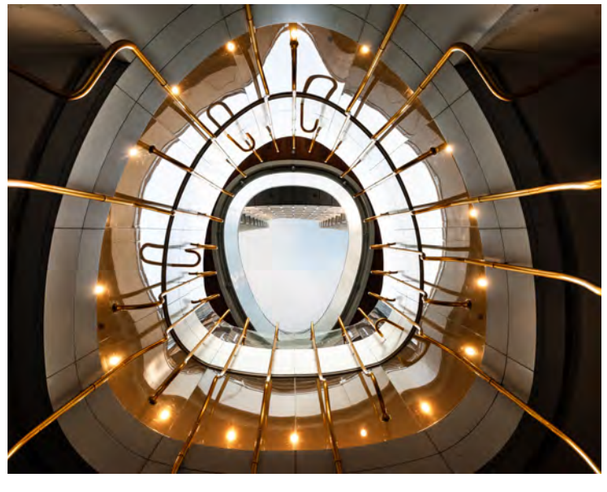
Structure cost
67.000.000,00 €

Size
- Over 290.000 sqm
- 231 m height of Unicredit tower
- 1.113 car park slots

Certifications obtained
LEED Gold

Lead engineers
- Ing. Giovanni Canetta
- Ing. Bruno Finzi
- Ing. Luca Rossini

Regulatory framework
New construction



Porta Nuova Garibaldi, Milan.

City Life

High technology

Location
Piazza Tre Torri, Milan

Year
- 2011 - 2021

Client
CityLife S.p.A.

Concept design
Zaha Hadid
Daniel Libeskind
Arata Isozaki

Area
Commercial / Offices

Activities
- In-progress and final structural certification (*Collaudo statico ongoing d'opera e finale delle opere strutturali*)

Project cost
n/a €

Lead engineers
- Ing. Bruno Finzi
- Ing. Luca Rossini

Hadid Tower

Year
- 2014 - 2019

Structure cost
42.026.318,0 €

Libeskind Tower

Year
- 2015 - 2020

Structure cost
16.570.000,00 €

Isozaki Tower

Year
- 2011 - 2016

Structure cost
70.911.257,00 €

City Life, Milan.

New Milan Stadium

Technical-economic feasibility study

Location
Piazzale Angelo Moratti, Milan

Year
- 2019 - 2023

Promoters
- A.C. Milan Spa
- F.C. Internazionale Milan Spa

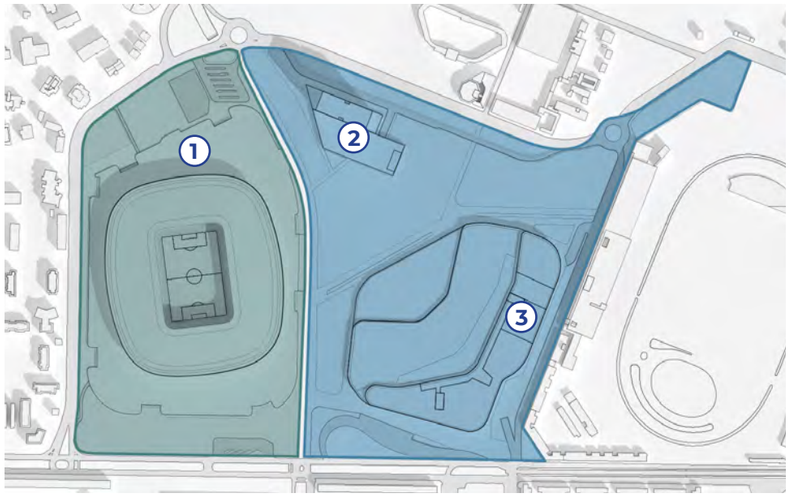
Concept design
Populous

Activities
- Development of Economic Technical Feasibility Study (PFTE)
- Technical coordination of project team during Public Debate

Size
- Territorial area ST: 280.916 sqm
- New stadium's seats: 60.000 - 65.000
- Tortal build surface: 196.297 sqm

Lead engineers
- Project coordinator: Ing. Patrizia Piera Polenghi

Relevant aspects
- New stadium that enhances the the teams' competitive power in the international arena, consolidating their sport leadership
- New zero-emission stadium with reduced visual and acoustic impact
- Energy masterplan introducing innovative systems with high ecological efficiency for a "Nearly Zero Energy Building" NZEB
- Construction of a urban park with double the usable green spaces, with consequent de-pavement of the areas
- Hydraulic efficiency with significant increase in the filtering capacity
- Accessibility system to the sectors defined by the most innovative principles of sustainable and shared mobility
- Car free area dedicated to soft mobility
- New vehicle connectivity system with reconstruction of the Patroclus underpass for underground access to the district
- Construction site development divided into phases that guarantee the usability of the Meazza Stadium and optimizes the duration of the intervention. This also aims at minimizing the impact of the construction site on the district, reducing emissions and improving materials management



BUSINESS GOALS
The scope of the large urban function of the intervention is made up of publicly owned areas circumscribing a surface area of 280,916 square meters.
Purpose: to create a large sports facility divided into distinct sectors:

1 Stadium sector
Housing the New Stadium of Milan

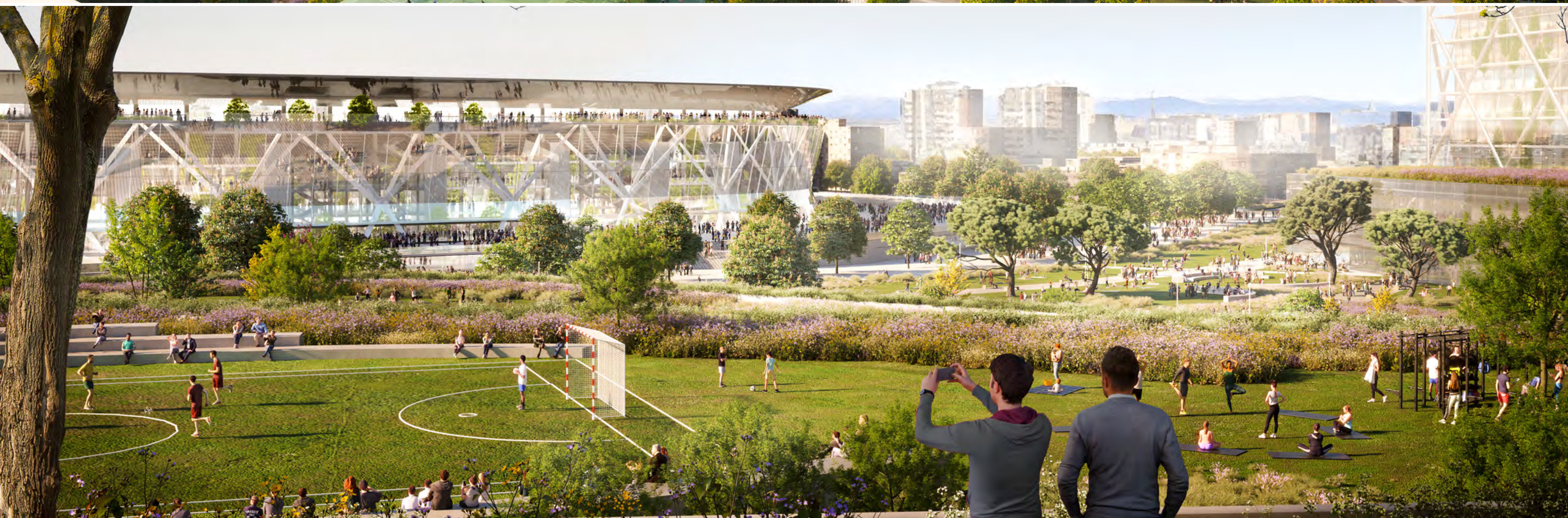
2 Multi-Purpose sector
Hosting offices, hotels and congress centers

3 Sport & Entertainment sector
Commercial, entertainment and sports functions

OBJECTIVE 1
To build the stadium of Milan, a modern and efficient facility capable of respecting the most innovative technological standards of sustainability and safety

OBJECTIVE 2
Urban regeneration, with the creation of an internal pedestrian area, connections to the city center and the refurbishment of a part of the current "G. Meazza " stadium

San Siro Masterplan.



Commercial & Offices

Casa BFF

BIM 45

LEED

People at the center

Location
Milan

Year
- Design: february 2022 - december 2022
- Execution: january 2023 - december 2024

Client
BFF Bank SpA

Area
Offices / Exhibition

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Structural construction supervision “DL”

Project cost
33.500.000 €

Structure cost
9.800.000 €

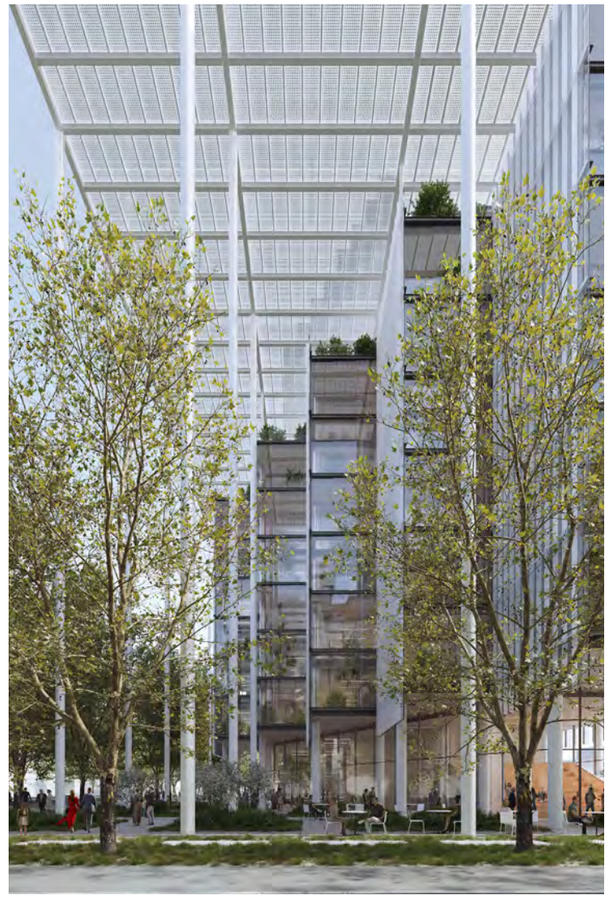
Size
- SLP: 7.350 sqm
- GBA: 19.774 sqm
- Parking spaces: 97

Certifications obtained
LEED Platinum

Lead engineers
- Ing. Bruno Finzi
- Ing. Gianluca Pittelli

Regulatory framework
New construction

Relevant aspects
- Energetic “Flying Carpet”
- Post-tensioned slabs



Ivory BIM 45 LEED

Aesthetics and functionality

Location
Milan

Year
- Design: november 2021 - ongoing

Client
COIMA SGR S.p.A.

Architect
Piuarch

Area
Offices / Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Structural construction documents design
- Architectural design and interdisciplinary coordination during the construction document design phase

Project cost
22.000.000,00 €

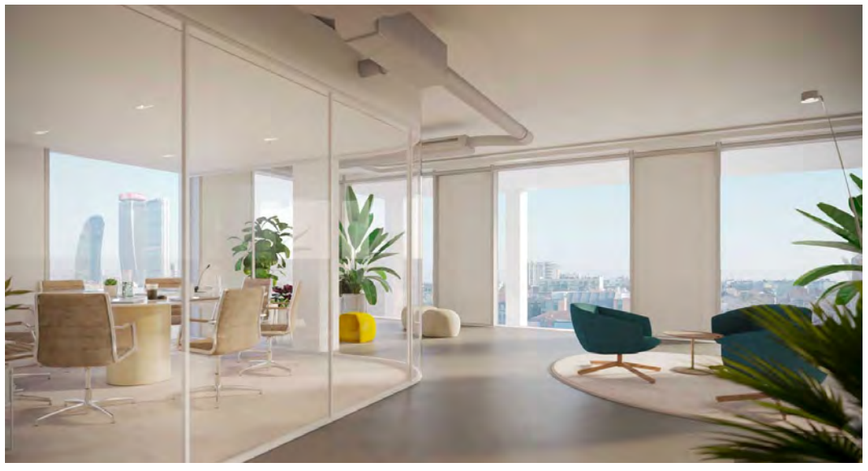
Structure cost
4.500.000,00 €

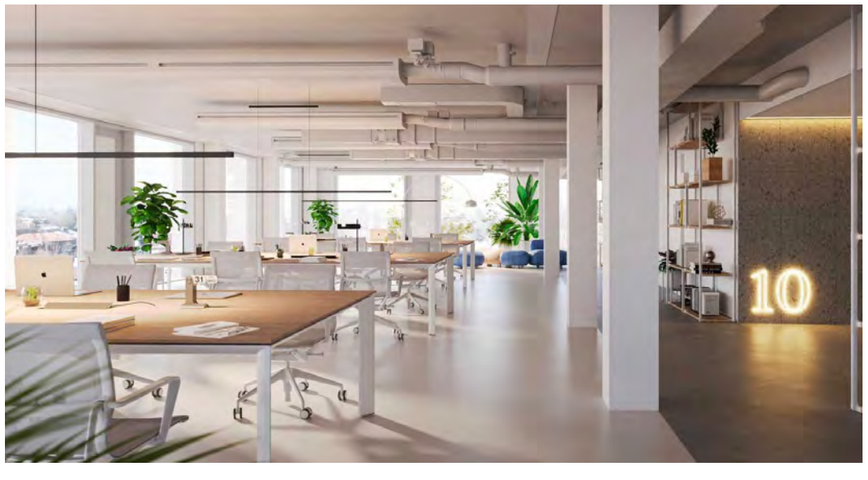
Size
- Total surface: 14.000 sqm
- 12 floors above ground
- 1.400 sqm of panoramic terraces

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Davide Emmanuello

Regulatory framework
Seismic retrofit

Relevant aspects
- Seismic and static retrofit of elevations and foundations, for a renovation project involving raising and expansion
- Addition of structural elements from the 8th floor upwards for the elevation and installation of a photovoltaic canopy
- Delicate temporary support activities for the conversion of internal structures to accommodate the new functional layout (relocation of pillars, shafts, and increased floor areas)





Villaggio Olimpico BIM 45

An Olympic athletes' home

Location
Scalo di Porta Romana, Milan

Year
- Design: may 2021 - december 2022
- Construction: january 2023 - december 2025

Client
COIMA SGR S.p.A. (ESG City Impact Fund)

Area
Hospitality / Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project cost
140.000.000 €

Structure cost
35.000.000 €

Size
Underground: 25,000 sqm - Above ground: 20,000 sqm
GBA: 55.000 sqm

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
New construction designed in compliance with the NTC'18

Relevant Aspects
6 buildings of 9 floors each in reinforced concrete, intended for hotel and future student housing, stand out above a common basement measuring 80 x 300 m. Squares, public spaces, green areas, and retail spaces complete the entire ground floor podium.

The project includes architectural addendum in structural steel - horizontal connections, planned for interconnecting the buildings at above-ground levels. Additionally, two historical buildings are structurally reinforced for seismic and static retro-fit purposes. Particularly significant is the new wooden roof of building H, featuring timber truss systems with steel elements.

Balduccio da Pisa

Keyword: reuse

Location
Via Balduccio da Pisa 15, Milan

Year
- Design: 2022 - ongoing

Client
Savills IM SGR SpA

Area
Offices / Retail

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Detailed architectural design
- Interdisciplinary coordination throughout all project phases
- General construction supervision “DL”
- Structural and geotechnical construction supervision “DL”
- Safety design coordination / safety inspection coordination
- Ongoing and final structural certification

Estimated project cost
35.000.000 €

Size
- Total area: 16.716 sqm
- Built-up area: 6.600 sqm
- Construction area: 12.166 sqm
- 270 parking spaces underground and/or above ground

Lead engineers
- Arch. Michelangelo Siracusa
- Ing. Mauro Savoldelli
- Arch. Luciano Miano
- Ing. Raimondo Salaris

Regulatory framework
Building renovation

Mercanti 21

Metropolitan luxury

Location
Via Mercanti 21 / Piazza Cordusio, Milano

Year
2020 - 2021

Promoter
Generali Real Estate SGR SpA

Client
Impresa Percassi Spa

Area
Commercial / Retail

Activities
- Architectural construction documents design
- Structural construction documents design
- Construction documents design coordination

Project cost
9.500.000,00 €

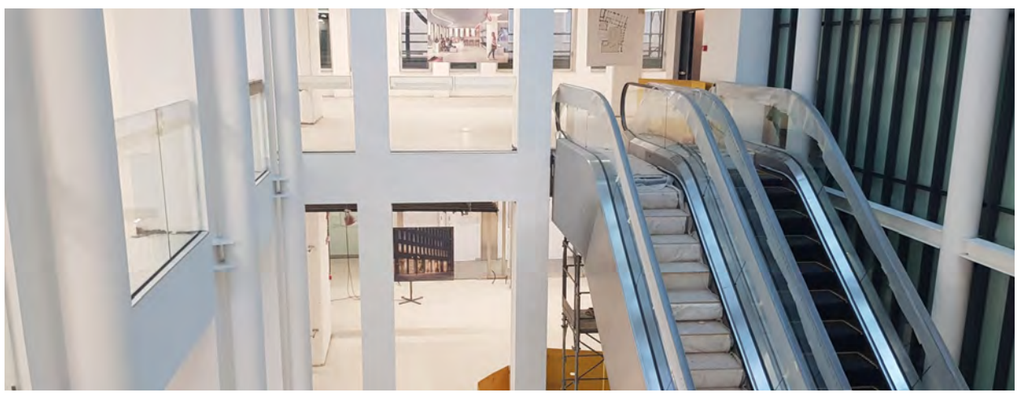
Structure cost
n/a

Size
- about 10.000 sqm

Lead engineers
- Ing. Gianluca Pittelli
- Arch. Andrea Zignani

Regulatory framework
Seismic retrofit

Relevant aspects
- All the estate is under the constraint of National Fine art institution and inserted in a highly urbanized context with particular logistical difficulties



Gonin 49-51

Naviglio looks to the future

Location
Via Gonin 49-51, Milan

Year
- Design: 2022 - ongoing

Client
Savills IM SGR SpA

Area
Residential / Commercial / Retail

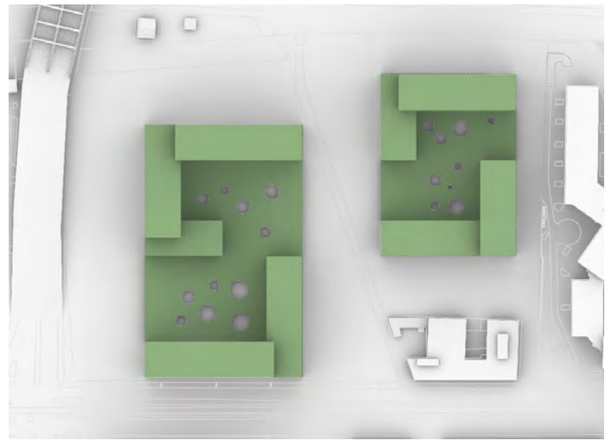
Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Detailed architectural design
- Interdisciplinary coordination throughout all project phases
- General construction supervision “DL”
- Structural and geotechnical construction supervision “DL”
- Safety design coordination / safety inspection coordination
- Ongoing and final structural certification

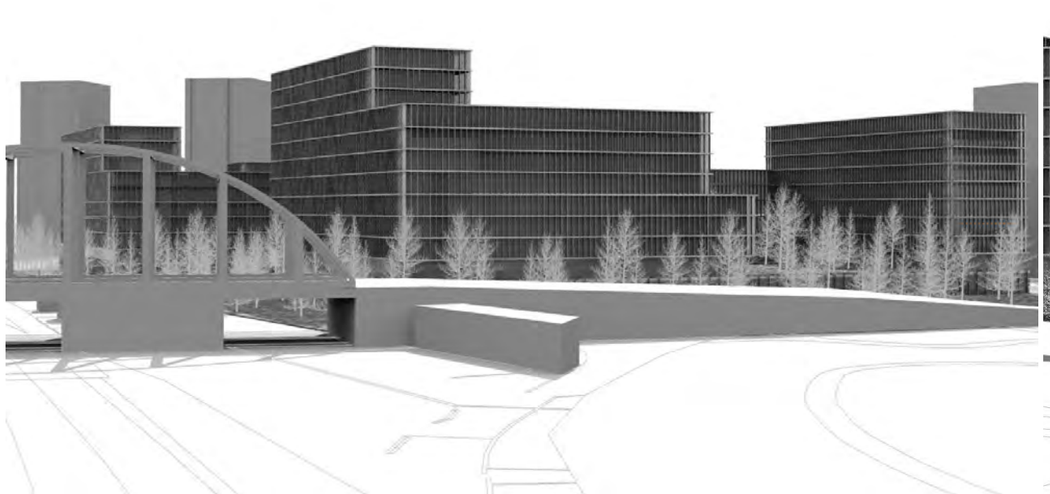
Estimated project cost
105.000.000 €

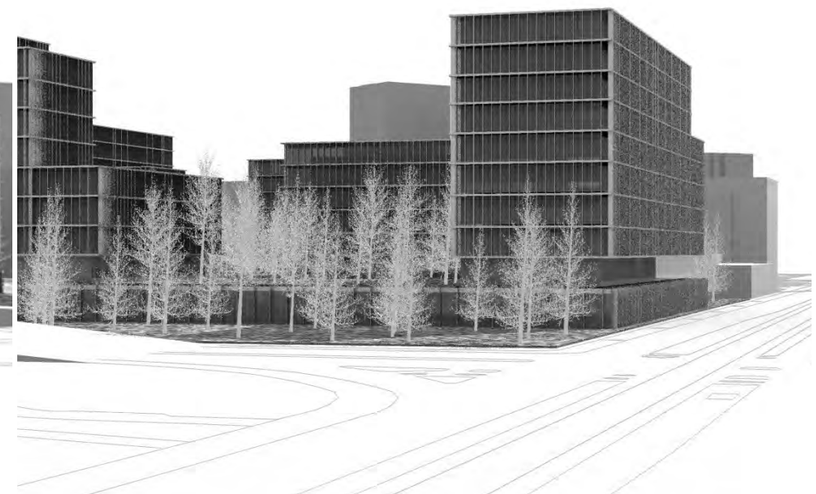
Size
- Total area: 36.181 sqm
- Built-up area: 9.965 sqm
- Construction area: 39.024 sqm

Lead engineers
- Arch. Michelangelo Siracusa
- Ing. Mauro Savoldelli
- Geom. Daniele Bitetto
- Ing. Hicham Maodium

Regulatory framework
Building renovation







Monterosa 91

Your green community office

Location
Via Monte Rosa 91, Milan

Year
- Design: october 2019 - september 2020
- Construction: february 2021 - december 2022

Client
AXA Investment Managers srl

Area
Retail / Offices

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”

Project cost
40.000.000,00 € (est.)

Structure cost
n/a

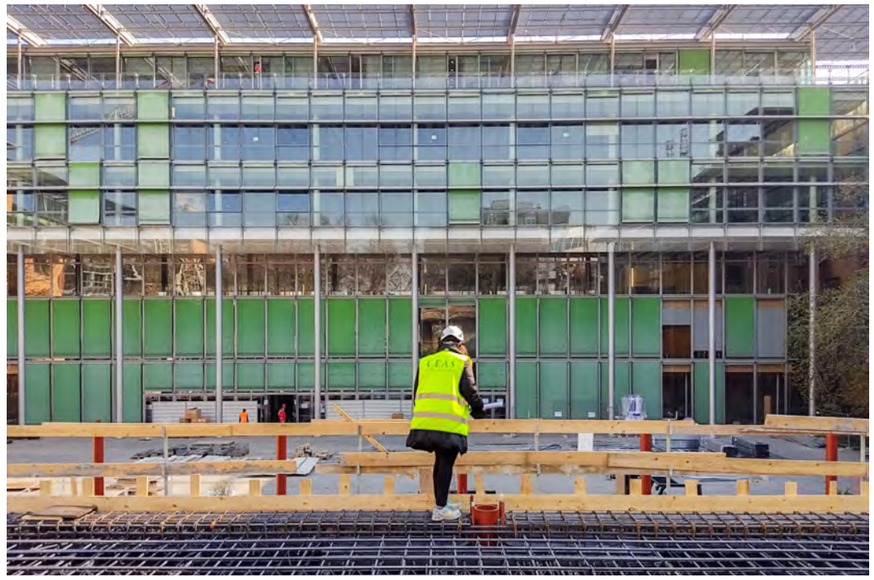
Size
- Floor area: 40.000 sqm
- Surface area for services, restaurant, and wellness facilities: 5.000 sqm
- 500 parking spaces

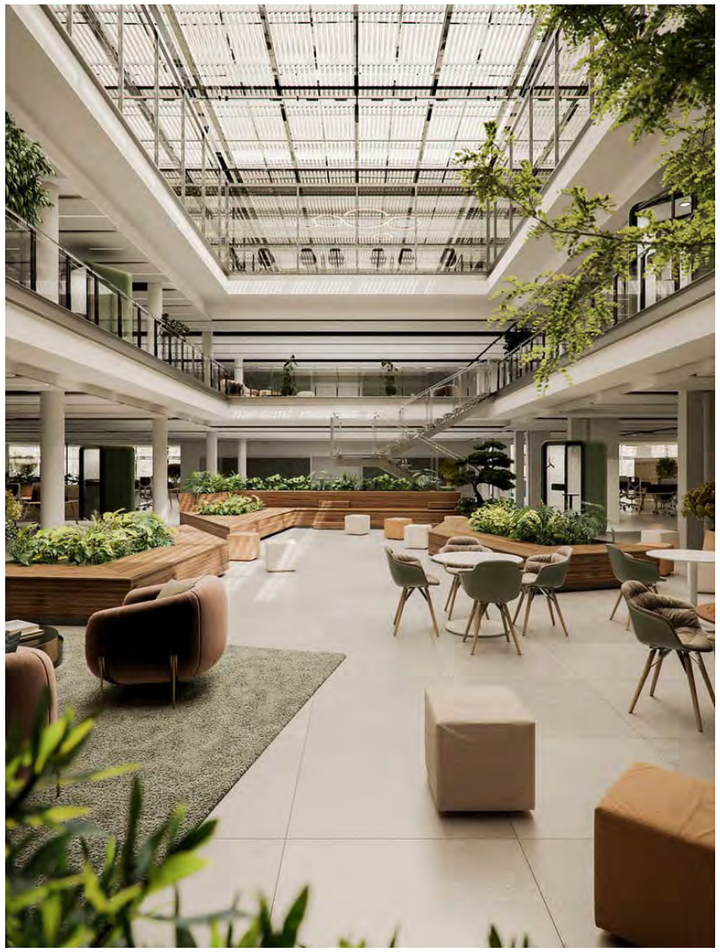
Certifications obtained
Leed Core & Shell Gold
Leed Ebom Platinum
Breeam nd WiredScore, Platinum level

Lead engineers
- Ing. Mauro Savoldelli
- Ing. Valter Carni

Regulatory framework
Building renovation and expansion

Relevant Aspects
- Elevation of existing building
- Seismic retrofit of existing building for university use
- Renovation of underground spaces
- New outdoor areas





Pirelli 35

A new urban gateway

Location
Via Pirelli 35, Milan

Year
- Design: March 2020 – May 2021

Client
COIMA SGR

Area
Offices / Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Assistance to construction supervision “DL”

Project cost
70.000.000,00 € (est.)

Structure cost
12.000.000,00 € (est.)

Size
- GFA: 26.500 sqm
- GBA: 56.000 sqm

Certifications obtained
LEED Platinum and WELL

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
Seismic retrofit and new construction

Prefabrication
All the metal carpentry structures of the bridge building

Sustainability
The “bridge” building has structure made of steel, a 100% recyclable material

BIM 45

Activity
Integrated team, documents and procedures coordinating BIM activities (for ex. BEP, clash detection, etc..). 3D modeling of structures. Exctraction of documents from model.

Division
Structural design

Design phase
- Preliminary design
- Developed design
- Detailed design

Software
Revit
Trimble Connect

Lead engineers
- Technical manager: Ing. M. Savoldelli
- Ingegnere geotecnico: Ing. B. Becci
- BIM Coordinator: Ing. L. Cattaneo

The Quad

Complexity and harmony

Location
Mriehel, Malta

Year
- Design: March 2015 - August 2019
- Assistance to structural construction supervision “DL”: January 2019 - March 2022

Client
De Micoli & Associates

Area
Offices / Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Assistance to structural construction supervision “DL”

Project cost
€ 95.000.000,00 (est.)

Structure cost
€ 23.500.000,00

Size
- GFA: 42.000 sqm
- Basement: 47.500 sqm of GBA - Towers: 53.097 sqm of GBA

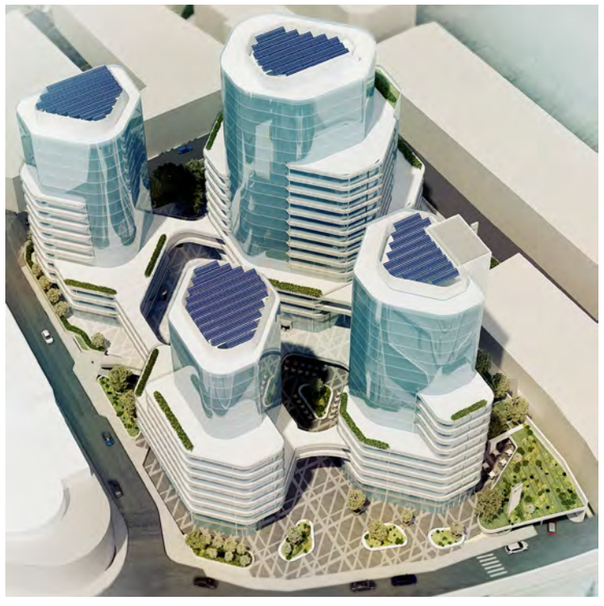
Certifications obtained
LEED Platinum

Lead engineers
- Ing. Bruno Finzi
- Ing. Gianluca Pittelli
- Ing. Davide Emmanuello

Regulatory framework
New construction

Prefabrication
All basement floors, floors in predalles slabs and completion casting, as well as prefabricated prestressed beams.
The bridges have metal carpentry structure

Sustainability
The connecting bridges between the towers are made of steel



BIM 45

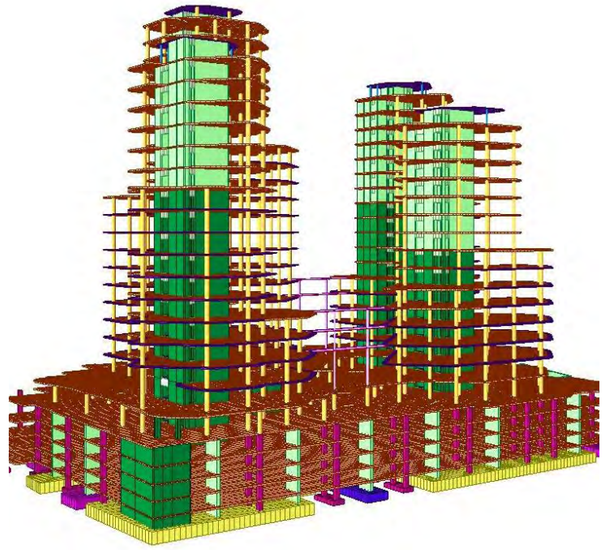
Activity
3D modeling of structures.
Exctraction of documents from model.
BIM process NOT coordinated with other specialists.

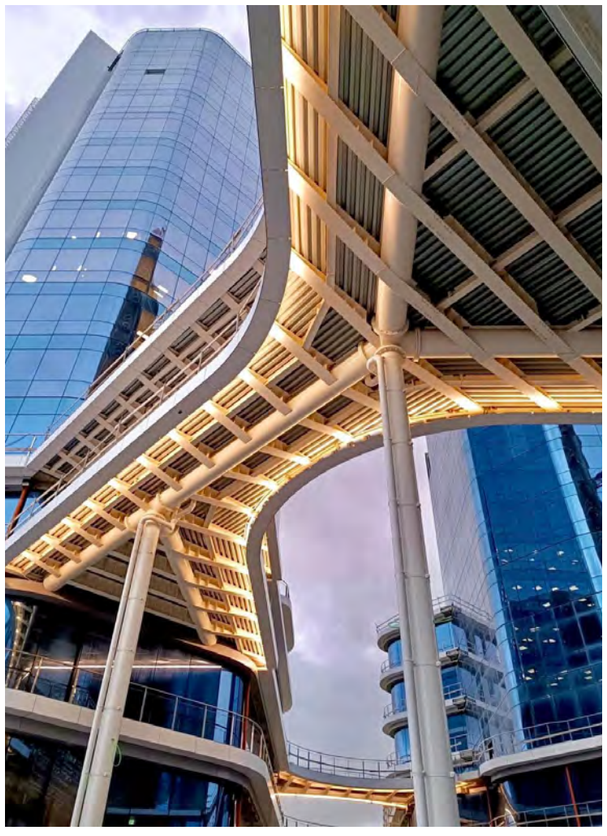
Division
Structural design

Design phase
- Preliminary design
- Developed design
- Detailed design

Software
Tekla

Lead engineers
- Technical manager: Ing. B. Finzi
- Senior engineer: Ing. G. Pittelli





Corso Como Place

Between tradition and change

Location
Via Bonnet 10, Milan

Year
- Design: March 2017 – March 2019
- Execution: June 2018 – December 2020

Client
COIMA SGR

Area
Offices / Commercial

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Assistance to construction supervision “DL”

Project cost
45.000.000,00 € (est.)

Structure cost
8.000.000,00 € (est.)

Size
- GFA: 13.000 sqm
- GBA: 52.000 sqm

Certifications obtained
LEED Gold e WELL

Lead engineers
- Ing. Bruno Finzi
- Ing. Giovanni Canetta
- Ing. Mauro Savoldelli

Regulatory framework
Seismic retrofit

Prefabrication
All steel and wood structures

Sustainability
Steel because of its reuse potential. Wood used for the floors of the building of body C because of its positive contribution in terms of carbon footprint

BIM 45

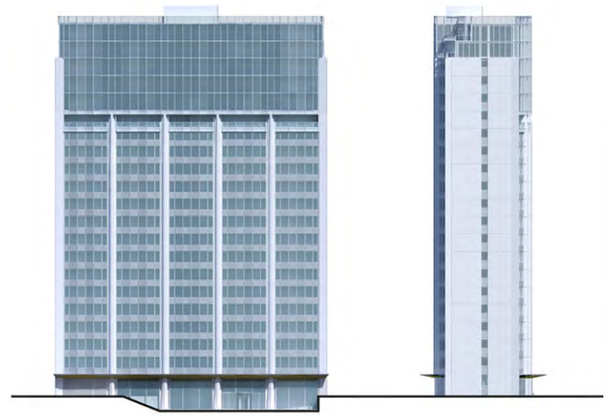
Activity
3D modeling of structures. Integrated team, documents and procedures coordinating BIM activities (for ex. BEP, clash detection, etc..)

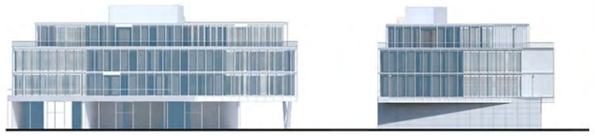
Division
Structural design

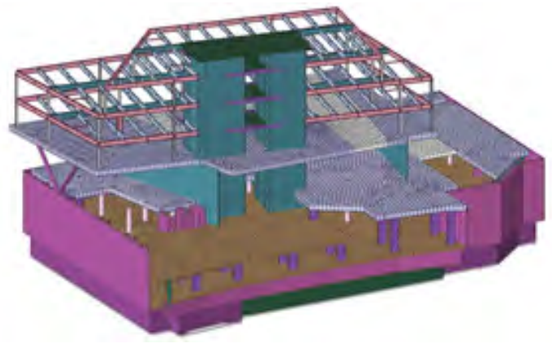
Design phase
- Detailed design

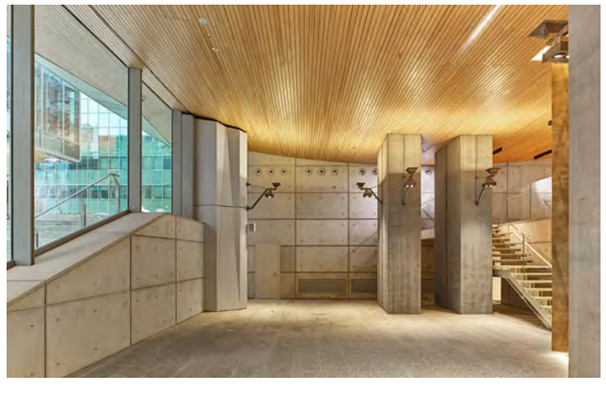
Software
Revit

Lead engineers
- Technical manager: Ing. B. Finzi
- BIM Coordinator: Ing. L. Cattaneo









Corso Como Place, Milano.

Hennebique

Silos redevelopment

Location
Genova

Year
- Design: 2020 - ongoing

Client
Starching srl

Area
Commercial / Hospitality

Activities
- Preliminary, developed and detailed structural design
- Preliminary and detailed geotechnical design

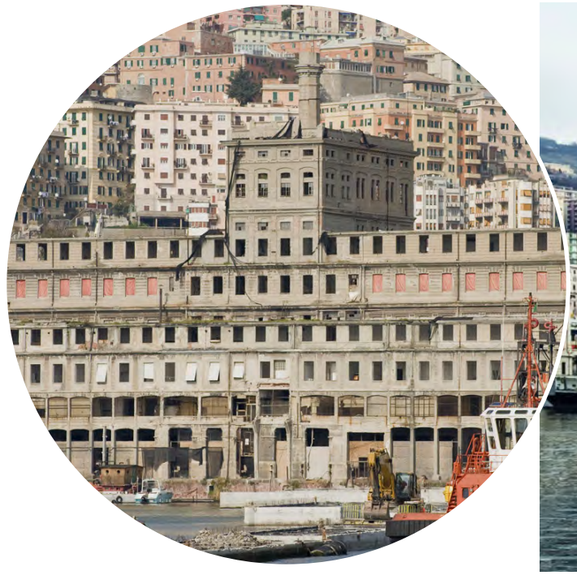
Project cost
60.000.000,00 €

Structure cost
21.899.000,00 €

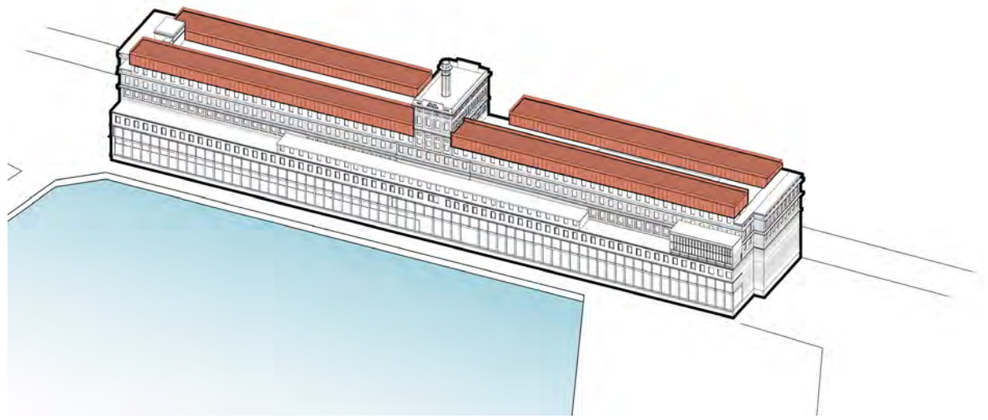
Size
- GBA: 46.844 sqm
- 6 floors above ground, 1 floor below ground
- Height: 40 m

Lead engineers
- Ing. Mauro Savoldelli
- Ing. Giovanni Canetta
- Ing. Raimondo Salaris

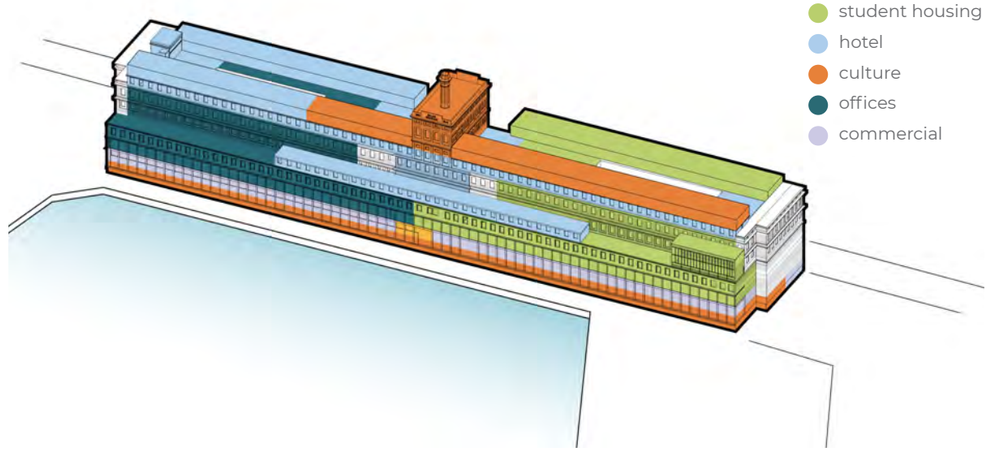
Regulatory framework
Intervention on existing building



the new volumes



area



Cavallotti Verziere

Volumes remodeling

Location
Via Cavallotti 14, Milan

Year
- Design: December 2018 – June 2019
- Structural construction supervision “DL”: July 2019 – March 2021

Client
Kryalos SGR SpA

Area
Commercial / Offices

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”

Project cost
10.600.000,00 €

Structure cost
2.900.000,00 €

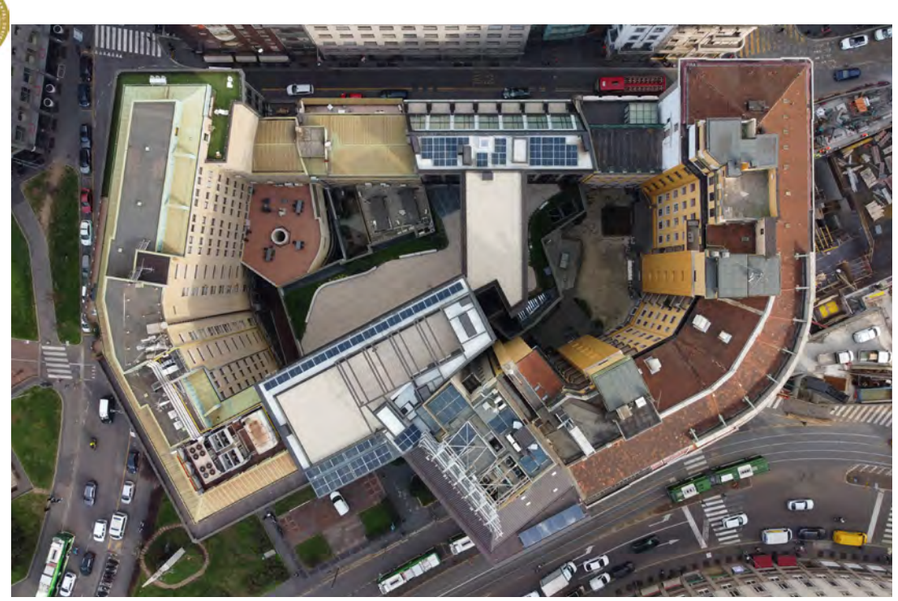
Size
- GFA: 5.360 sqm
- GBA: 12.900 sqm
- Volume (underground + above ground): 41.906 sqm
- N. 9 floors above ground - N. 3 underground floors

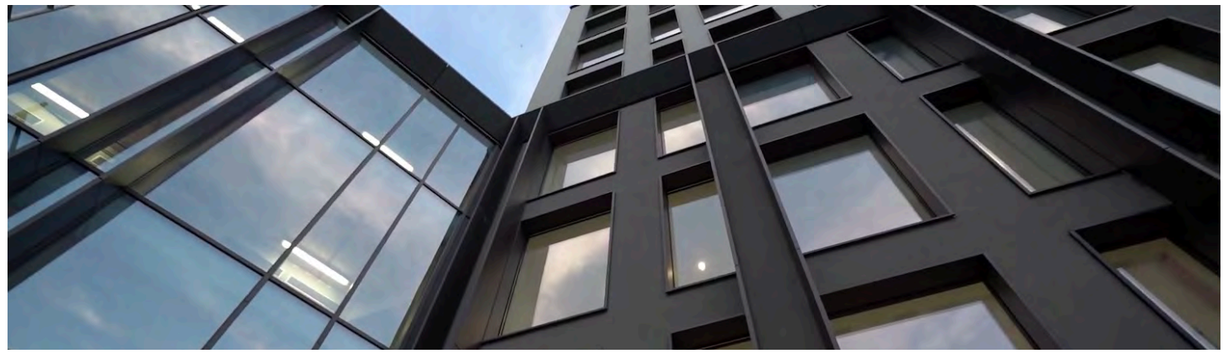
Certifications obtained
Cat. A and LEED Gold

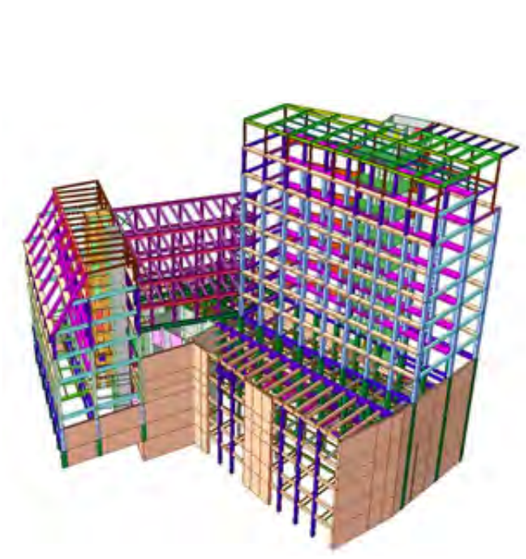
Lead engineers
- Ing. Bruno Finzi
- Ing. Gianluca Pittelli

Regulatory framework
- Local intervention (building on Verziere street)
- Seismic retrofit (building on Cavallotti street)
- New construction (new “bridge” building)

Prefabrication
Structure of the new building in laminated wood and X-Lam panels. Structural components in metal carpentry







Veneto 89

Neoclassical modernity

Location
Via Vittorio Veneto 89, Rome

Year
- Design: 2019 – February 2021
- Structural Construction supervision “DL”: June 2023

Client
Prelios SGR

Area
Offices / Commercial

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”

Project cost
29.000.000,00 €

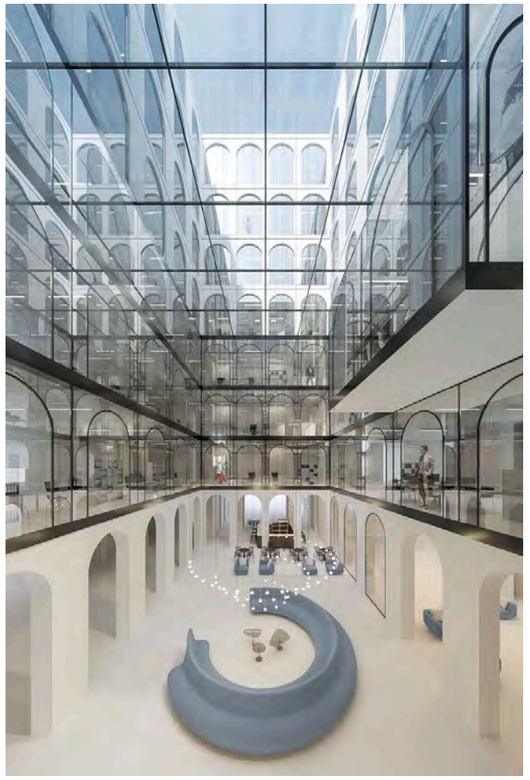
Structure cost
5.500.000,00 €

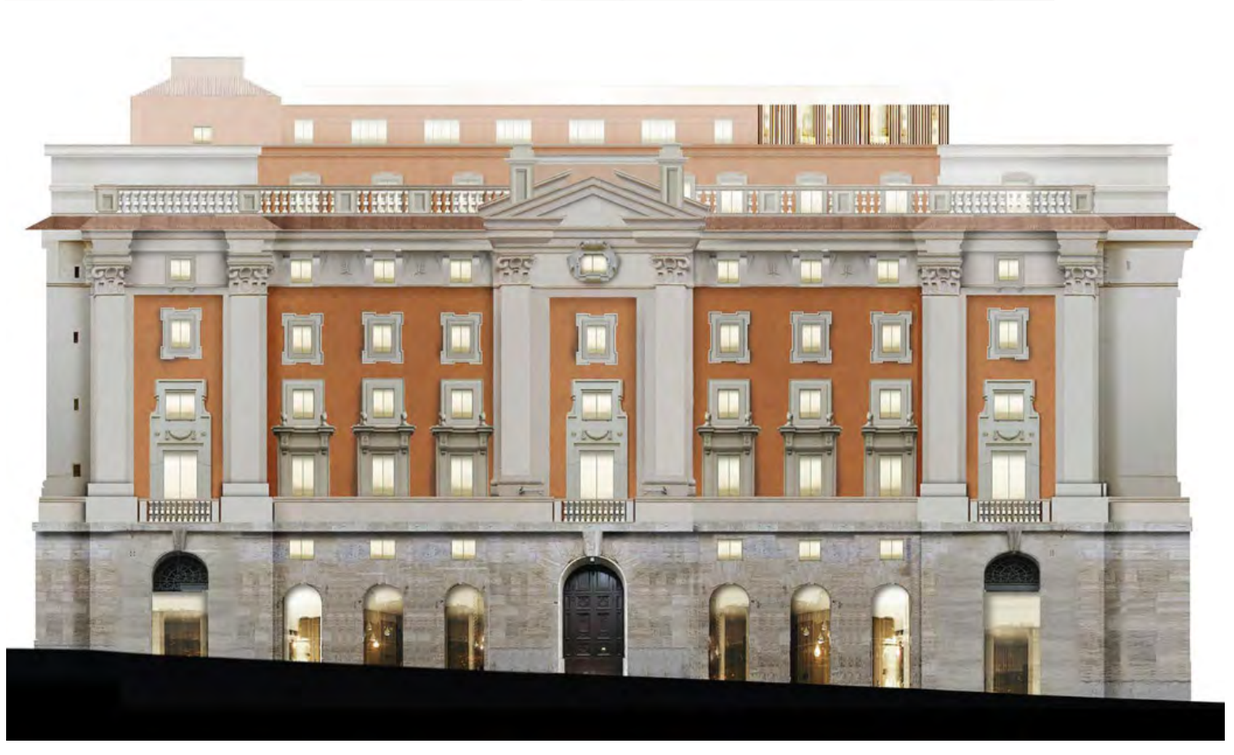
Size
- GBA: 27.000 sqm

Certifications obtained
Cat. A and LEED Gold

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
Seismic retrofit





BIM 45

Activity
Creation of a 3D model from the developed design phase according to BIM procedures (for ex. BEP, clash detection, etc..).

Division
Structural design

Design phase
- Preliminary design, developed design
- Detailed design

Software
Revit, Navisworks

Lead engineers
- Technical manager: Ing. M.Savoldelli
- Geotechnical engineer: Ing. B. Becci
- Senior engineer: H. Madioum

The Liberty Tower

Gentle restyling

Location
Piazza Liberty, Milan

Year
- Design: 2017 - 2020

Client
Savills IM SGR

Area
Commercial / Offices

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Structural construction supervision “DL”

Project cost
13.000.000,00 € (est.)

Structure cost
2.000.000,00 € (est.)

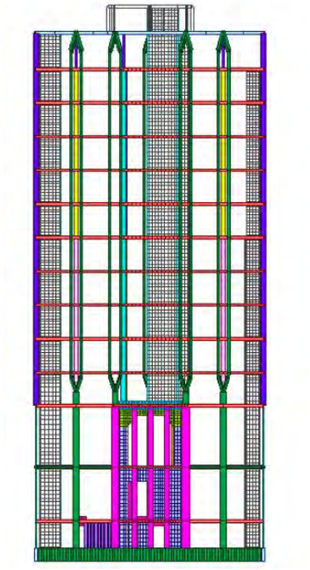
Size
- GFA: 5.990 sqm

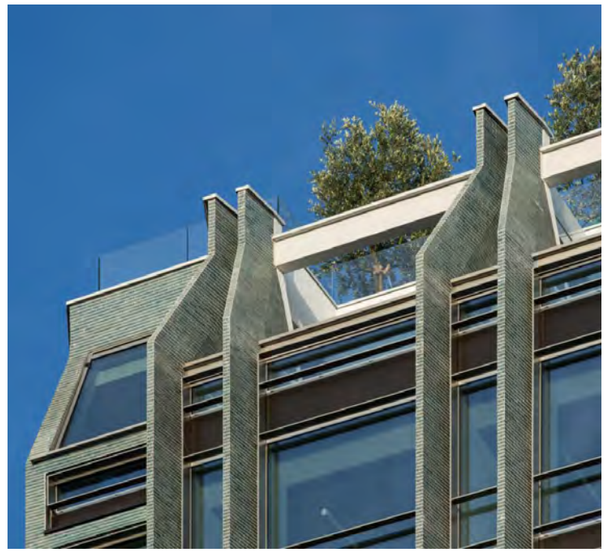
Certifications obtained
Cat. A, Leed Gold

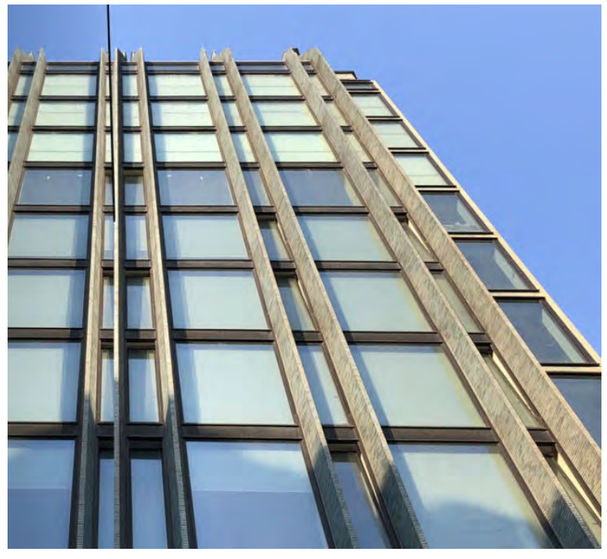
Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli
- Ing. Davide Emmanuello

Regulatory framework
Seismic retrofit

Relevant aspects
- Functional redevelopment and internal layout updating of the historic *Torre Tirrena* built in 1957
- Structural enhancement of the paired pillars of the facade: project based on emphasizing the distinctive features of the original design

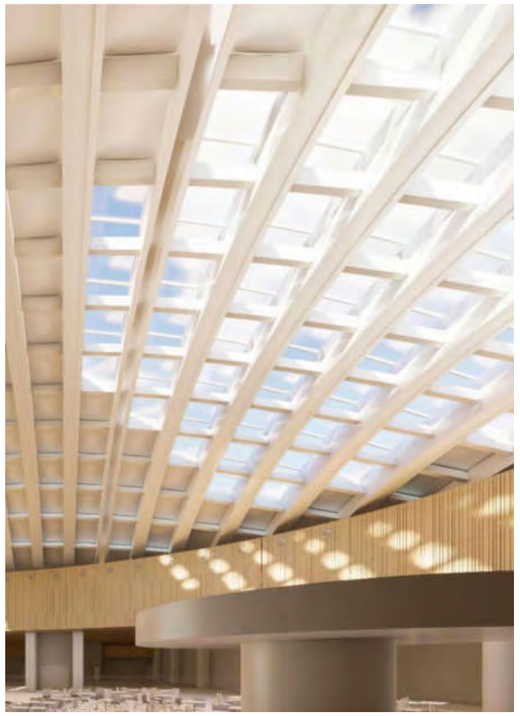






Le Cucine di Curno

A new Food-Hall in Bergamo



Location
Curno, Bergamo

Year
2018 - 2019

Client
Eurocommercial Properties Italia Srl

Cliente
Impresa Percassi Spa

Area
Commercial / Retail

Activities
- Detailed structural design + construction documents
- Detailed architectural design
- Construction documents design coordination

Project cost
12.370.687,95 €

Structure cost
4.335.997,14 €

Size
- Surface: 5.400 sqm
- Dome height: 17 m
- 600 seats and 17 tenant

Lead engineers
- Ing. Mauro Savoldelli

Relevant aspects
- The project obtained the “very good” level certification according to the BREEAM eco-sustainable building assessment protocol
- Finishes and details of a high aesthetic level
- Use of quality materials and precise definition of details in agreement with the Artistic Direction

Starbucks

The American giant in Milan

Location
Ex Palazzo delle Poste, Piazza Cordusio, Milan

Year
- Design: September 2015 – August 2016
- Structural construction supervision “DL”: October 2016 – January 2018

Client
Asti Architetti s.r.l.

Area
Offices / Commercial

Activities
- Executive structural design
- Structural construction supervision “DL”

Project cost
10.500.000,00 €

Structure cost
1.500.000,00 €

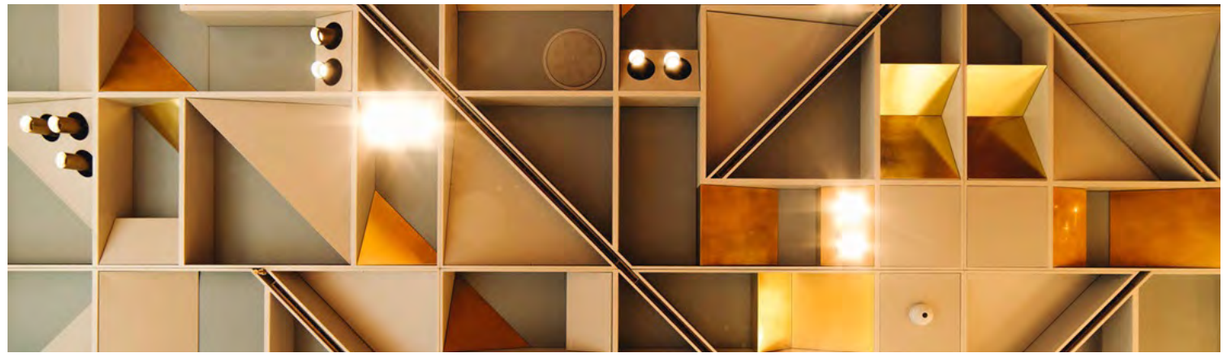
Size
- GFAP: 13.700 sqm
- 300 sqm surface of the new star skylight

Certifications obtained
LEED Gold

Lead engineers
- Ing. Valter Carni
- Ing. Hicham Madioum

Regulatory framework
Conservative rehabilitation

Sustainability
Steel was used for all 6 floors above ground on the Armorari street side, for the mezzanine floor of Starbucks and for the support of the skylight



Eataly Milan

The Smeraldo theater is reborn

Location
Ex Teatro Smeraldo, XXV Aprile square, Milan

Year
- Design: 2012 – 2013
- DL: 2012 – 2014

Cliente
Eataly Real Estate Srl

Area
Commercial

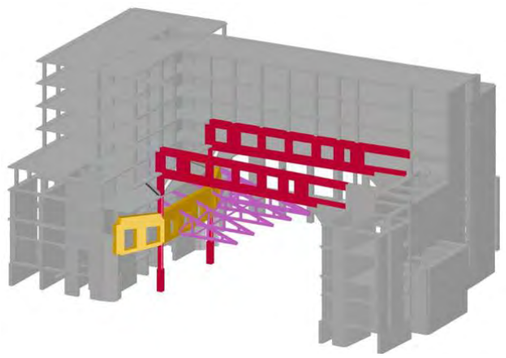
Activities
- Structural Design
- Structural construction supervision “DL”
- Safety coordination in the design phase and construction

Project cost
17.000.000,00 €

Structure cost
4.782.000,00 €

Size
- Surface: 3.500 sqm
- 3 floors above ground

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli



Residential

VivaCertosa BIM 45

Energy of ribirth

Location
Viale Certosa 165-177, Milan

Year
- Design: April 2022 – July 2023

Client
Green Stone SICAF SpA

Area
Residential

Activities
- Project, construction supervision, and Safety Coordination for strip-out and demolition works
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Construction supervision for temporary excavation containment structures
- Structural construction supervision “DL”
- Safety design and inspection coordination

Project Cost
28.000.000,00 €

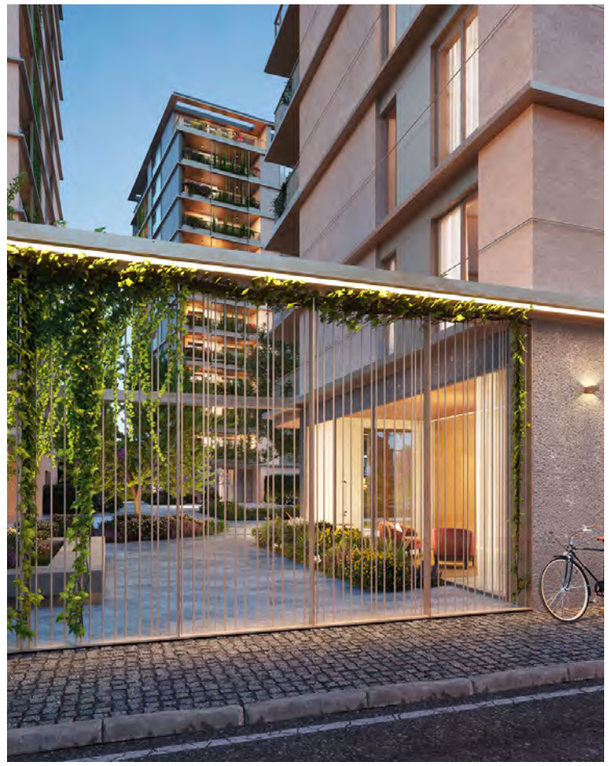
Structure Cost
6.000.000,00 €

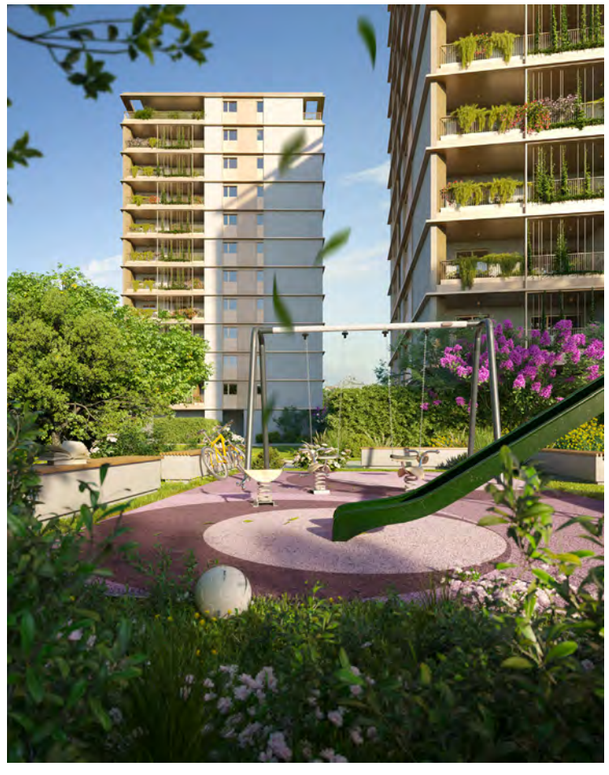
Size
- GFA 25.850 sqm
- 1 building with 6 above-ground floors and 2 internal towers with 12 above-ground floors
- 1 underground floor - 140 parking spaces

Lead engineers
- Ing. Mauro Savoldelli
- Ing. Giovanni Canetta
- Ing. Hicham Madioum

Regulatory framework
New construction

Relevant aspects
- Aim of requalifying the area at an urban and landscape level in a neighborhood negatively affected and depleted over time





Parco Adriano BIM 45

Modern day babylon

Location
Quartiere Adriano, Milan

Year
- Design: September 2021 – February 2023

Client
General Planning Srl

Area
Residential

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project Cost
110.000.000,00 € (est.)

Structure Cost
25.000.000,00 €

Size
- GFA 30.500 sqm
- 21 above-ground floors for the tallest building
- 3 underground floors
- Maximum height: around 77 m

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Andrea Colombo
- Ing. Alice Mingolla

Regulatory framework
New construction

Relevant aspects
Residential complex characterized by four tower buildings, with varying heights, up to 77 m above ground.
The facades have structural steel frames with a decorative function. The project also required columnar treatment of the ground using jet-grouting for the implementation of settlement-reducing piles, given the presence of contiguous portions with very different heights.

Syre

San Siro is redesigned

Location
San Siro, Milan

Year
- Design: January 2020 – ongoing

Client
Redbrick Advisors S.r.l. for
Axa Real Estate Investment Managers SGP

Area
Residential

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project cost
60.000.000,00 € (est.)

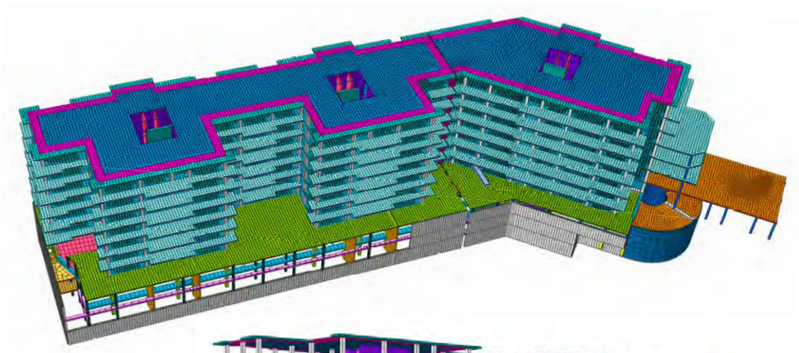
Structure cost
8.500.000,00 €

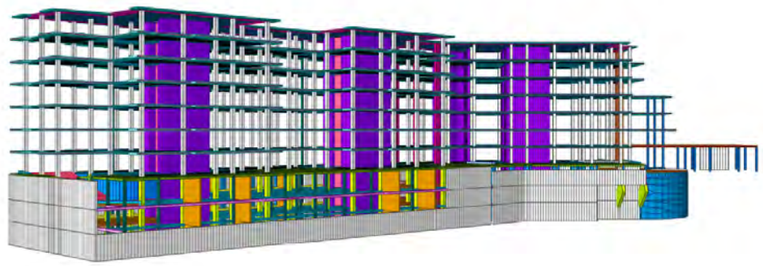
Size
- GFA: 22.536 sqm
- GBA: 62.672 sqm

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Bruno Finzi

Regulatory framework
New construction

Prefabrication
Underground floors made with Predalles type slabs





Scalo Greco Breda

Reinventing Cities

Location
Scalo Greco Breda, Milan

Year
- Design: 2021 – ongoing

Client
REDO SGR S.p.A.

Area
Residential / Social housing

Activities
- Structural and geotechnical design
  (at the moment until the Preliminary phase)

Project cost
45.000.000,00 € (est.)

Structure cost
9.000.000,00 € (est.)

Size
- GFA: 24.000 sqm
- GBA: 40.000 sqm

Lead engineers
- Ing. Mauro Savoldelli

Regulatory framework
New construction

Prefabrication
Wooden floors

Sustainability
Project with Zero Carbon goal

BIM 45

Activity
Integrated team, documents and procedures coordinating BIM activities (for ex. BEP, clash detection, etc..). 3D modeling of structures. Extraction of the drawings from the model.

Division
Structural design

Design phase
- Preliminary design

Software
Revit, Trimble Connect

Lead engineers
- BIM Coordinator: Ing. L. Cattaneo

Princype

A cutting-edge project

Location
Via Principe Eugenio 3, 5, 7, Milan

Year
- Design: December 2018 – December 2019

Client
DEA CAPITAL REAL ESTATE SGR S.p.A.

Area
Residential

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project cost
37.400.000,00 €

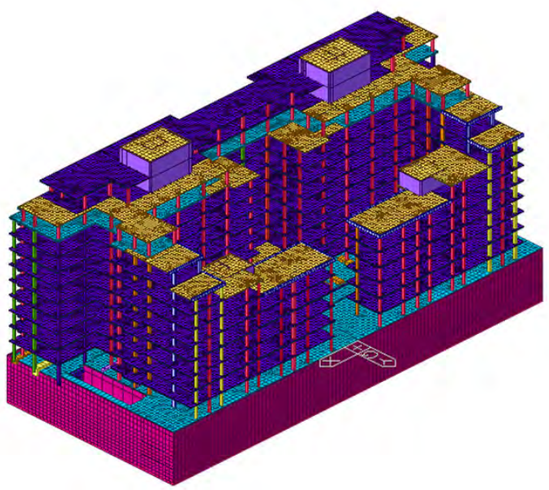
Structure cost
8.600.000,00 €

Size
- GFA: 18.390 sqm
- GBA: 37.000 sqm approx.
- Volume (underground + above ground): 130.000 mc
- N. 3 underground floors
- N. 11 floors above ground

Lead engineers
- Ing. Bruno Finzi
- Ing. Gianluca Pittelli

Regulatory framework
New construction

Relevant aspects
One of the design challenges was to adapt the structures to pre-existing excavation volumes, previously created for a different project, without further interventions or modifications



BIM 45

Activity
3D modeling of structures and geotechnical works.
Exctraction of documents from model.

Division
Structural design

Design phase
- Preliminary design
- Developed design
- Detailed design

Software
Revit

Lead engineers
- Technical manager: Ing. G. Pittelli
- BIM Coordinator: Ing. L. Cattaneo

Durazzo 2/4 BIM 45

New air in the Feltre district

Location
via Durazzo 2/4, Milan

Year
- 2020 - ongoing

Client
Investire SGR S.p.A.

Area
Residential

Activities
- Due diligence
- Integrated design definitiva ed esecutiva (architettonica, structural, plants)
- Structural and general construction supervision “DL”

Project cost
13.600.000,00 € (est.)

Structure cost
2.900.000,00 € (est.)

Size
- GFA: 3.832 sqm

Lead engineers
- Ing. Pietro Gusella
- Arch. Barbara Palazzotto
- Ing. Gianluca Pittelli

Regulatory framework
New construction

Relevant aspects
- New Residential project as an element of redevelopment in an area with no architectural or cultural value, with modification of the current volumetric structure of the block.

Richard 1

A new skyscraper in the city

Location
Milan

Year
- Design: 2022 - ongoing

Client
Savills IM SGR SpA

Area
Residential / Offices

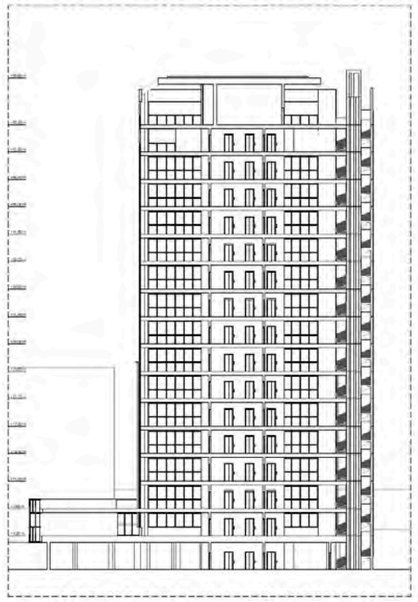
Activities
- Developed and detailed structural design
- Developed and detailed developed design
- Support for architectural developed design
- Detailed architectural design and coordination
- Structural and geotechnical construction supervision “DL”

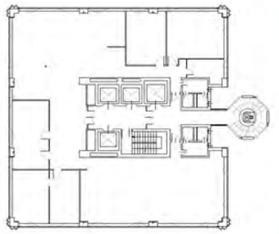
Project cost
20.000.000 € (est.)

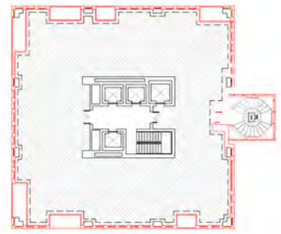
Size
- SL: 7.275 sqm

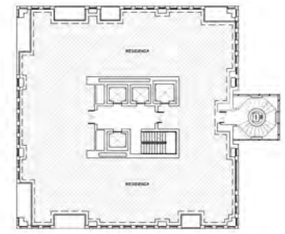
Lead engineers
- Arch. Michelangelo Siracusa
- Arch. Luciano Miano
- Ing. Davide Emmanuello

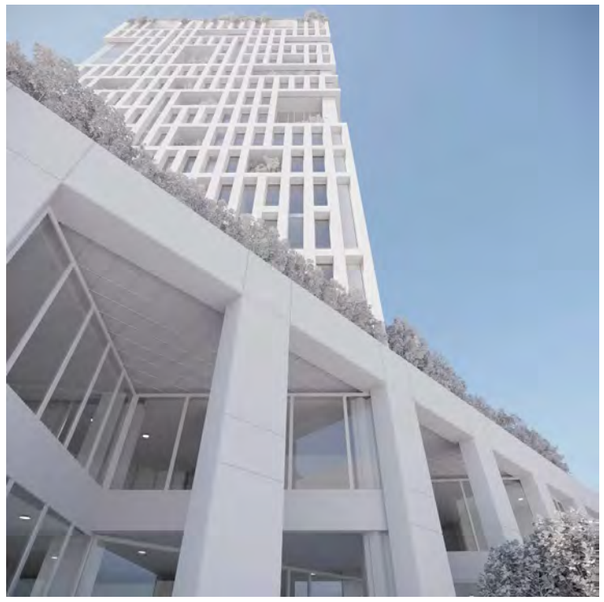
Regulatory framework
Building renovation

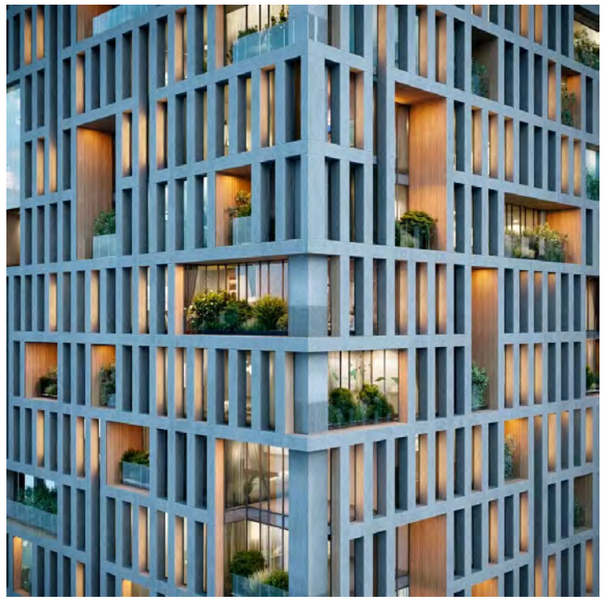












Dimore Moneta Motta

The charm of yesterday, today

Location
via Orazio - via Caminadella, Milan

Year
2016 - 2021

Developer
Fondo Ca' Granda

Client
Investire SGR

Area
Residential

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision "DL"

Project Cost
5.050.000,00 €

Structure Cost
760.000,00 €

Size
- 2 buildings
- GFA: 2.200 sqm
- 6 floors above ground - 1 underground floor

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Raimondo Salaris

Regulatory framework
Local interventions

Relevant aspects
- Skillful project of conservative redevelopment that emphasizes architectural details by enhancing decorative elements
- Structural interventions, such as the new metal and wood roofing and the new floor on the 5th level, in full respect of the existing building and its historical/artistic characteristics
- Management of a construction site in the historical center

Trentacoste

Empowering student environment

Location
via Trentacoste, Milan

Year
- 2021 - ongoing

Client
CA Ventures

Client
GLA Genius Loci Architettura Srl

Area
Hospitality

Activities
- Developed and detailed structural design
- Structural construction supervision “DL”

Project cost
25.981.000,00 €

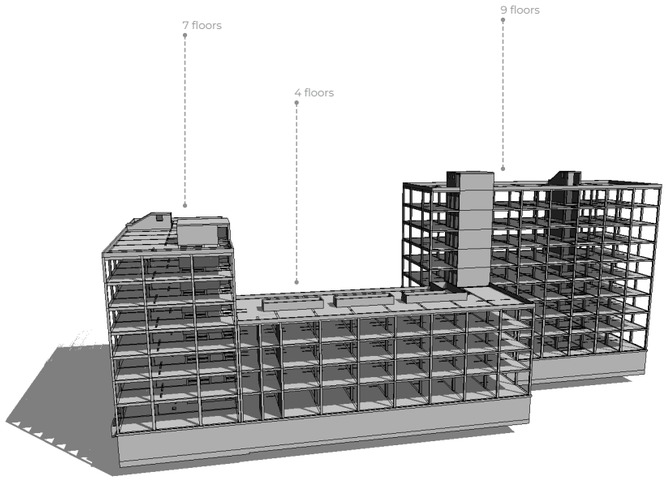
Structure cost
4.497.363,00 €

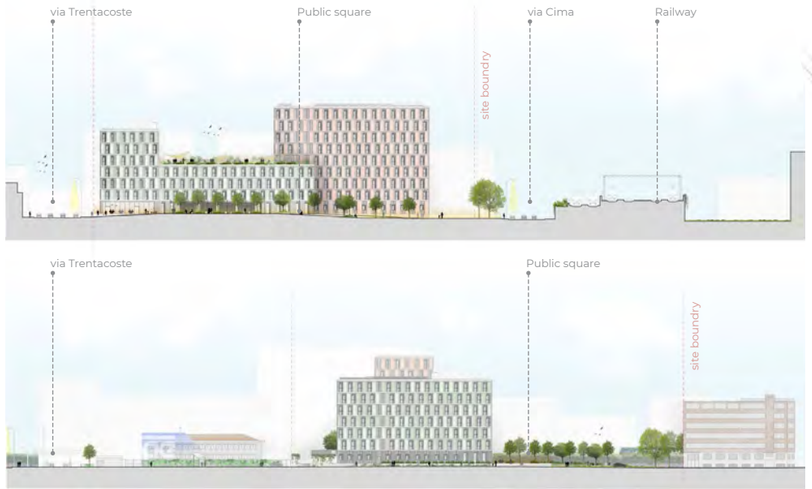
Size
- GFA: 11.914 sqm
- GBA: 16.320 sqm
- 9 floors above g.; 1 floor below g.
- 32 m of height

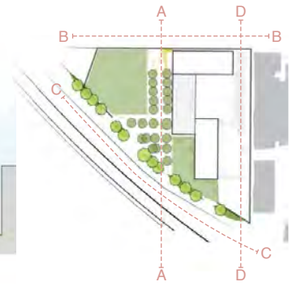
Lead engineers
- Ing. Mauro Savoldelli
- Ing. Raimondo Salaris
- Ing. Davide Luraschi

Regulatory framework
New construction

Relevant aspects
- Organic design with the vocation of connection between public and private, with the aim of providing a comfortable and convenient environment for students, but also of promoting social life and a sense of belonging
- Modularity in the design of the housing units, which are divided into spaces of the same size on all floors







538 Students
437 Single rooms
27 Double rooms
9 Apartments for 3 people
5 Apartments for 4 people

Bologna Rimesse

Evolved student housing

Location
Via Rimesse, Bologna

Year
- 2022 - ongoing

Client
CA Ventures

Area
Receptive

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design
- Structural construction supervision “DL”

Project Cost
30.300.000,00 € (target)

Structure Cost
8.000.000 € (est.)

Size
GFA: 12.126,83 sqm

GRV: 44.709,44 mc

Lead engineers
- Ing. Mauro Savoldelli
- Ing. Raimondo Salaris

Regulatory framework
New construction

Relevant aspects
- Construction of ϕ800 piles to reduce building settlements
- Compliance with constraints imposed by the Italian supervisory authority
- Seismic retrofit of existing buildings to be preserved
- Modularity in the design of residential units, which are organized into same size-spaces on all floors

Savona 105

The elegance of simplicity

Location
Via Savona 105, Milan

Year
2021 - ongoing

Client
Abitare IN

Client
MPartner

Area
Residential / Social Housing

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project cost
n/a

Structure cost
13.153.798,88 €

Size
- GFA about 15.000 sqm

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Davide Emmenuello
- Ing. Veronica Minardi

Regulatory framework
New construction

Prefabrication
Underground floors made with Predalles type GFAabs

BIM 45

Activity
3D modeling of structures.
Exctraction of documents from model.
Practical authorization presentation with documents and calculations extracted from the model. MEP model present.

Division
Structural design

Design phase
- Preliminary design
- Detailed design
- Construction design

Software
Revit 2021

Lead engineers
- Senior Engineer: Ing. D. Emmenuello
- BIM Coordinator: P.I.E. D. Luraschi

Indipendenza 1

The other face of elegance

Location
Corso Indipendenza 1, Milan

Year
- Design: 2013 – 2014

Client
H2A Properties s.r.l.

Area
Residential

Activities
- Structural design
- Geotechnical design
- Structural construction supervision “DL”
- Safety inspection coordination

Project cost
n/a

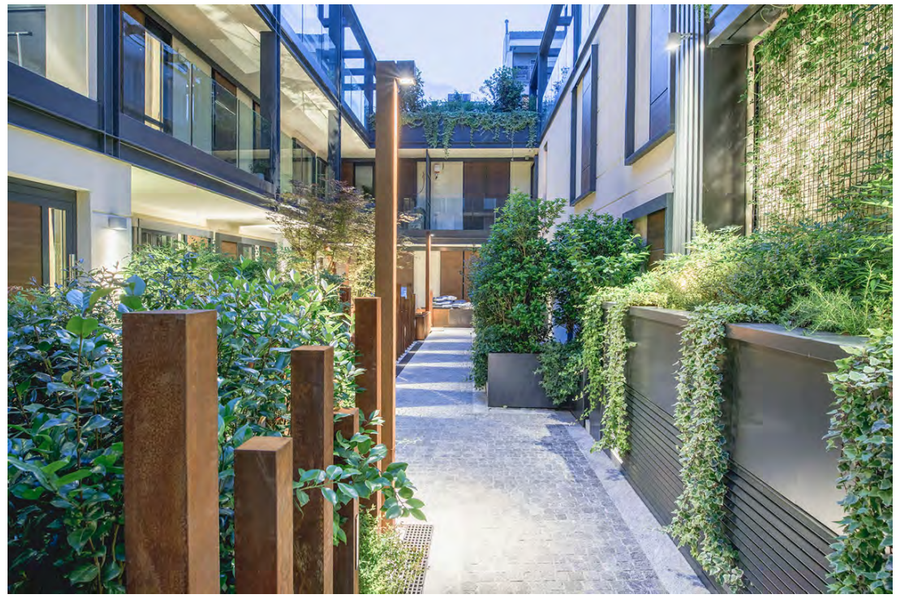
Structure cost
n/a

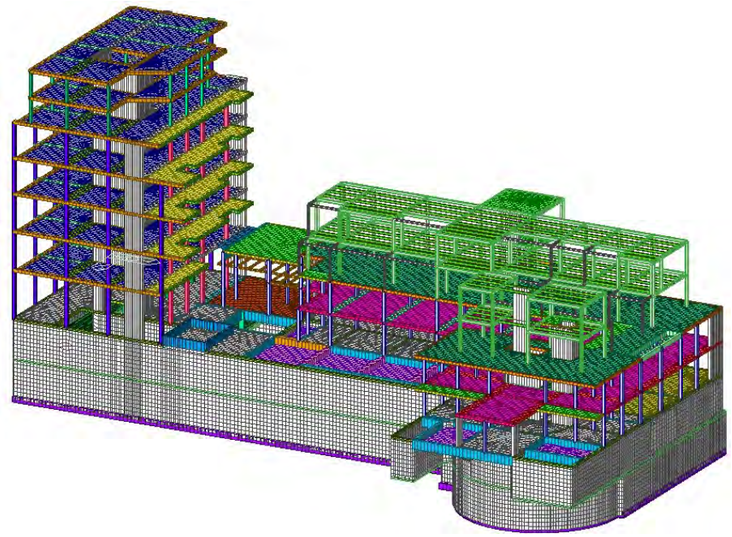
Size
- GFA: 3.300 sqm
- 67,5 m lenght of the “L” base
- 35,5 m di width of the “L” base
- 20 m maximum height of the building

Lead engineers
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli

Regulatory framework
New construction and seismic retrofit

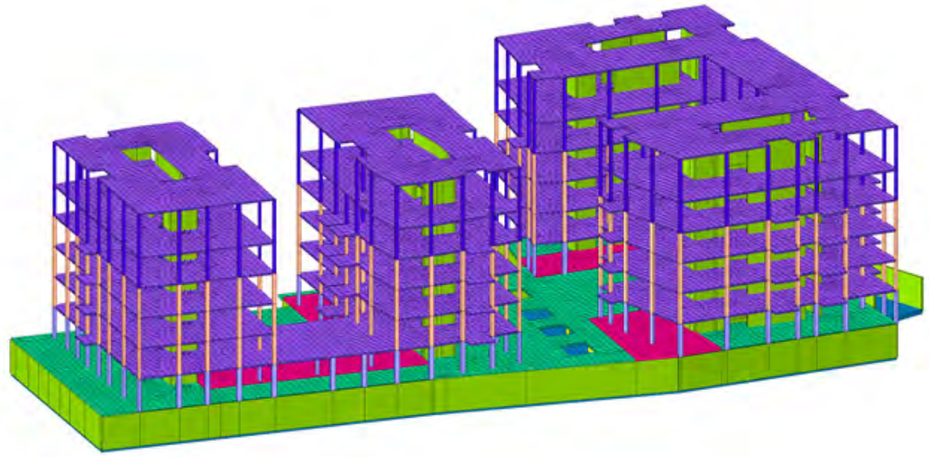
Relevant aspects
- Demolition and reconstruction intervention in a highly sensitive urban environment
- Need to design and implement non-ordinary structural interventions in order to support existing structures





Montepertico

Social housing in La Spezia



Location
Via Fontevivo, La Spezia

Year
- Design: September 2017 – March 2020
- Structural construction supervision “DL”: June 2019 – April 2020

Client
DEA CAPITAL REAL ESTATE SGR S.p.A.
Fondo Housing Sociale – Liguria

Area
Residential / Social housing

Activities
- Preliminary, developed and detailed structural design of the excavation support works
- Structural construction supervision “DL”

Project cost
28.000.000,00 €

Structure cost
6.500.000,00 €

Size
- GBA: 16.895 sqm
- Plan surface: 24.000 sqm
- Volume (underground + above ground): 72.000 mc
- N. 1 building - 2 floors above ground to be used as garage
- N. 3 buildings - 6 floors above ground without undergrounds
- N. 4 buildings - 6 floors above ground + 1 shared underground

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Bruno Finzi
- Ing. Lorenzo Mariani

Regulatory framework
New construction

BIM 45

Activity
3D modeling of structures and geotechnical works. Coordination between structural and civil discipline. Calculation from the model.

Division
Structural design

Design phase
- Preliminary design
- Developed design
- Detailed design

Software
Revit

Lead engineers
- Technical manager: Ing. G. Pittelli
- BIM Manager / BIM Coordinator: Ing. L. Cattaneo

Corte del Moro

New life on the Naviglio

Location
Via Manfredonia 4, Milan

Year
- Design: May 2017 – April 2018
- Construction supervision “DL”: January 2018 – May 2020
- Safety inspection coordination: January 2018 – May 2020

Client
San Cristoforo s.r.l.

Area
Residential

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”
- Safety inspection coordination

Project cost
8.912.714,00 €

Structure cost
2.606.410,00 €

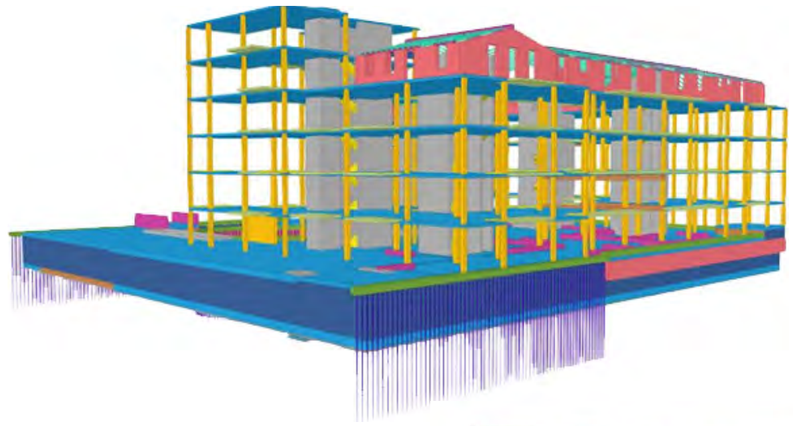
Size
- GFA: 3.764,30 sqm - Plan surface: 3.146 sqm
- Volume (underground + above ground): 31.130 mc
- N. 7 floors above ground - N. 1 floor underground

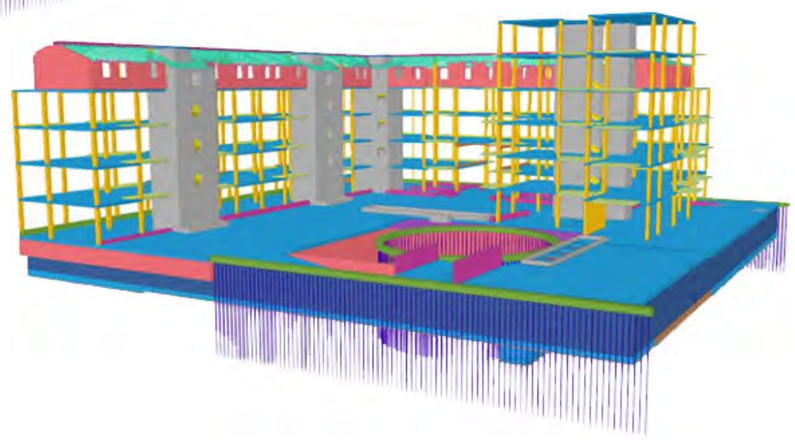
Lead engineers
- Ing. Bruno Finzi
- Ing. Bruno Becci
- Ing. Mauro Savoldelli

Regulatory framework
New construction

Prefabrication
Metal and wooden structures on the top floor

Sustainability
Use of steel structures, 100% recyclable, and the entire pitched roof of the building is made of laminated wood





BIM 45

Activity
3D modeling of structures.
Exctraction of documents from model.
Coordination with the architectural and plant engineering disciplines.

Division
Structural design

Design phase
- Detailed design

Software
Tekla

Lead engineers
- Technical manager: Ing. B. Finzi

Urban Garden

Designing nature in the city

Location
Via Verona 5, Milan

Year
- 2016 - 2019

Client
Bluestone Verona srl

Area
Residential

Activities
- Preliminary architectural and structural design
- Structural and geotechnical detailed design of demolition and excavation containment works
- General and structural construction supervision “DL” of the demolition of existing buildings and containment of the excavations

Project cost
20.857.701 €

Size
- 4.848 sqm
- 56 apartments
- 3.000 sqm of green areas

Lead engineers
- Ing. Patrizia Piera Polenghi
- Ing. Gianluca Pittelli

Regulatory framework
New construction

Relevant aspects
- Presence in the heart of the city of a park hidden but accessible to the public and therefore perceptible from the building curtain
- Large loggias and terraces that geometrically create the facade

BIM 45

Attività svolta
Modellazione 3D delle opere civili e strutturali. Estrazione degli elaborati dal modello. Presentazione pratica autorizzativa con elaborati e conteggi estratti dal modello. Coordinamento tra disciplina strutturale e civile; modello MEP assente.

Divisione
Integrated design

Fase progettuale
- Progetto definitivo
- Progetto esecutivo
- Autorizzazioni edilizie

Software
Revit

Figure coinvolte
- Ingegnere senior: Ing. G. Pittelli
- BIM Coordinator: Ing. L. Cattaneo

Investire SGR BIM 45

Living better starts here

Location
Milan, 7 different buildings
- Via Lauria 12
- Corso Magenta 54
- Via Argelati 30/A
- Via Elba 14
- Via Fumagalli 7
- Corso Sempione 39
- Via Ferrucci 2

Year
- 2020 - ongoing

Client
InvestiRE SGR

Area
Residential

Activities
- Integrated design

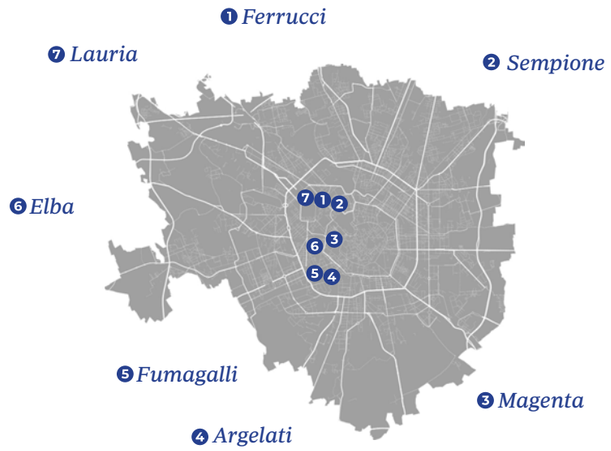
Project cost
30.000.00,00 € (est.)

Size
- 7 buildings located throughout the Milan area
- GFA about 25.000 sqm

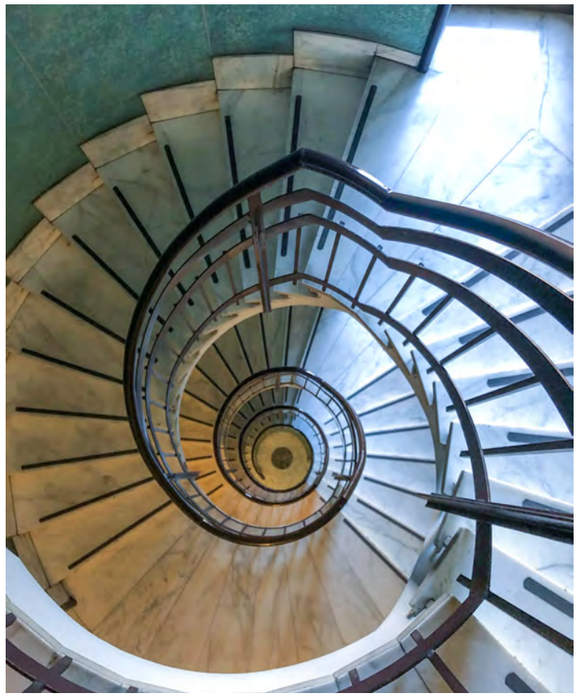
Lead engineers
- Ing. Patrizia Polenghi

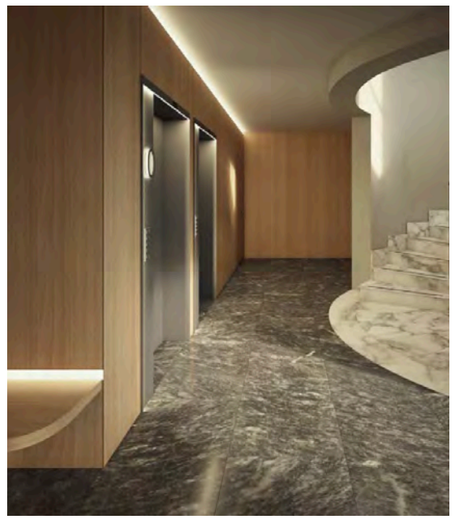
Regulatory framework
Redevelopment

Relevant aspects
Careful management of the construction site which allowed the simultaneous stay of the tenants inside their homes in safe conditions



Argelati





Elba

Investire SGR BIM 45
Magenta 54

Living better starts here

Fine finishes

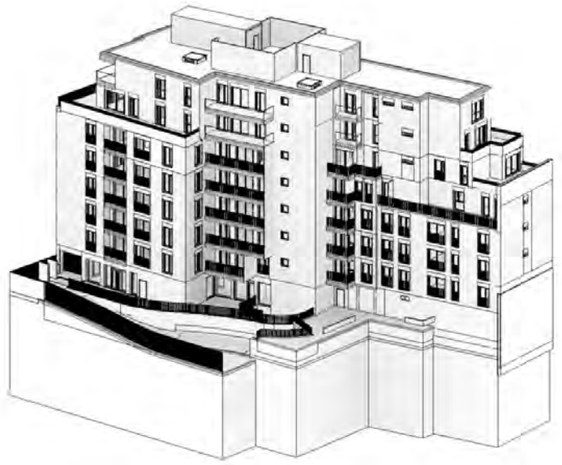
Wide and comfortable spaces

Historical facade

Big balconies and dehors

Crivelli 30

A stone's throw from the Roman walls



Location
Via Crivelli 30, Milan

Year
- 2016 - 2019

Client
Bluestone Crivelli srl

Area
Residential

Activities
- Preliminary and construction architectural and structural design
- Structural and geotechnical detailed design of the demolition and containment works of the excavations
- General and structural construction supervision "DL" of the demolition of existing buildings

Project cost
13.093.171,11 €

Structure cost
4.339.862,32 €

Size
- Surface: 1.334 sqm
- 42 residential units
- 2 commercial units

Lead engineers
- Ing. Patrizia Piera Polenghi
- Ing. Lorenzo Mariani

Relevant aspects
- Redevelopment of a historic Milanese area
- Limited area of the lot and narrow construction site spaces along a traffic artery with a heavy component of public transport

Ponte Vetero

In the heart of Brera, Milan

Location
Via Ponte Vetero 16/18, Milan

Year
- 2010 – 2019

Client
Defi srl

Area
Residential

Activities
- Integrated design in the detailed design phase
- Specialized design of structures, systems and fire prevention in the preliminary, developed and detailed design phases
- General, structural, civil works, plant construction supervision "DL"
- Safety design coordination / safety inspection coordination
- Obtaining of building permit

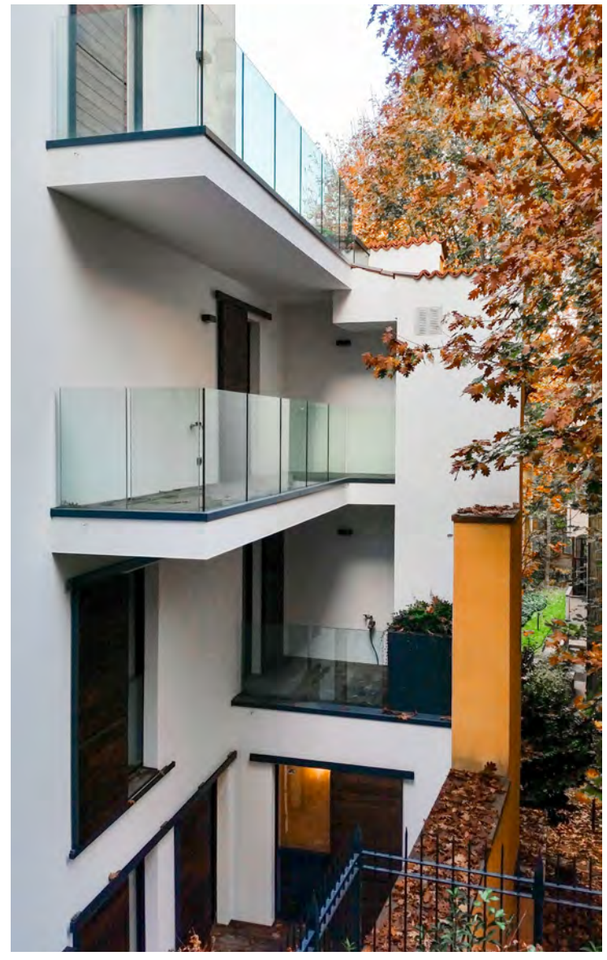
Project cost
11.902.565 €

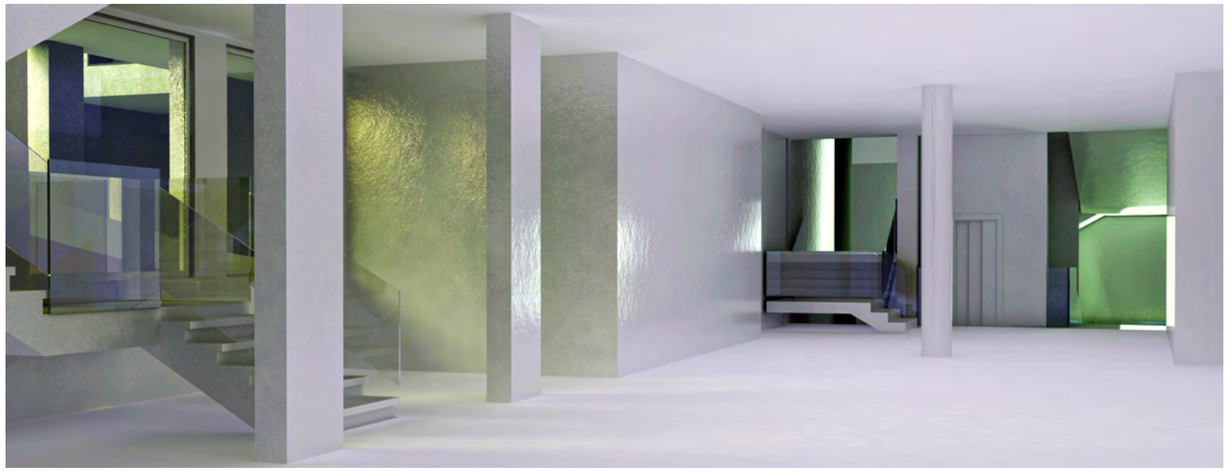
Size
- Building capacity: 3.250 sqm

Lead engineers
- Ing. Alessandro Sabato

Regulatory framework
New construction

Relevant aspects
- Choice of structural types in relation to the difficulty of building site, with costly and complex construction phasing
- Complexity of the soli support works, necessary for the construction of the excavation for the underground car park
- High-quality finishes combined with cutting-edge technological and plant solutions





Boezio 20

MIA the Italian house

Location
Via Boezio 20, Milan

Year
- Design: 2014 - 2015
- Structural Construction supervision “DL”: 2015 - 2017

Client
BNP PARIBAS REAL ESTATE / General Planning srl

Area
Residential

Activities
- Preliminary structural design
- Demolition and excavation supervision
- Developed structural design of the building and collaboration in the detailed design phase
- Operational structural construction supervision “DL”

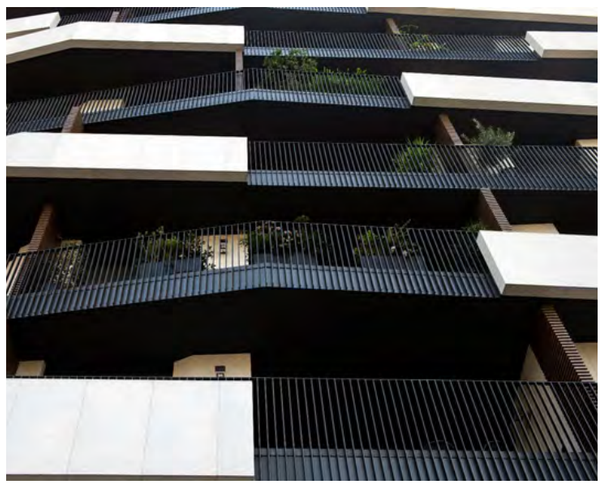
Project cost
23.000.000,00 €

Structure cost
4.500.000,00 €

Size
- GBA: 14.500 sqm
- GFAP: 10.000 sqm
- N. 11 floors above ground in the buildings facing the street
- N. 8 floors above ground
- n. 2 underground floors - 102 apartments

Lead engineers
- Ing. Bruno Finzi
- Ing. Alessandro Sabato

Regulatory framework
New construction



General interest

QC Salsomaggiore

SPA redevelopment

Location
Piazza Berzieri, Salsomaggiore

Year
- Design: February 2018 – may 2023
- Construction: september 2023 - ongoing

Client
QC Terme s.r.l.

Area
General interest

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”

Project cost
n/a

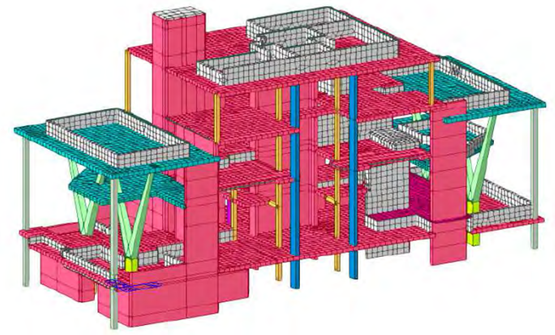
Structure cost
1.250.000,00 €

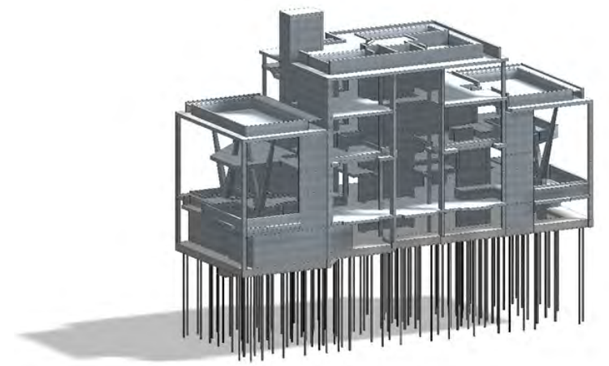
Size
- GBA: 2.900 sqm

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Alessandro Sabato
- Ing, Andrea Colombo

Regulatory framework
Riqualification and seismic retrofit

Relevant aspects
- Restoration works involve both Palazzo Berzieri and the former Thermal Power Plant, which will be transformed into a Spa with 9 pools
- Delicate intervention at the former Thermal Power Plant, involving the complete demolition of the internal spaces and their reconstruction from scratch while retaining the existing perimeter facades - under the supervision of the heritage authority - using a strong scaffolding structure
- The chimney is also under heritage protection and will be strengthened while fully respecting its original appearance





BIM 45

Activity
3D modeling of structures.
Exctraction of documents from model.
Coordination with the architectural disci-pline and with the structural calculation model. Calculation from the model.

Division
Integrated design

Design phase
- Preliminary design

Software
Allplan, Solibrì, BIM Collab

Lead engineers
- Technical manager: Ing. G. Pittelli
- BIM Coordinator: Ing. L. Cattaneo

Cesena Sport City

Discover the joy of play

Location
Cesena

Year
- 2022 - ongoing

Client
Comune di Cesena
Project funded by the Presidency of the Council of Ministers
Construction funded by PNRR – EU Next Generation Program

Concept Design
Degli Esposti Architetti

Area
Sport

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Budget
18.980.000 €

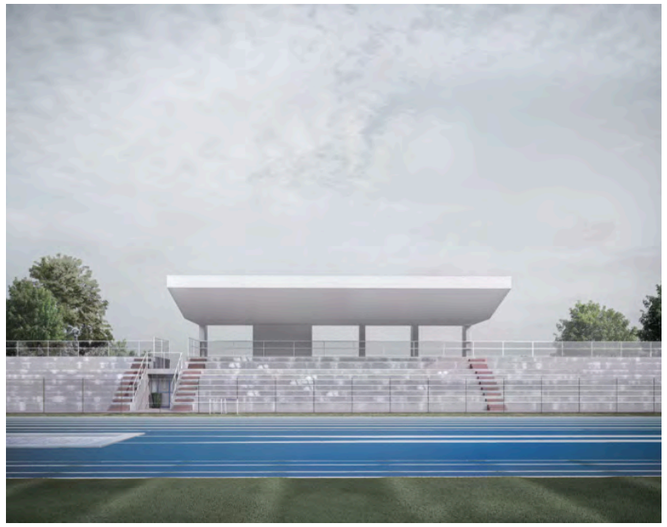
Lead engineers
- Ing. Gianluca Pittelli
- Ing. Davide Emmanuello

Regulatory framework
New construction and partial demolition of existing buildings

Relevant aspects
Redevelopment of the main sports center of the city of Cesena, consisting of sports and recreational facilities municipally owned, with partial demolition and reconstruction.

Strategic guidelines study and overall concept design approved by the City of Cesena.
Completed projects:
- Cesena Athletics Sport Center (Hippodrome district);
- Villa Chiaviche Sports Citadel.

Design development:
- new swimming pools center;
- billiards hall;
- velodrome;
- cycle paths.



Palazzo delle Scintille

A Renaissance of the Past

Location
Largo Domodossola 1, Milan

Year
- Design: September 2020 – ongoing
- Safety coordination during the design phase: September 2020 - ongoing

Client
Generali Real Estate S.p.A.

Area
General interest

Activities
- Preliminary, developed and detailed structural design
- Safety design coordination

Project cost
14.000.000 €

Structure cost
4.800.000 €

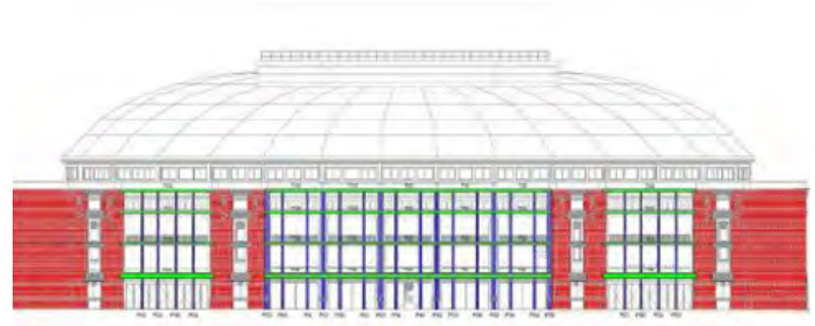
Size
- GFA: 14.990 sqm
- GBA: 26.940 sqm

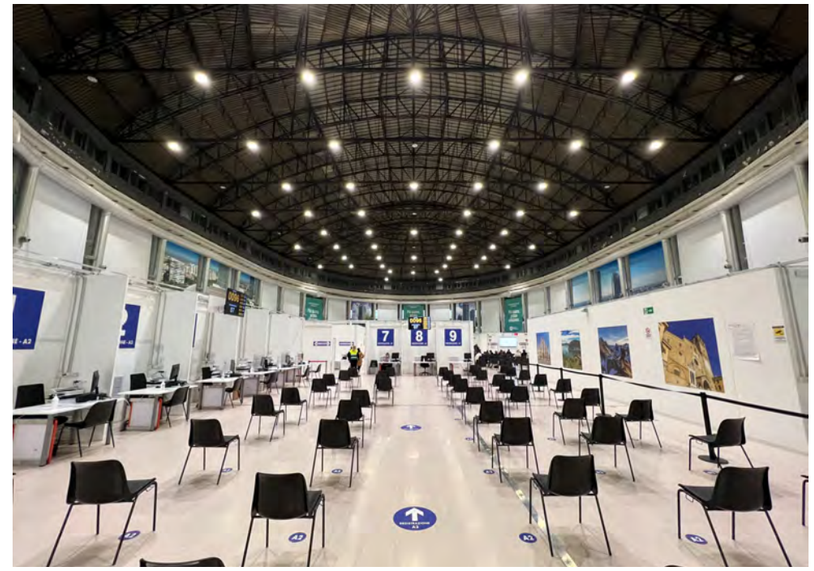
Lead engineers
- Ing. Valter Carni
- Ing. Luca Rossini

Regulatory framework
Intervention on existing building as per NTC 2018

Prefabrication
Metal carpentry structures of the roof

Sustainability
Roof cover is made of steel





Sala Billanovich

New light for 90,000 volumes

Location

Gregorianum building - via Lanzone 30, Milan

Year

- Design: september 2019– december 2020
- Execution: february 2020 - january 2023

Client

Università Cattolica del Sacro Cuore

Area

University

Activities

Complete integrated design:

- Preliminary, developed and detailed architectural design
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed plant design (in partnership with Rethink srl and Esselle Progetti)
- Design coordination
- Safety design coordination; safety inspection coordination
- General construction supervision “DL”
- Specialist construction supervision “DL”

Project cost

1.860.000,00 €

Structure cost

250.900,00 €

Size

- Gross surface area: 1.350 sqm

Lead engineers

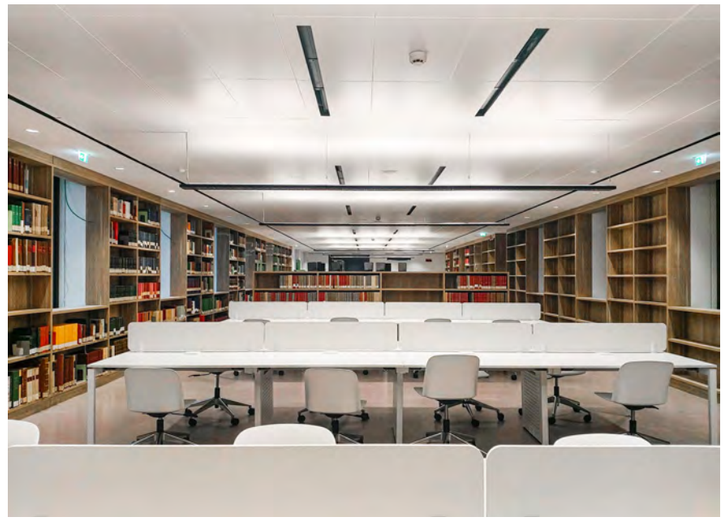
- Ing. Bruno Finzi
- Ing. Mauro Savoldelli
- Arch. Anna Legnani

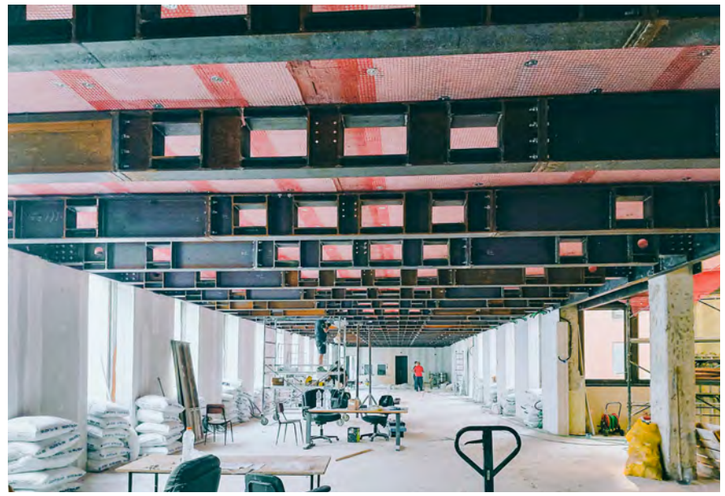
Regulatory framework

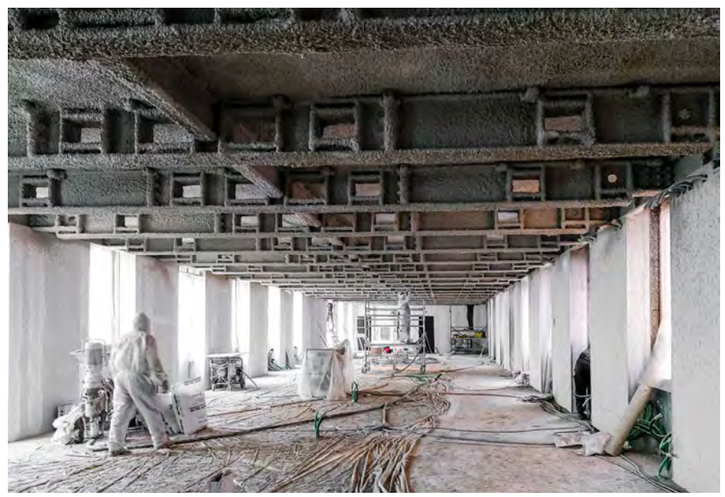
Conservative restoration (DPR 380/2001 art. 3)

Relevant aspects

- Sala Cinquecentine: independent compartment with dedicated plants, it houses 2,000 volumes from the 16th century and 39 incunabula from the 1400s
- Coordination of plant strategies and interventions to strengthen existing structures







Hospitality

21 House of Stories

Coworking and 4 hotel*

Location
via Bettinelli, Milan

Year
- 2018 - 2023

Client
Bettinelli 3 Srl

Area
Hospitality

Activities
- Preliminary, developed and detailed structural design

Project cost
17.500.000,00 €

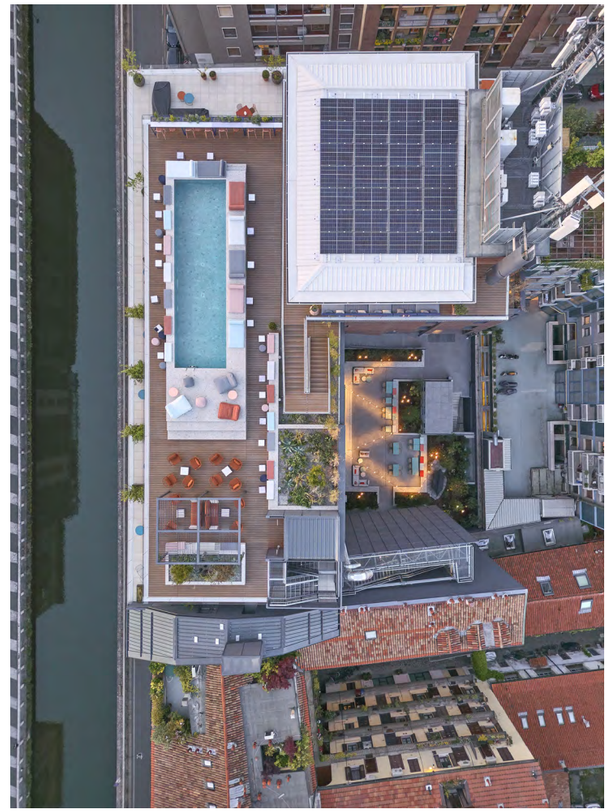
Structures cost
2.200.000,00 €

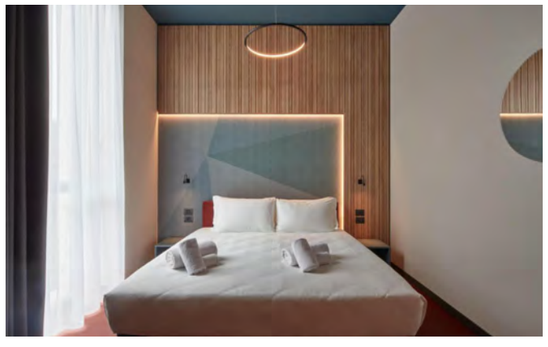
Size
- SL: 6.000 smq
- 8 floors above ground, 1 underground
- 104 rooms
- 1,000 sqm of open-air common spaces

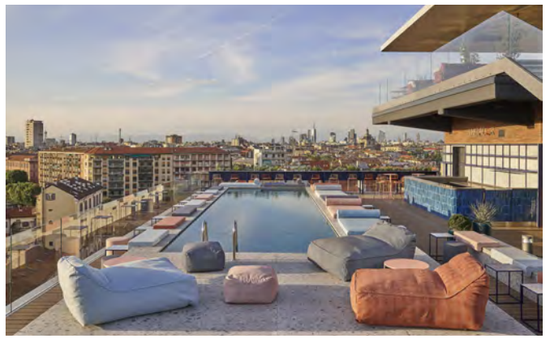
Lead Engineers
- Ing. Mauro Savoldelli
- Ing. Davide Emmanuello

Regulatory framework
Seismic retrofit of structures in accordance with NTC'18

Relevant aspects
- Redevelopment project for a building dating back to the 1960s, which housed a telephone exchange and related offices
- Objective to scale down the imposing volume of the building to an urban scale harmonious with its surroundings, achieved by breaking it down into smaller elements reflecting the modularity of residential units
- Addition of new reinforced concrete shear walls and reinforcement of existing ones through reinforced cladding. Also, steel framework extensions are introduced to reduce the impact of seismic forces during architectural reconfiguration.







Excelsior Hotel Gallia

The rebirth of Art Nouveau

Location
Piazza Duca d'Aosta, Milan

Year
- Design: 2011 – 2014

Client
ZH-M Gallia Scarl

Area
Hospitality

Activities
- Preliminary, developed and detailed structural design

Project cost
n/a

Structure cost
14.452.970,00 €

Size
- GFA: 31.500 sqm

Lead engineers
- Ing. Bruno Finzi
- Ing. Giovanni Canetta

Regulatory framework
Redevelopment / restoration

Hotel Fabriqa BIM 45

Former CIRIO with five stars

Location
Porto Ercole, Grosseto

Year
- Design: 2018 – 2019

Client
QARLBO srl

Area
Hospitality

Activities
- Preliminary, developed and detailed structural design
- Preliminary, developed and detailed geotechnical design

Project cost
5.000.000,00 €

Structure cost
5.000.000,00 €

Size
- GFA: 4.500 sqm

Lead engineers
- Ing. Mauro Savoldelli

Regulatory framework
Redevelopment and new construction

Relevant aspects
- Project developed in BIM from the preliminary stages, facilitating the integration of disciplines and different teams based in Rome, Milan and Stockholm
- Particular importance of the geotechnical aspects of the work due to the proximity of the site to the coast
- Complex support works of the excavation fronts near the sea

Hotel Cordusio

The new Meliá in the historic center

Location
Piazza Cordusio 2, Milan

Year
- 2021 – ongoing

Client
Generali Real Estate SGR SpA

Client
Impresa Percassi SpA

Area
Hospitality

Activities
- Architectural construction documents design
- Structural construction documents design
- Construction documents design coordination

Project cost
17.000.000,00 €

Structure cost
2.000.000,00 €

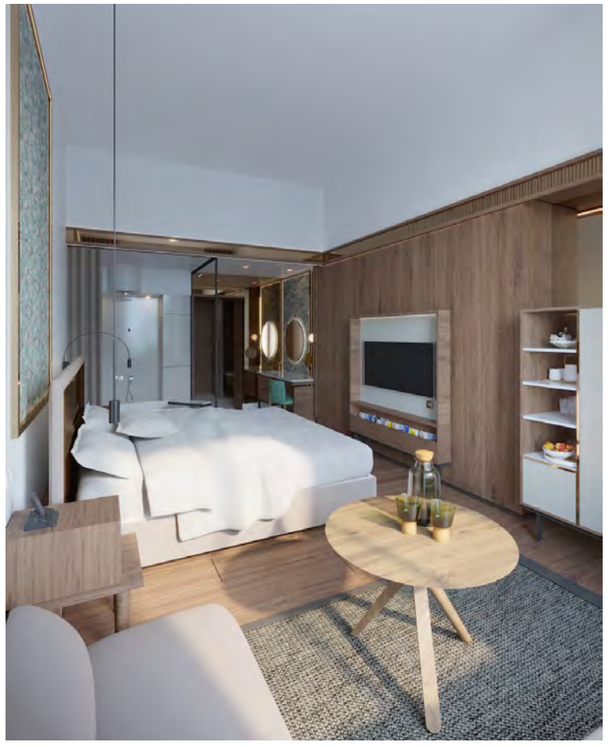
Size
- 10.000 sqm about

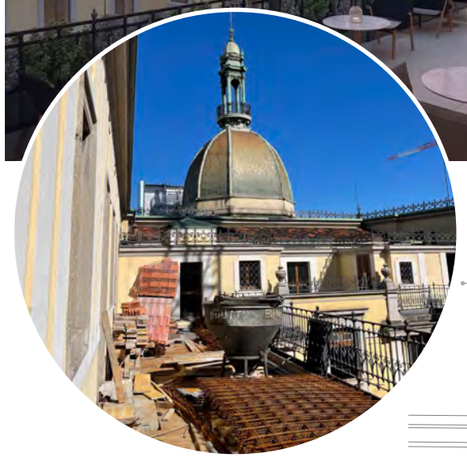
Lead engineers
- Ing. Gianluca Pittelli
- Arch. Andrea Zignani

Certifications expected
- LEED e BREEAM

Regulatory framework
- SCIA condizionata art. 23 DPR 380/01 - renovation with modification of shape and change of use

Relevant aspects
- Enhancement of the existing building heritage
- Interventions on buildings subject to artistic constraints and inserted in a highly urbanized context and with particular logistic difficulties (historical center of the city)

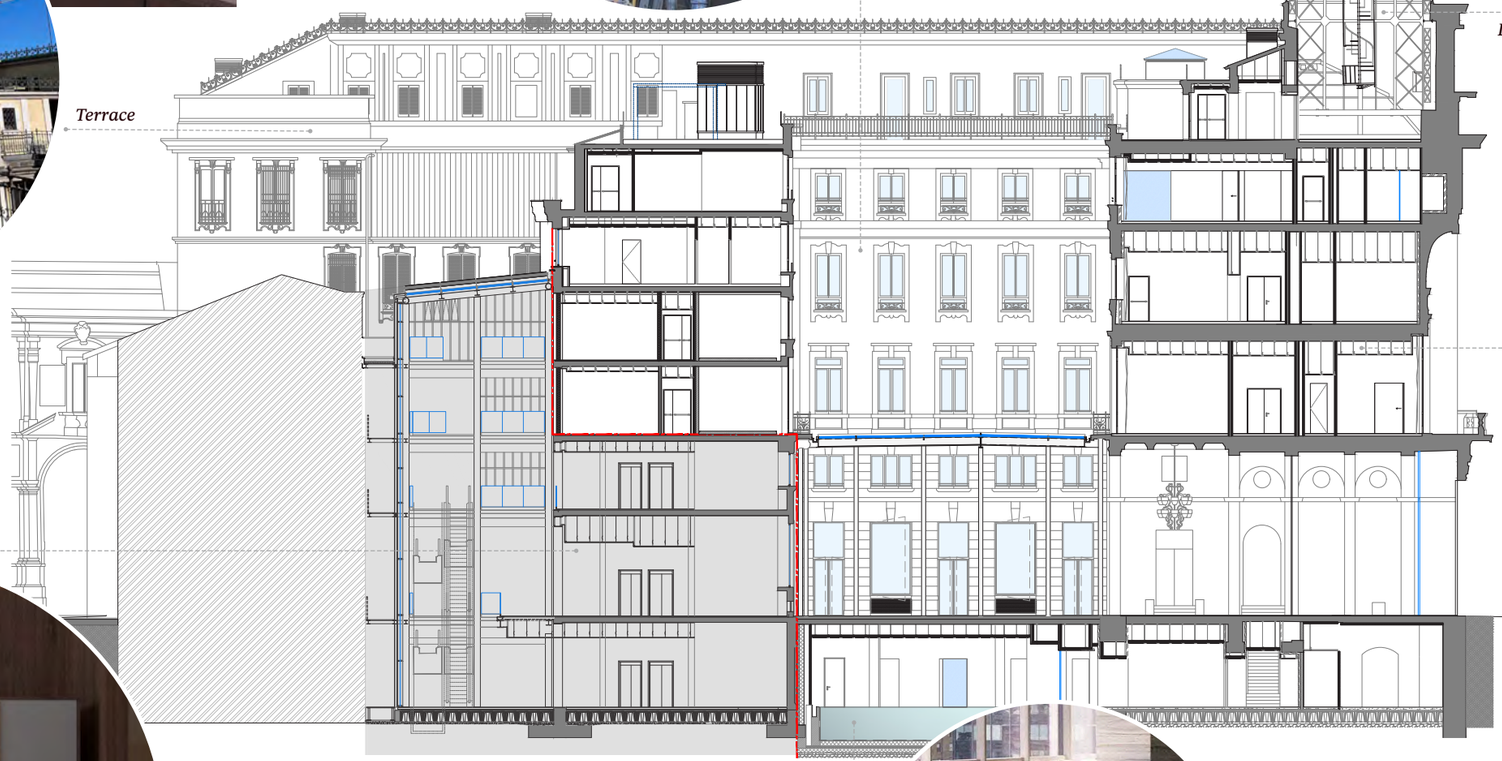




Internal courtyard

Dome

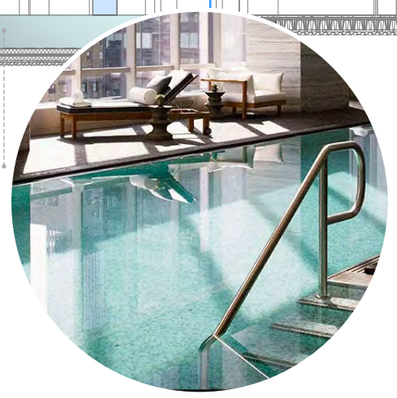
Terrace



Structural reinforcement

Rooms

Pool



UNA Hotel (ex ATA)

High performance standards

Location
Via Carlo de Cristoforis 6/8, Milan

Year
- 2017 – 2020

Client
Unipol SGRl

Area
Hospitality

Activities
- Preliminary, developed and detailed structural design
- Structural construction supervision “DL”

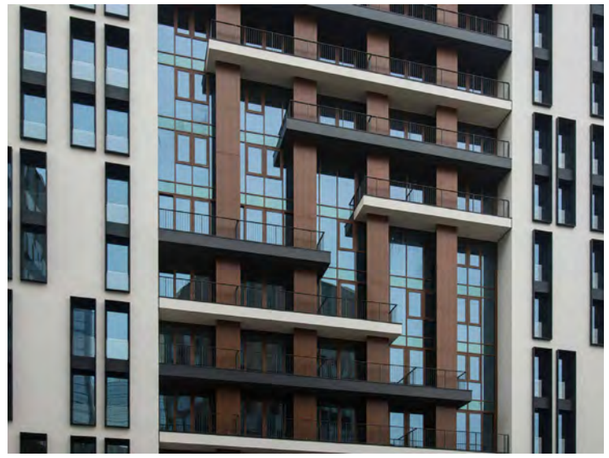
Project cost
n/a

Structure cost
n/a

Size
- GFA: 8.980 sqm
- 14 floors above ground
- 2 floors below ground
- Maximum height: 49 m

Regulatory framework
Redevelopment / restoration

Relevant aspect
Modification of the functional layout of the entire building, in order to obtain modern spaces suitable for new housing needs



Infrastructural

Sesto Station

A bridge between the past and the future

Location
Sesto San Giovanni, Milan

Year
- Construction: october 2021 - ongoing

Developer
MilanSesto SpA

Client
Prelios Integra

Architect
Renzo Piano Building Workshop RPBW with
Ottavio Di Blasi & Partners

Area
Infrastructure

Activities
- General and specialized construction supervision
  (structures, civil works, mechanical, electrical, special systems)

Project cost
14.600.000 €

Size
- 89 x 18m: pedestrian walkway area
- 110m: length of photovoltaic covering

Lead engineers
- Ing. Giovanni Canetta
- Ing. Alessandro Sabato

Regulatory framework
Public and general interest work.
Areas included in the PGT (General Territorial Plan) of Sesto San Giovanni, in the Strategic Transformation Areas ATs1 (so-called Ex Falck Compound) and ATs2 (so-called Ex Railway Depot Compound).

Relevant aspects
- Part of the MilanSesto urban regeneration project, one of the largest in Europe
- Infrastructure connecting two areas of the city historically divided by the railway tracks: the former Falck areas and Piazza 1° Maggio

Genoa Subport Tunnel

Waterfront redevelopment

Location
Genoa

Year
- 2021 - 2023

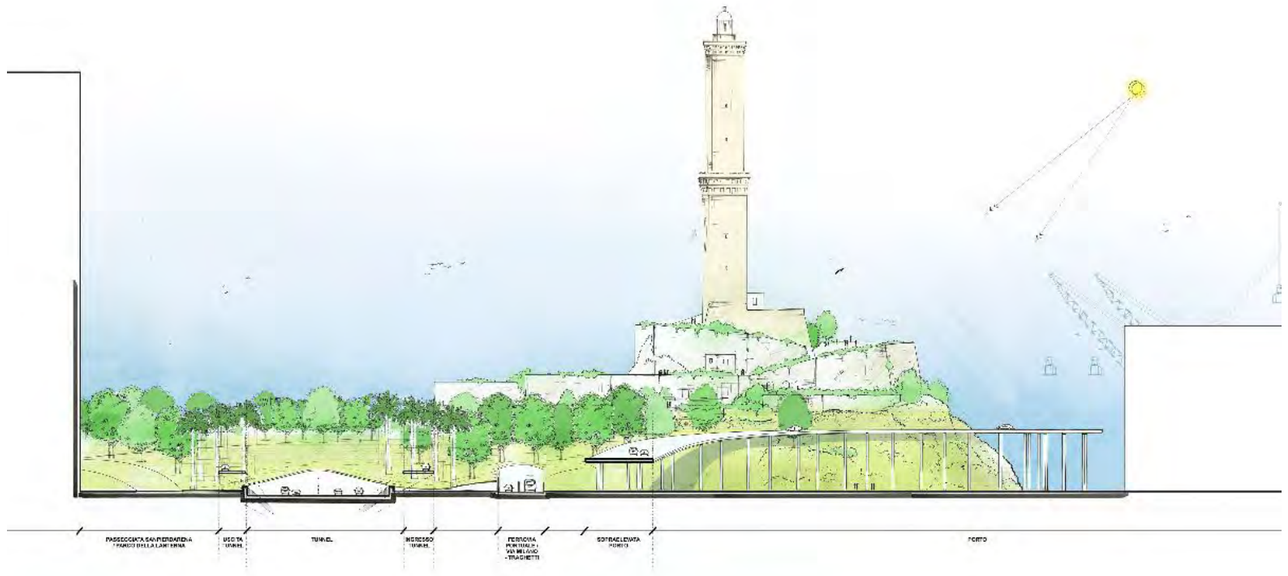
Client
Rina SpA

Area
Infrastructure

Activities
Structural consultancy for the development of the Technical and Economic Feasibility Project of provisional and final surface works, (mainly related to the entrances of the natural tunnels, shafts, and connections with the city's road network)

Lead engineers
- Ing. Giovanni Canetta
- Ing. Gianluca Pittelli
- Ing. Veronica Minardi

Relevant aspects
The project involves the road crossing of the internal basin of the Port of Genoa through the construction of a tunnel and the relevant connecting sections with the highway junction and the city's road network to the west and east of the city center.



Bridges and arches for EXPO 2015

A new landmark in the city of Milan

Location
Viale De Gasperi, via Gattamelata, Milan

Year
- 2012 - 2016

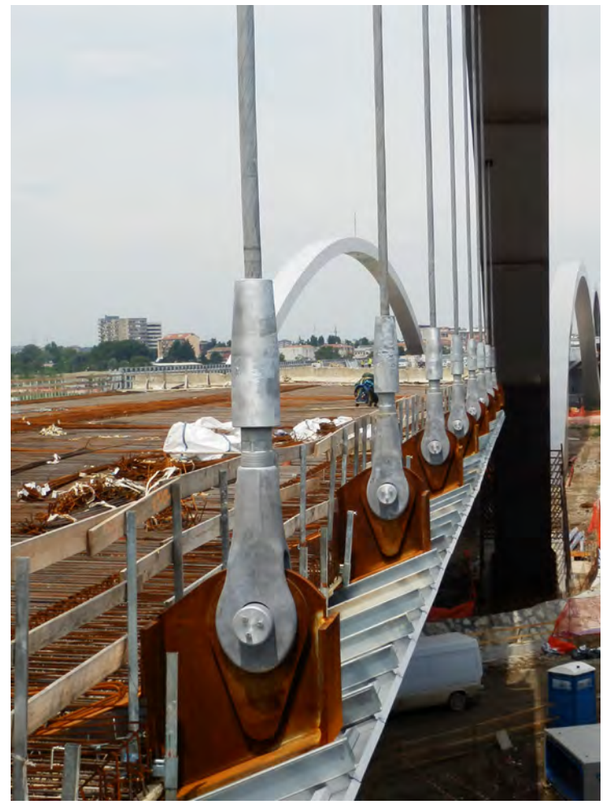
Client
Infrastrutture Lombarde SpA

Area
Infrastructure

Activities
Technical and administrative final structural certification
- Cascina Merlata gallery
- Merlata roundabout
- Box underpass at the first span of the RFI Certosa viaduct
- RFI north and south viaducts
- Arch bridge on the A4 motorway
- Viadotto EXPO
- EXPO viaduct
- Arched bridge over the A8 motorway and related approach and junction viaduct

Size
- 2,250 m total of works completed
- 22 spans
- Bridge on the A4: span 140 m
- Bridge over the A8: span 91 m

Relevant aspects
- Tests on aeroelastic model at the Wind Tunnel of the Milan Polytechnic
- The high technology of the bearings
- The sophisticated pile profile
- Overpass A4 and Expo Viaduct in a single deck
- Speed of construction



Cepav 2
AV/AC Turin-Venice
High-Speed Highway Network

Location
AV/AC Turin - Venice, functional lot Treviglio - Brescia

Year
- 2011 - 2015

Client
CEPAV2 – Consorzio ENI per l'alta velocità

Area
Infrastructure

Activities
- Developed geotechnical design

Project cost
n/a

Size
- Length of railway section: 39.6 km
- Embankments: 46.2 km
- Interconnections: 11.8 km
- Artificial tunnels: 1 km
- Viaducts: 3.2 km
- 7 overpasses
- 34 road underpasses

Lead engineers
- Ing. Bruno Becci
- Ing. Giovanni Canetta
- Ing. Luca Rossini

Relevant aspects
- High permeability soils - very shallow water table, particularly in the Bergamo section, interfering with the works
- The main structures of the Treviglio – Brescia high-speed railway line are the viaducts over the Oglio River (1,287m long) and Serio River (957m long), and the artificial tunnel "Lovernato 2" (525 meters) on the Brescia interconnection

Smart Park Varese

A landmark made of copper

Location
via Sempione, Varese

Year
- Design: 2013 - 2018
- Construction: 2018 - 2021

Cliente
AVT Azienda Varesina Trasporti SpA

Area
Car Park / Offices

Activities
- Integrated design
- Complete design of structures, systems and fire prevention
- Structural and general construction supervision “DL”
- Civil works supervision
- Safety design coordination / safety inspection coordination
- Obtaining permission to build
- Seismic and landscape practice

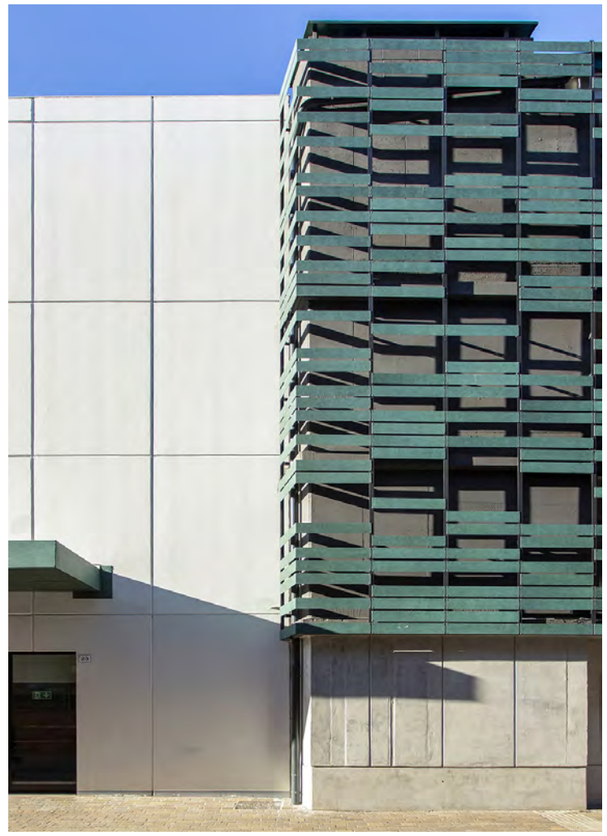
Project cost
€ 5.150.816,91

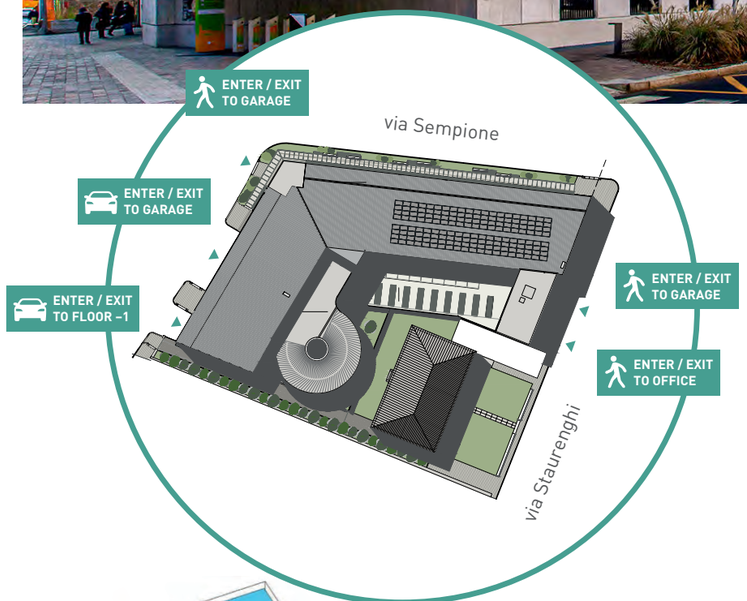
Size
- 2.600 sqm - 315 parking spaces
- 3 floors above ground, 1 floor below

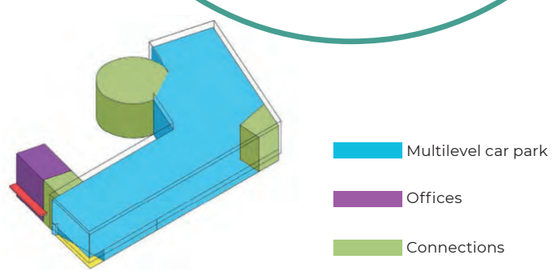
Lead engineers
- Ing. Giovanni Canetta

Regulatory framework
New construction

Relevant aspects
- Placement in an urban context of significant historical and artistic value, a few meters from the city center of Varese
- Design of a public infrastructure with study of user flow, access to the structure and permeability of the area
- Deck rests directly on the perimeter structures of the corridors, creating a space free from pillars
- Facade made with composite copper panels randomly placed by the designer. It creates a full / empty effect that lightens the facade and provides the internal air exchange







Pepe - Farini underpass

At Isola's edge

Location
Via Guglielmo Pepe / Via Carlo Farini, Milan

Year
- 2020 - ongoing

Client
COIMA SGR SpA

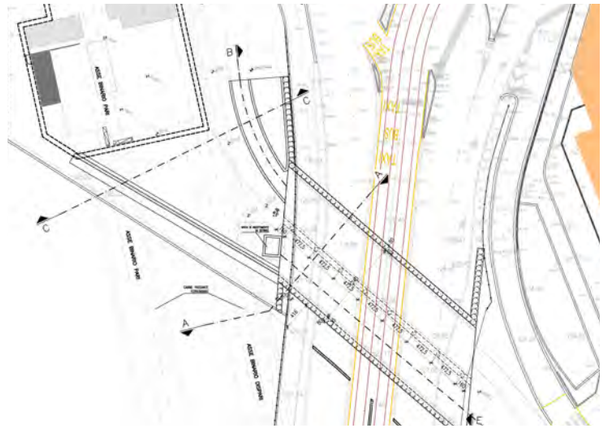
Area
Infrastructure

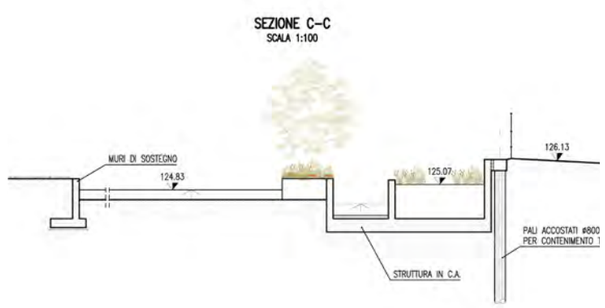
Activities
- Preliminary, developed, and detailed structural design for the widening of Ponte Farini and the crossing of Via Pepe
- Preliminary, developed and detailed geotechnical design

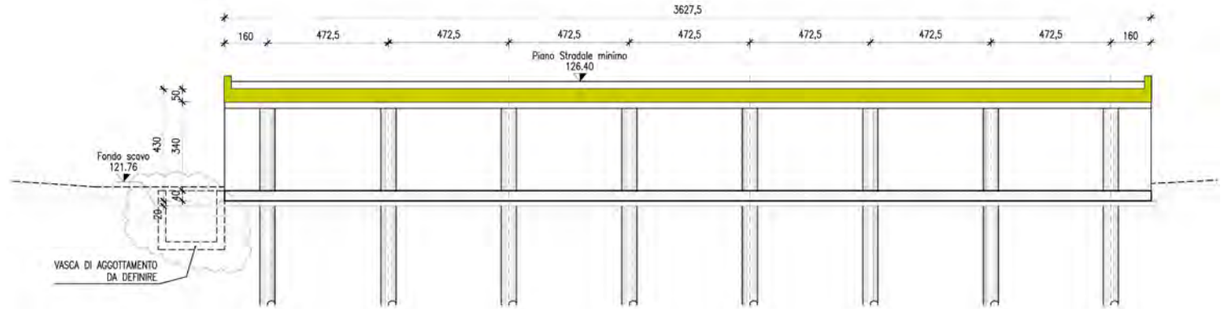
Size
- Underpass width: 12 m
- Underpass height: 3 m

Relevant aspects
Key entrance gate to the large Scalo Farini Masterplan and strategic connection point with the high-traffic pedestrian and cycling route along the Porta Nuova Garibaldi / Piazza Gae Aulenti axis.

Strong architectural appeal and attention to detail for an infrastructure-focused intervention. The architectural concept enhances not only mobility aspects but also recreational and social elements (reflective walls and ceilings, rounded walls serving as mini ramps for skateboarding and waveboarding).







Viability Portello - Gattamelata

Urban gallery

Location
Viale De Gasperi, via Gattamelata, Milan

Year
- 2006 - 2014

Client
Claudio Salini Grandi Lavori SpA

Area
Infrastructure

Activities
- Structural construction documents design, with seismic adaptation

Size
- Length of the road route: about 1.5 km
- 1 km of urban gallery
- 6 traffic lanes

Crema RFI station

A restyling for travellers

Location

Crema RFI station along the Treviglio - Cremona line

Year

- 2020 - ongoing

Client

Minnucci Associati srl

Area

Infrastructure

Activities

Support activities for the integrated developed and detailed design of the works necessary for the construction of:

- a station pedestrian underpass;
- adaptation and elevation of existing sidewalks;
- construction of new shelters;
- restyling of the passenger building.

Civitavecchia RFI station

Renovation by the sea

Location

Civitavecchia RFI station

Year

- 2021 - ongoing

Client

Minnucci Associati srl

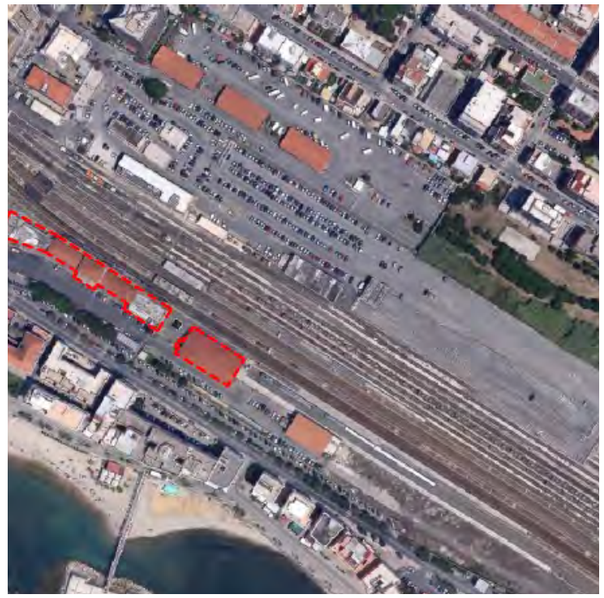
Area

Infrastructure

Activities

Restructuring of the Civitavecchia station, specifically:

- Assistance in the design of accessibility improvement works, extended up to the detailed design phase;
- Assistance in the design of the restyling of the passenger building, the goods warehouse, and the external square, extended up to the detailed design phase.



Brasilia Park

More space for pedestrian areas, bike lanes, and nature

Location
largo Brasilia / via San Gimignano, Milan

Year
- 2022 - in corso

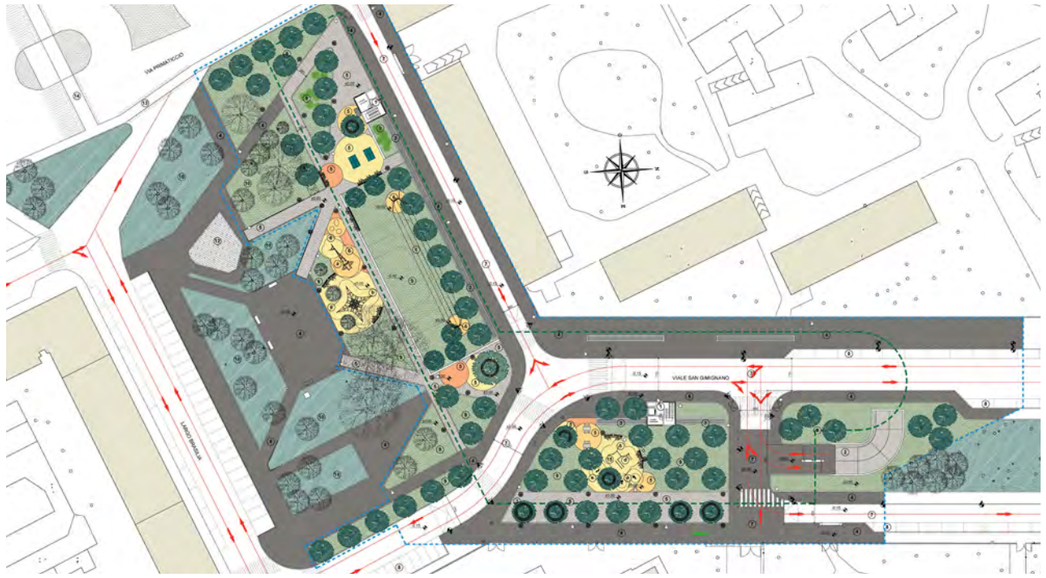
Client
SAMSTAVAL Srl

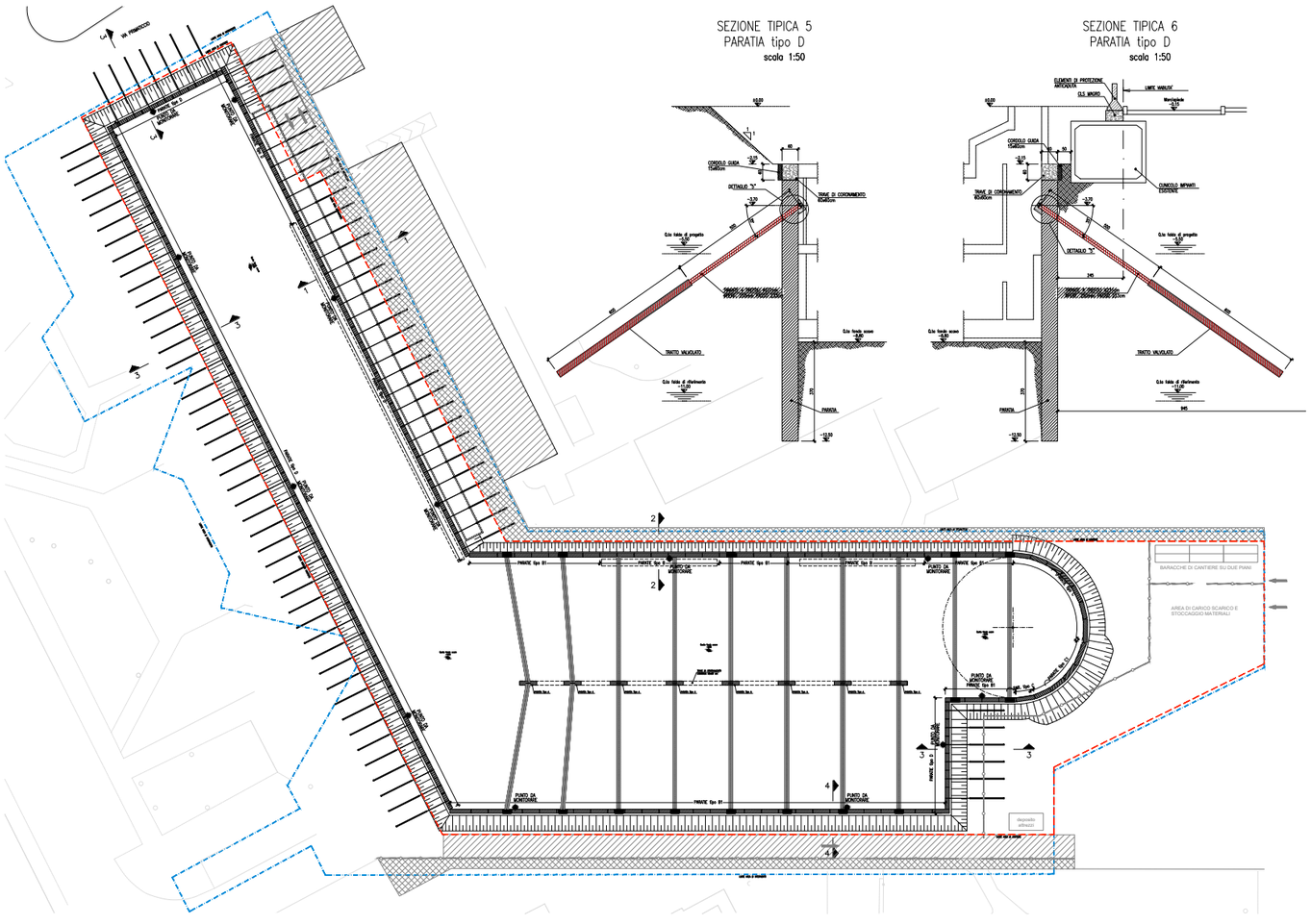
Area
Infrastructure

Activities
- Developed and detailed structural design of excavation works
- Site supervision for the excavation support structures
- Assistance to final structural certification

Size
- 2 underground levels
- 316 car parks

Relevant aspects
The identified area takes into account the specific needs of the residents in the area, the interchange with the public transportation network, and the dedicated sustainable mobility network. With structured parking, it is possible to free streets, squares, and sidewalks from cars, increasing pedestrian areas, green spaces, bike lanes, and bicycle parking.





Scalabrini Park

The new underground parking in the Lorenteggio area

Location
largo Scalabrini, Milan

Year
- 2022 - ongoing

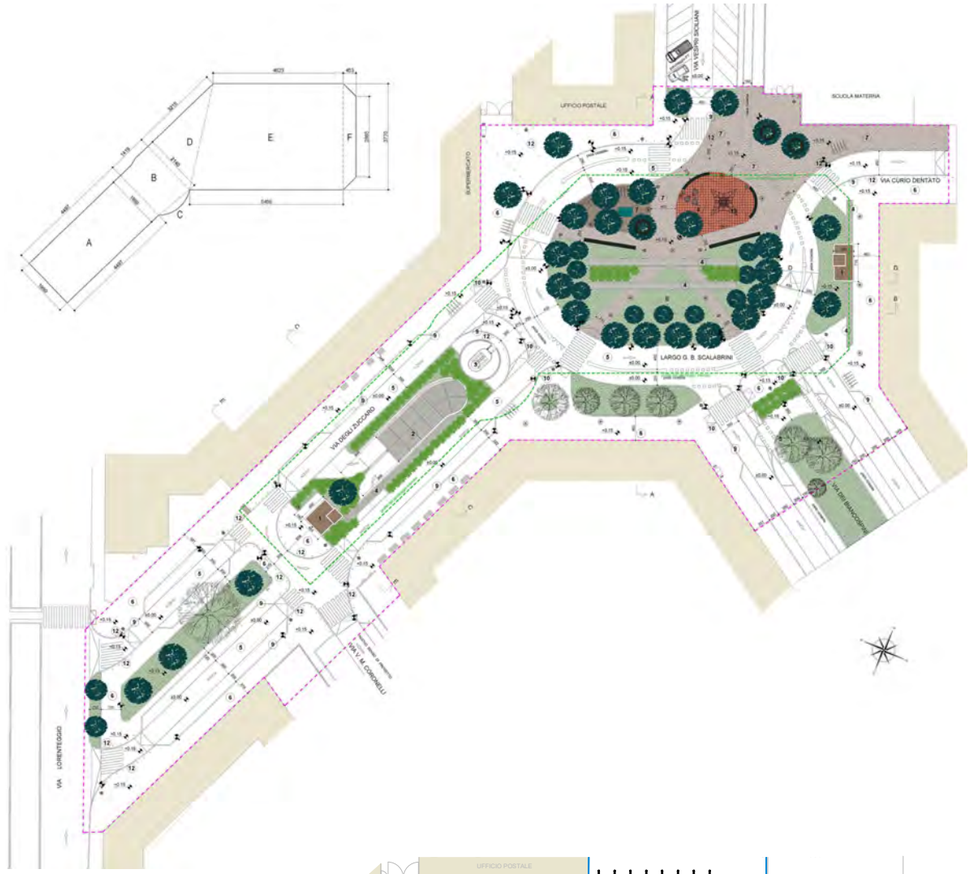
Client
VERDE & BOX Società Cooperativa

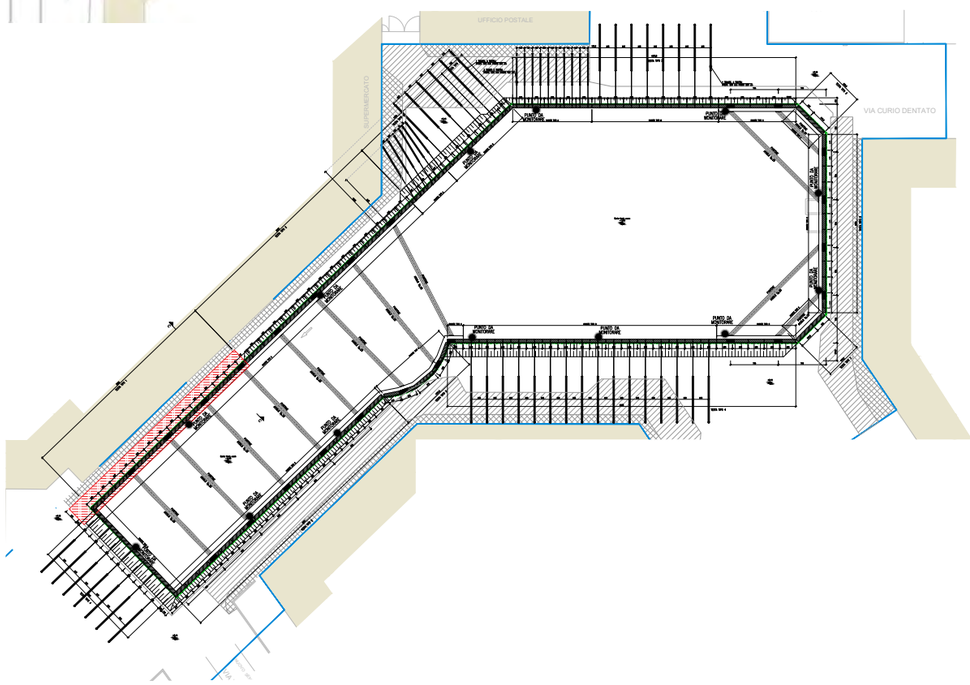
Area
Infrastructure

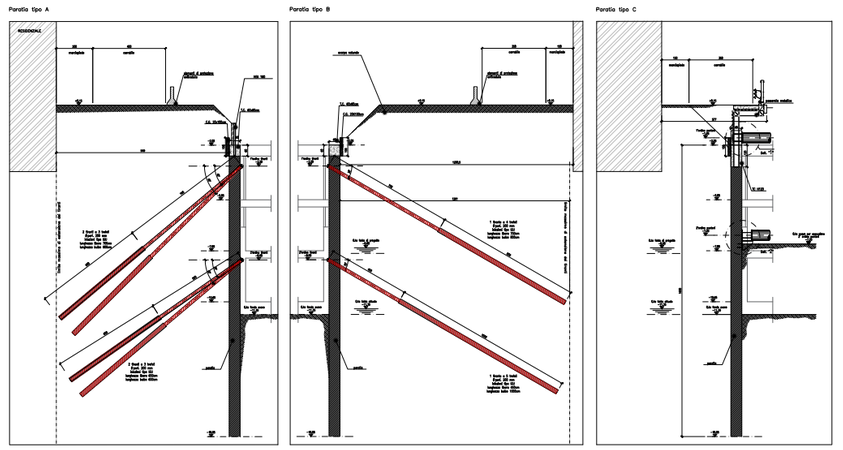
Activities
- Developed and detailed structural design of excavation works
- Site supervision for the excavation support structures
- Assistance to final structural certification

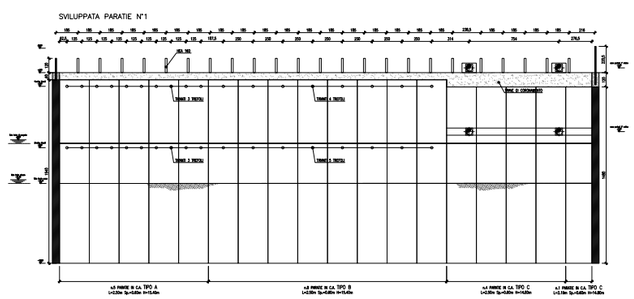
Size
- 3 underground levels plus a mezzanine floor
- 252 single and 33 double parking spaces, for a total of 318 parking spots
- Covered area of the parking lot: 3,556.96 sqm
- Gross volume: 33,079.73 cubic meters

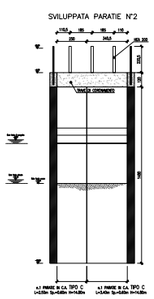
Relevant aspects
Strategic project in the Lorenteggio-Giambellino area, already subject to numerous urban development interventions (M4 Subway) with related surface arrangements that include the creation of large equipped public spaces and new green areas.











Novelli Park

From a crossroads to a livable and usable square

Location
Piazza Novelli, Milan

Year
- 2003 - 2011

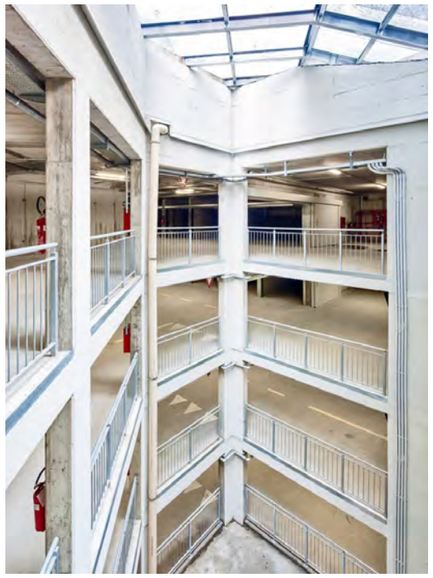
Client
Quadro Curzio SpA – ICS Grandi Lavori SpA

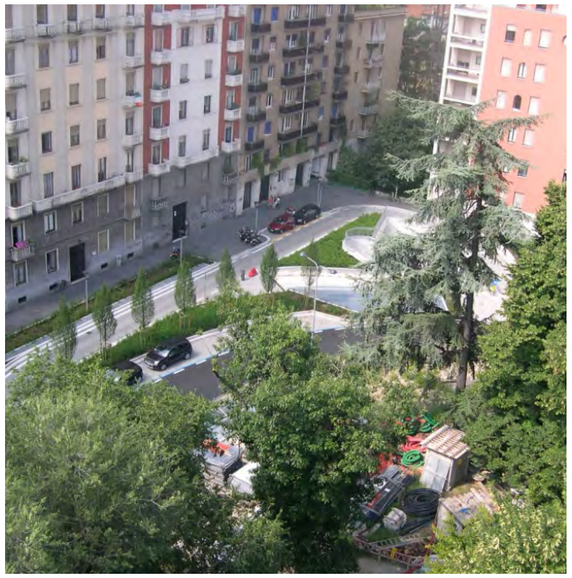
Area
Infrastructure

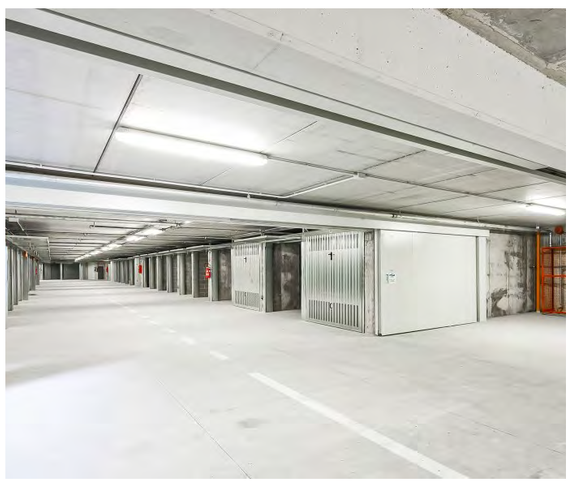
Activities
- Surface arrangement design
- Road design
- Resolution of underground services interference
- Architectural project
- Structural and geotechnical design
- Plant design
- Construction supervision “DL”
- Safety coordination

Size
- 4 underground floors
- 483 parking spaces

Relevant aspects
Optimization of design results in terms of:
- Construction time and cost, in relation to the number of garages or parking spaces created
- Functionality, usability and technical and aesthetic value of the underground building
- Durability of the work and optimization of management and maintenance costs
- Insertion of the garage in the urban context
- Qualification of the surface area in accordance to the Municipality’s guidelines related to car, cycle and pedestrian traffic, public green areas, and street furniture







Zarotto Park

Parking lot and pedestrian area in Porta Venezia

Location
Via Zarotto, Milan

Year
- 2017 - 2018

Client
Cooperativa Silos Buenos Aires

Area
Infrastructure

Activities
- Developed and detailed structural design
- Site supervision for the excavation support structures
- Assistance to final structural certification

Size
- 3 piani interrati
- 143 autovetture

Relevant aspects
The space freed from cars on the surface has allowed for the redevelopment of the area, including the creation of raised flowerbeds, benches, and two bike racks.

Two large narrative steel plaques have been installed, dedicated to Engineer Luigi Lorenzo Secchi and architect Luigi Moretti, respectively designers of the Cozzi Swimming Pool and the building now occupied by the Hotel Ibis, formerly the Casa Albergo, adjacent to the parking lot.

Da Forlì Park

A traffic island turned into green oasis

Location
V.le Caterina da Forlì, Milan

Year
- 1999 - 2006

Client
Quadro Curzio SpA – ICS Grandi Lavori SpA

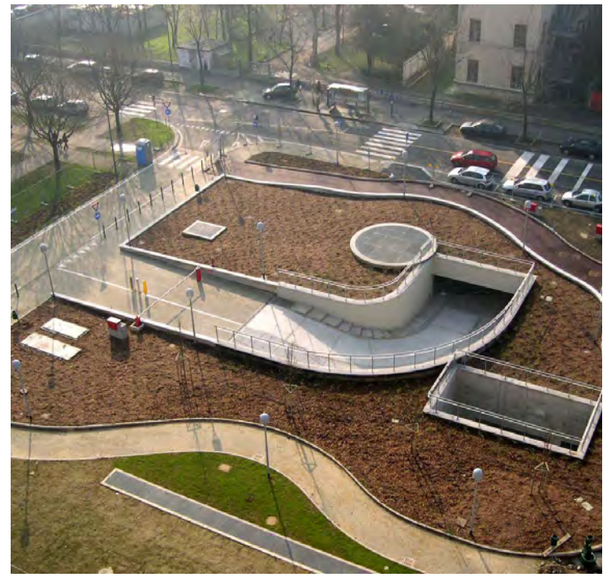
Area
Infrastructure

Activities
- Surface arrangement design
- Road design
- Resolution of underground services interference
- Architectural project
- Structural and geotechnical design
- Plant design
- Construction supervision “DL”
- Safety coordination

Size
- 3 underground floors
- 483 parking spaces

Relevant aspects
The road layout of access ramps to the structures and, more generally, the unified arrangement of the surface area designated for equipped public greenery.

Complex safety coordination activity regarding both temporary road phases and monitoring operations for structural interdependencies.



Loreto Park

A construction site along a major traffic artery

Location
Piazza Loreto, Milan

Year
- 1999 - 2006

Client
Quadro Curzio SpA

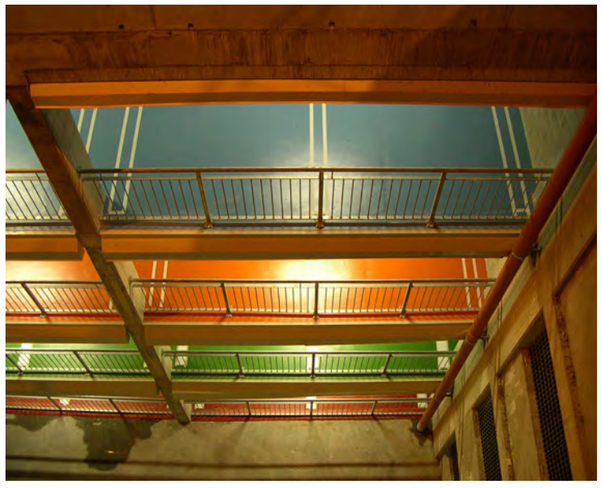
Area
Infrastructure

Activities
- Surface arrangement design
- Road design
- Resolution of underground services interference
- Architectural project
- Structural and geotechnical design
- Plant design
- Construction supervision “DL”
- Safety coordination

Size
- 4 underground floors
- 329 parking spaces

Relevant aspects
The structure was built using a sequence of 10 phases of temporary road arrangements, which heavily influenced the structures and construction method

The resolution of interference with the utilities also occurred in stages. The construction of a transverse steel structure to the structure, supporting a polyphore with 37 holes crossing the entire Via Costa, or a structure supporting cables of great strategic importance, also occurred in phases.



Accursio Park

A project centered around the grand cedar

Location
Piazzale Accursio, Milan

Year
- 2002 - 2011

Client
Quadro Curzio SpA – ICS Grandi Lavori SpA

Area
Infrastructure

Activities
- Surface arrangement design
- Road design
- Resolution of underground services interference
- Architectural project
- Structural and geotechnical design
- Plant design
- Construction supervision “DL”
- Safety coordination

Size
- 4.076 smq of surface
- 440 parking spaces

Relevant aspects
The surface green project was aimed at preserving a splendid specimen of Cedrus Atlantica, of great aesthetic and environmental value and particularly beloved by the residents of the area. Therefore, functional choices for parking were made around the Cedar, and the intervention’s landscape was built on it.

CEAS has designed a completely natural ventilation, in order to contain, on the one hand, the maintenance costs of the underground parking garage, and on the other hand, to provide a source of natural lighting and ventilation.

Porta Nuova-Garibaldi UG interference

A new urban passage

Location
Piazza Gae Aulenti, Milan

Year
- 2008 - 2012

Cliente
Hines Italia SGR SpA

Area
Infrastructure

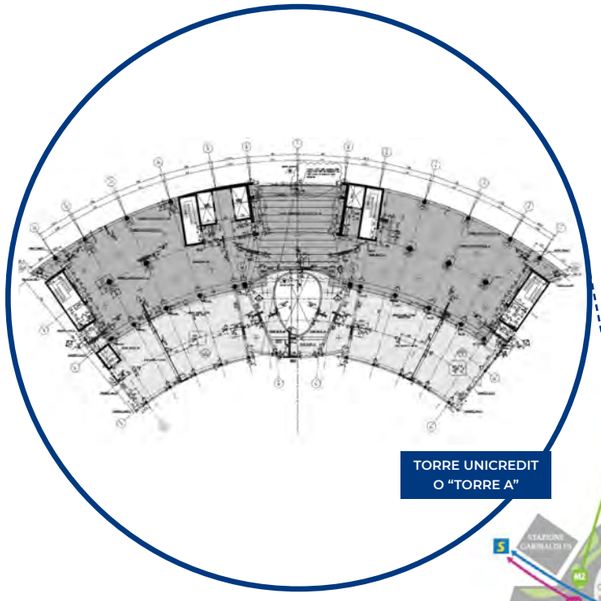
Activities
- Structural construction supervision “DL”
- Verification and monitoring

Project cost
n/a

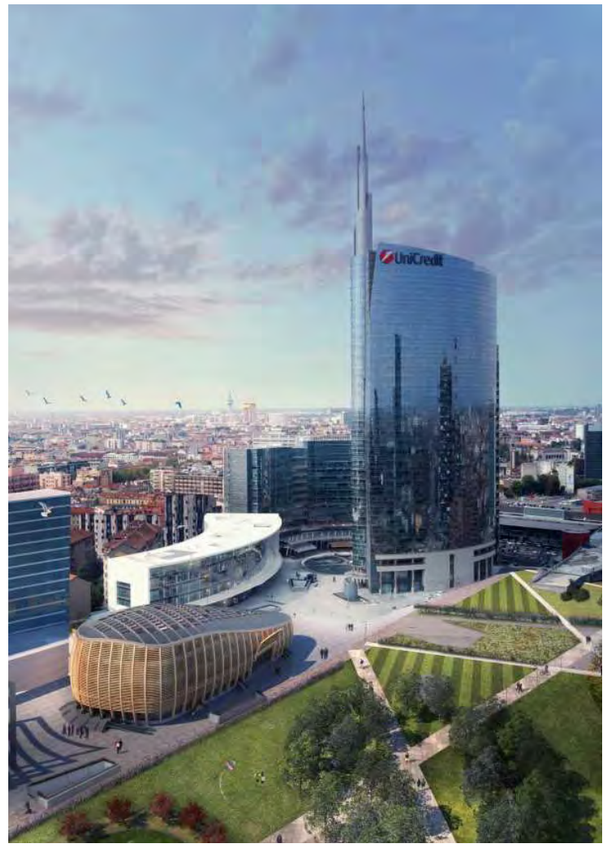
Size
- Height of Tower A: 231 m
- Floors width in Tower C: 1200 sqm

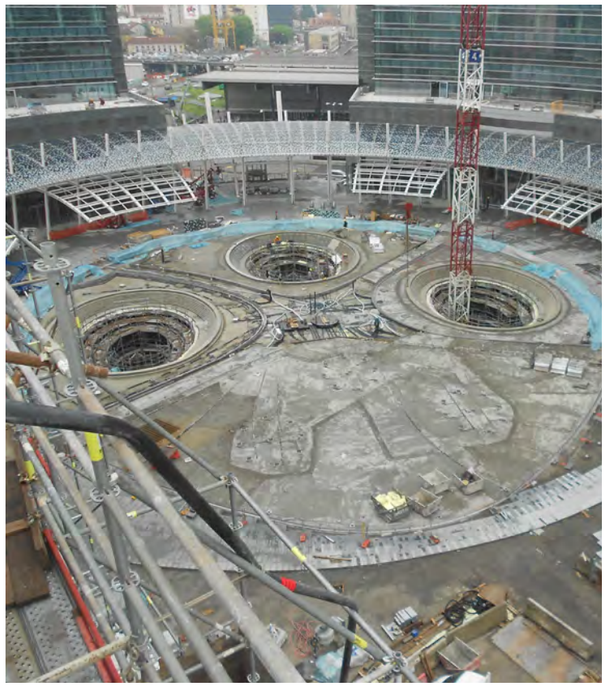
Lead engineers
- Ing. Bruno Becci
- Ing. Giovanni Canetta
- Ing. Luca Rossini

Relevant aspects
Tower C “bridges” the Passante Ferroviario tunnels (already designed by CEAS in the 1990s) with a sophisticated foundation system that transfers the weight of the tower to a level lower than that of the tunnels.
CEAS has carried out a sophisticated verification task during construction and monitoring of these structures, which were originally not designed for such a high load as that imposed by Tower C.
Tower A, also part of the Unicredit complex, with its height of 231 m, is the tallest building in Italy.



Sistema di interferenze nel sottosuolo





Industrial

Terminale Adriatic LNG

Technology in the Adriatic Sea

Location
Mare Adriatico

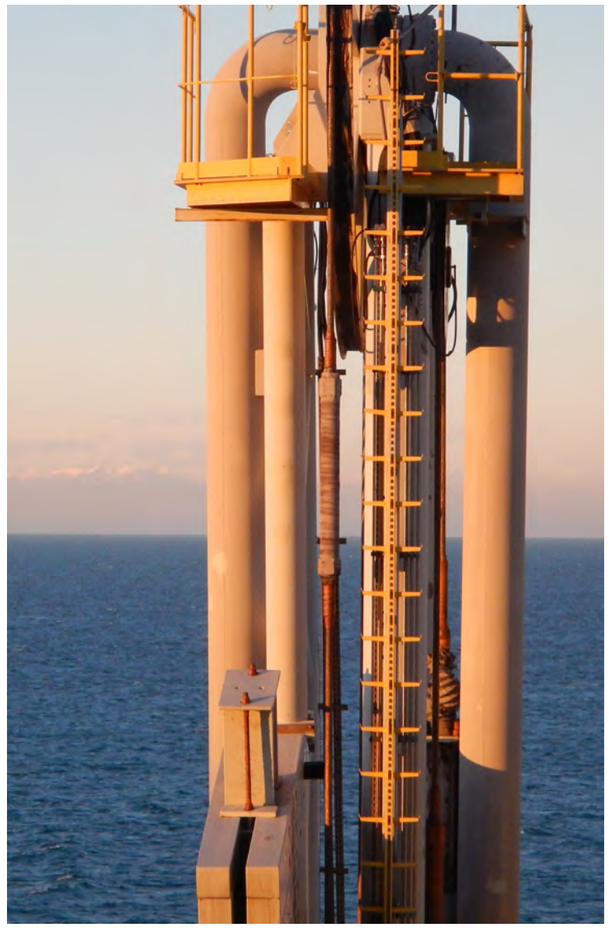
Year
- 2015 - ongoing

Client
Adriatic LNG

Area
Industrial

Activities performed
- Maintenance and continuous implementation of structural integrity programs for structures
- Data analysis of monitoring systems
- Preparation of the inspection program and periodic inspection plans of the facilities
- Issuing of the five-year final structural certification
- Support during seismic and extraordinary events

Relevant aspects
- Complex and unique work of its kind, made with different technologies such as prestressed reinforced concrete, steel, carbon and alloy steels
- Highly aggressive environment due to the marine atmosphere and the presence of cryogenic liquids at a temperature of -165 ° C
- Due to the complexity and potential danger of the offshore marine environment, every activity involving the terminal is governed by strict safety protocols



Fimac

Expansion of production site

Location
Senago (MI)

Year
- 2019 - ongoing

Cliente
Fimac Spa

Area
Industrial

Activities performed
- Integrated design
- Safety design coordination
- Safety inspection coordination
- General and structural construction supervision “DL”

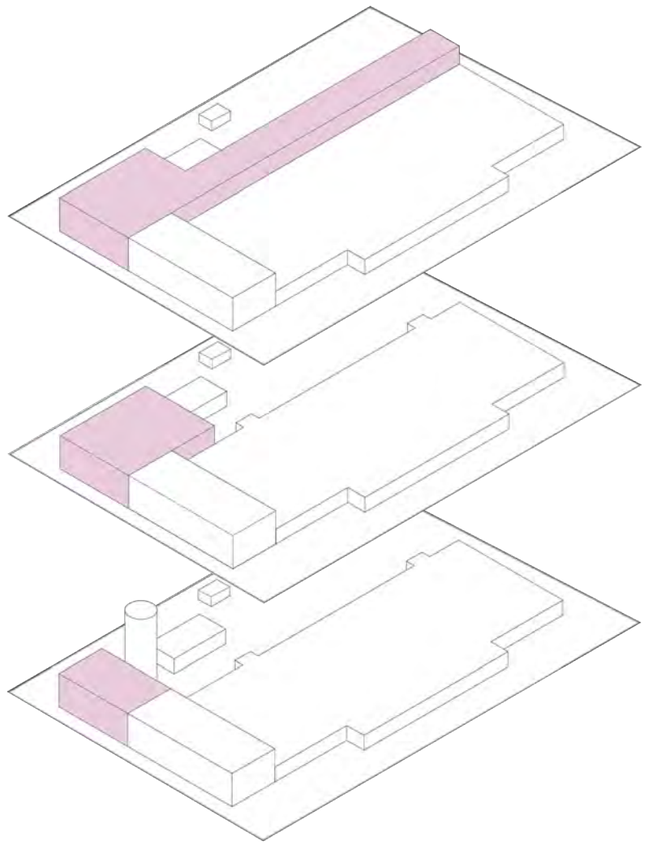
Project cost
€ 1.800.000,00 (est.)

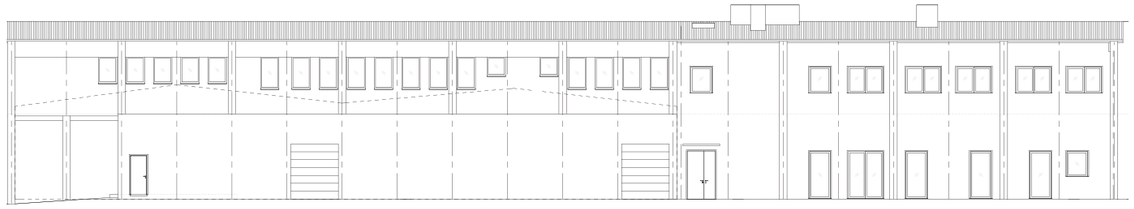
Size
- Total SL: 5.872 sqm
- SL industrial and productive activities: 4.969 sqm
- SL offices and complementary activities: 903 sqm

Lead engineers
- Ing. Lorenzo Mariani
- Arch. Anna Legnani
- Arch. Barbara Palazzotto

Relevant aspects
- Careful planning of the construction site phases to allow the extension of the building while keeping the company head-quarters fully active and operational

expansion phases





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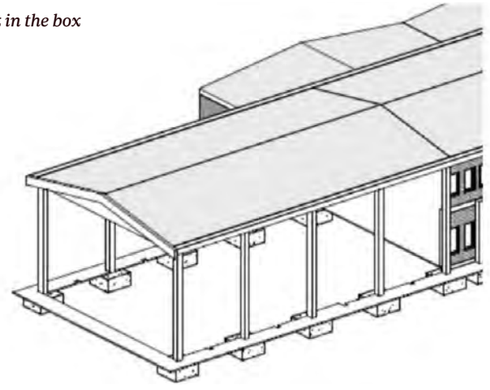
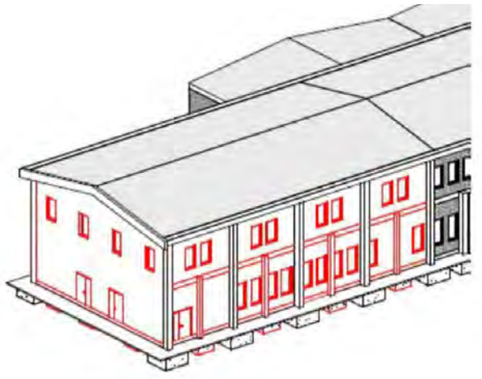




Gioia Tauro LNG Terminal

The Mediterranean LNG hub

Location
Gioia Tauro, Reggio Calabria, Italy

Year
- 2014 - 2015

Client
Tractebel Engineering Spa

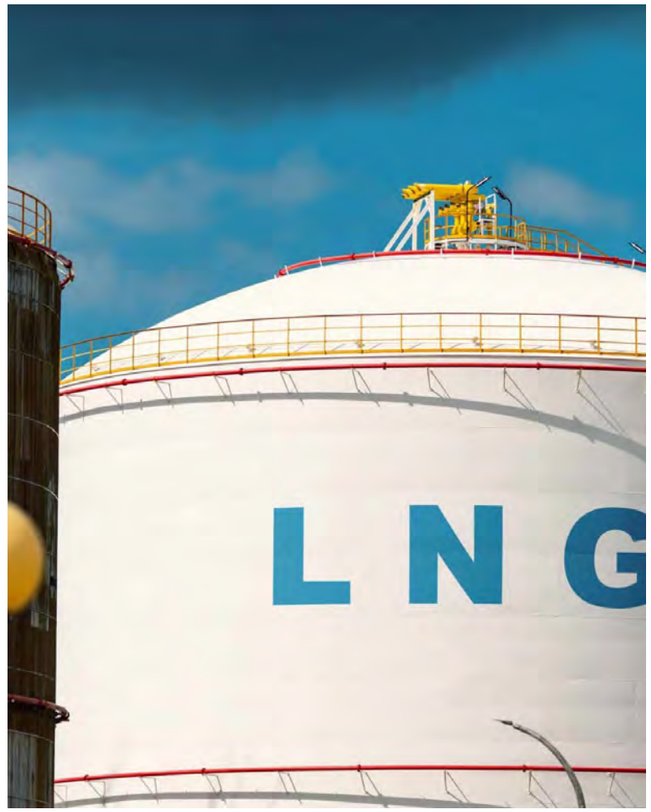
Area
Industrial

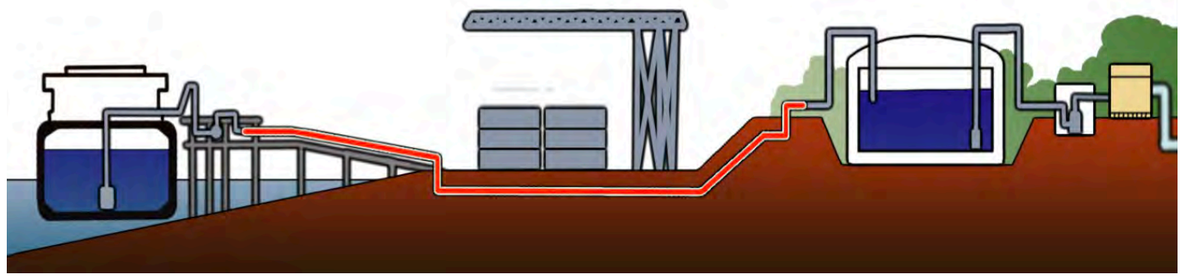
Activities performed
- Analysis and detailed structural modeling of a tank for the storage of Liquefied Natural Gas at cryo temperatures with double containment and on seismic isolators
- Developed structural design
- Adaptation of the project for compliance with the Italian NTC'08 standards

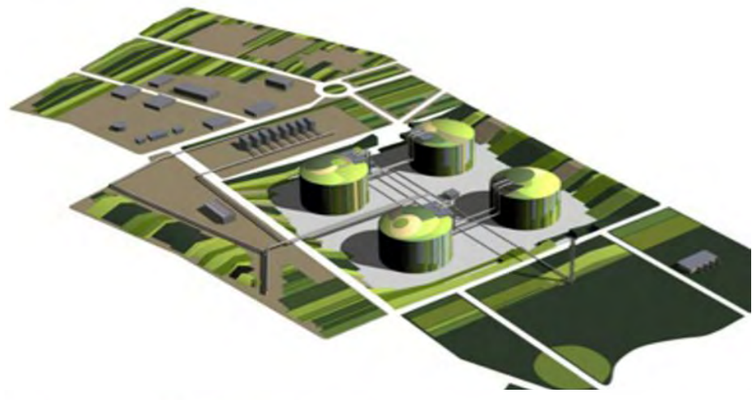
Size
- total unit capacity of the tank 160.000 m^3
- 47 hectares of extension in the municipalities of Gioia Tauro, San Ferdinando and Rosarno
- 7 km of pipeline connection to the Snam network
- 12 billion m^3 of LNG processed per year

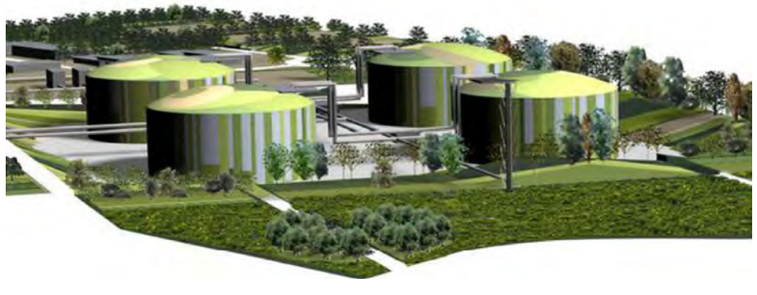
Project cost
1.500.000.000,00 € (est.)

Relevant aspects
- Strategic location of the Gioia Tauro plain as a LNG reception facility from the Mediterranean, but also from Africa and the Middle East
- Potential ideal refueling point for LNG used as fuel by ships and trucks
- Recovery of waste cold energy released from the Liquefied Natural Gas regasification process and used for the development of industrial activities in the surrounding area









Calusco Project

Performance and sustainability

Location
Calusco d'Adda (BG)

Year
- 2003 - 2004

Client
Italcementi S.p.A., CTG, Kobe Steel LTD

Area
Industrial

Activities performed
- Geotechnical characterization of the site
- Construction documents design of reinforced concrete and steel structures

Relevant aspects
- Complex intervention for an important manufacturing area in the country
- Complex structural works realised with the combination of different construction strategies
- Use of innovative technologies, especially for self-compacting concrete castings

Vassiliko Cement

Civil works of the new kiln line

Location
Nicosia, Cipro

Year
- 2009 - 2010

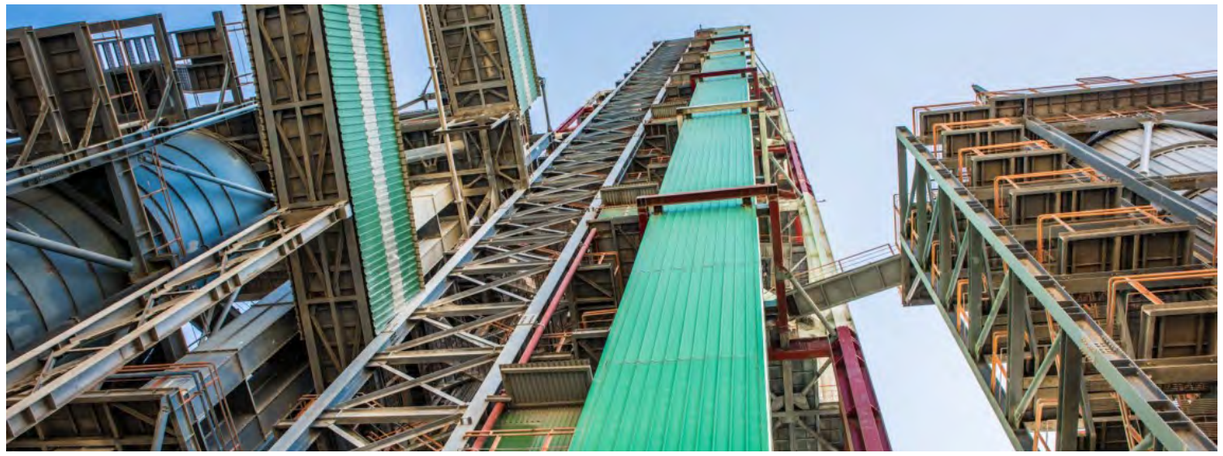
Client
Vassiliko Cement – PPA Associates

Area
Industrial

Activities performed
- Detailed design of reinforced concrete and steel structures

Structural works cost
€ 16.500.000,00

Relevant aspects
- A complex project as part of an important industrial investment for the Cypriot nation
- Structural design with Eurocodes in a high intensity seismic area
- The structures withstood without damage a nearby explosion that destroyed other industrial sites



Tenaris Dalmine

For a more sustainable future

Location
Dalmine (BG)

Year
- 2005 - 2006

Client
Tenaris Dalmine

Area
Industrial

Activities performed
- Geotechnical design
- Structural design
- Undergrounds coordination
- Structural construction supervision “DL”

Relevant aspects
- Particularly careful study of possible interferences with the underground systems due to the presence of old foundations under those newly built
- The gantry and turbines’ bases design was carried out with particular attention to the dynamic performance during operation
- Construction design was developed for the Cooling Tower. A second large tank (about 60x20m) subject to severe thermal operating conditions was then buit, whose behaviour was previously investigated through finite element simulations
- The choice of mix design was crucial to limit concrete cracking. During the casting phase the material used was constantly checked to obtain the required consistency

Cementeria Matera

Efficiency at the forefront

Location
Matera

Year
- 2008 - 2009

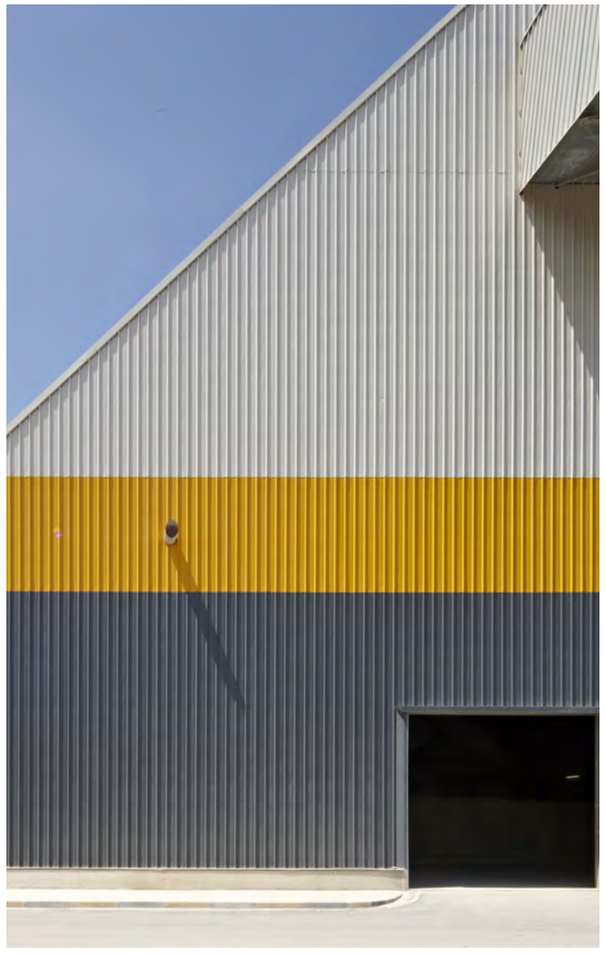
Client
Italcementi S.p.A./CTG

Area
Industrial

Activities performed
- Geotechnical characterization of the site
- Detailed design of the preheating tower foundation structures
- Detailed design of the reinforced concrete cores
- Detailed design of floor metal structures

Structural works cost
€ 8.500.000,00

Relevant aspects
- Complex structural works realised with the combination of different construction strategies
- Use of innovative technologies, especially for self-compacting concrete castings
- Study of particular construction strategies in coordination with the Company executing the operational construction phases (use of rampant formwork, optimization of reinforcement cuts).
- Metal decks assembly phases divided into sub-assemblies



Devnya Cement

An innovative cement plant

Location
Devnya, Bulgaria

Year
- 2013 - 2014

Client
CBMI Construction Co. Ltd – SINOMA

Area
Industrial

Activities performed
- Structural detailed design

Structural works cost
€ 5.000.000,00

Relevant aspects
- Strong wind and seismic actions on very tall structures
- Complex plant layout strongly constraining the structures
- Strong need for integration of the Eurocode with local standards

San Giusto Wind Farm

Clean energy

Location
San Giusto, Lucera, Foggia

Year
- 2011 - 2012

Client
SEA (RePower group)

Area
Industrial

Activities performed
- Detailed design of turbines and electrical substation foundations
- Construction site and service traffic design
- Design of the routes of the new cable duct between towers
- On-site high surveillance

Size
- 13 turbines of 2 MW
- 29 km of cable duct

Project
The wind farm consists of 13 - 2 MW turbines for a total of 26 MW. CEAS has designed the local road system, service roads and the platforms for the parking of the cranes, the entire cable duct of about 29 km, and the building used as electrical substation, in which a low and medium voltage switchboards and a transformer are housed.

Relevant aspects
Structural design of the foundations in compliance with the requirements in terms of deformations imposed by the supplier of the turbines.

Campolattaro

The largest water plant in Southern Italy

Location
Campolattaro, Benevento, Italy

Year
- 2009 - 2011

Client
REC - Sea (RePower group)

Area
Industrial

Activities performed
- Developed structural and geotechnical design
- Geological, hydrogeological and hydraulic consultancy

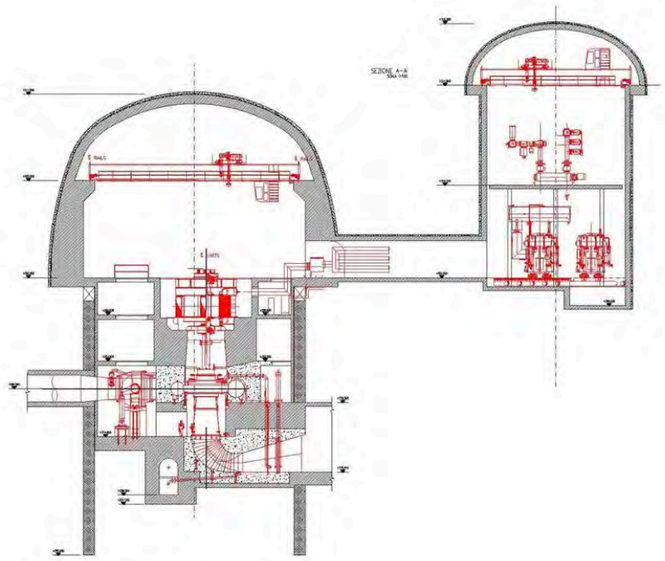
Project cost
550.000.000,00 € (est.)

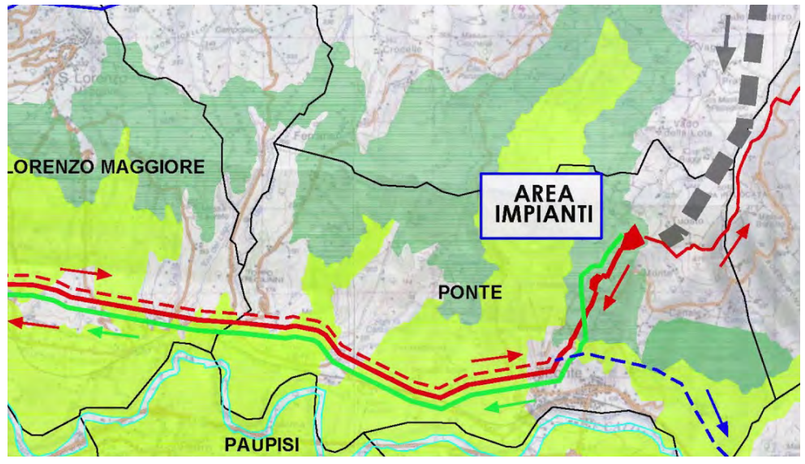
Project
Structural, geotechnical and road design for the authorization of a 500 Mw underground hydroelectric regulation plant.

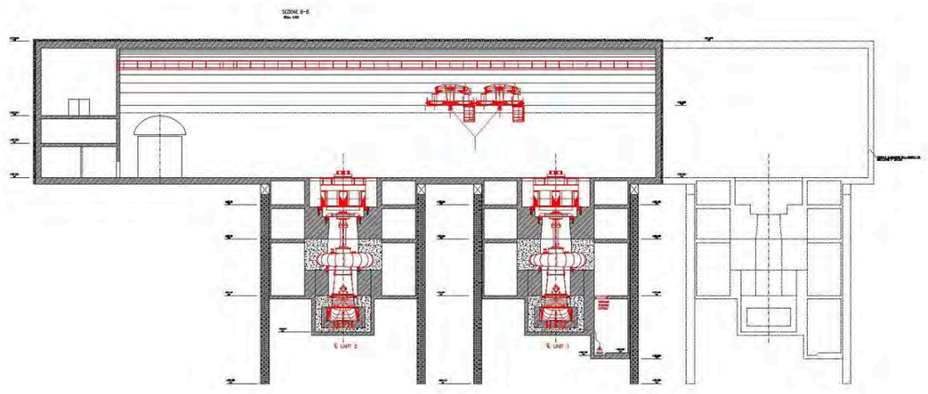
Civil works for the hydroelectric plant, including the cavern for the power plant, two surge tanks, a hydraulic pressure tunnel and an outlet tunnel, intake and return works for the upper and lower basins, and 4 access tunnels .

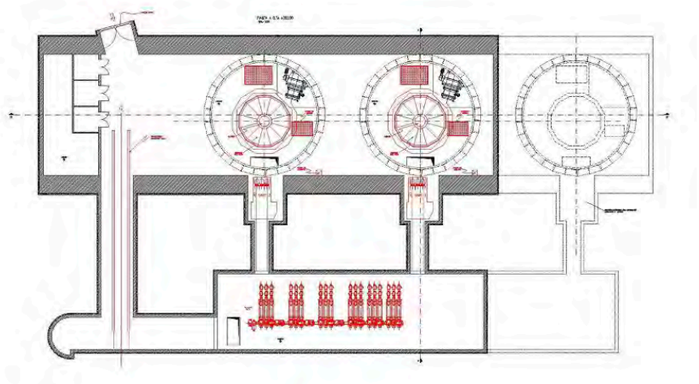
Relevant aspects
Structural and geotechnical design, including over 4 km of road and water tunnels, caverns for the power station, transformers, piezometric wells.

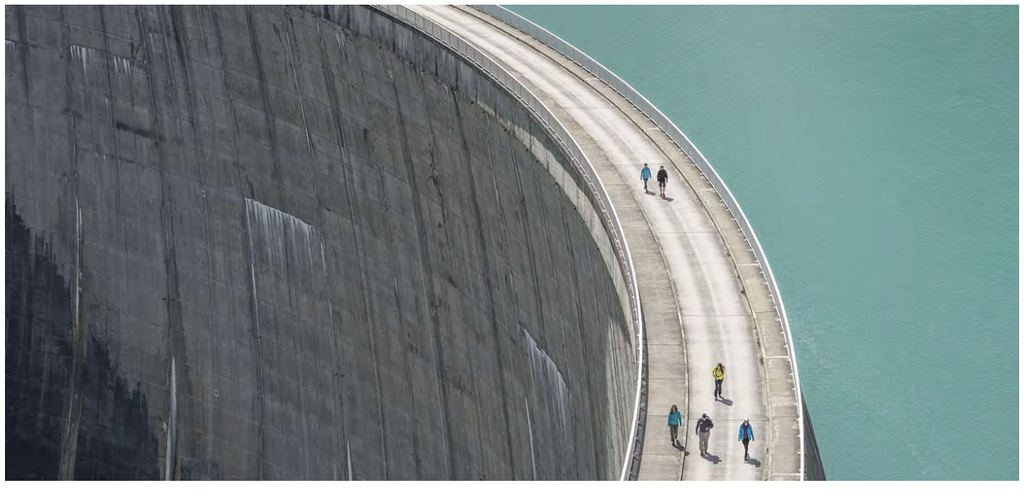
The lower reservoir consisting of the artificial reservoir of Campolattaro is connected via a system of tunnels and pressurized wells to the upstream accumulation reservoir consisting of a natural depression with a capacity of 7 million m3.











IKEA Stores

Quality, design and functionality

Location
Italia, 14 stores e 6 warehouses

Year
2015 - 2017

Client
IKEA Italia Property srl

Area
Commercial / Industrial

Activities performed
- Verification of the structural conditions of all commercial buildings and their warehouses
- The analysis covered 14 stores and 6 warehouses located throughout the Italian territory

Relevant aspects
- Intervention within the conversion of an important real estate asset, aimed at giving indications of the restoration interventions needed
- Contribution to the improvement of the maintenance plans of a multinational company
- Advice given to IKEA technicians on the ideal construction standards of the new stores

Highlighted problems

IKEA has launched a program to check the structural conditions of all commercial buildings and their warehouses. CEAS was asked to carry out the verifications in 14 stores and 6 warehouses.

The following pathologies were found:
- Presence of injuries.
- Detachment of concrete cover and corroded reinforcement.
- Incorrect execution of the joints.
- Metal carpentry with deteriorated surface protection or incomplete joints.

Size

	floors	volume	volume		floors	volume	volume
Ancona	3 piani	198.315 mc	26.625 sqm	**Firenze warehouse**	1 piano 3 negli uffici	43.558 mc	4.240 sqm
Bari	2 piani	173.299 mc	25.301 sqm				
Bologna Store	2 piani	128.596 mc	20.220 sqm	**Genova Store**	3 piani	140.400 mc	17.360 sqm
Bologna warehouse	1 piano 3 negli uffici	54.756 mc	5.900 sqm	**Genova warehouse**	2 piani	55.920 mc	5.350 sqm
				Napoli	2 piani	234.987 mc	34.138 sqm
Carugate Store	3 piani	477.603 mc	37.905 sqm	**Parma**	3 piani	508.166 mc	33.432 sqm
Carugate Park Deck	5 piani	49.228 mc	16.975 sqm	**Rimini**	3 piani	279.000 mc	34.365 sqm
Catania	2 piani	339.020 mc	30.820 sqm	**Salerno**	3 piani	250.994 mc	31.118 sqm
Firenze Store	2 livelli FT + 1 interrato	166.020 mc	27.334 sqm	**Villesse**	3 piani	511.422 mc	33.869 sqm

Logistics

Amazon

Customer obsession

Location
Roncade (TV)

Year
- 2021 - ongoing

Final client
Amazon

Client
Jacobs Italia Spa

Area
Logistics

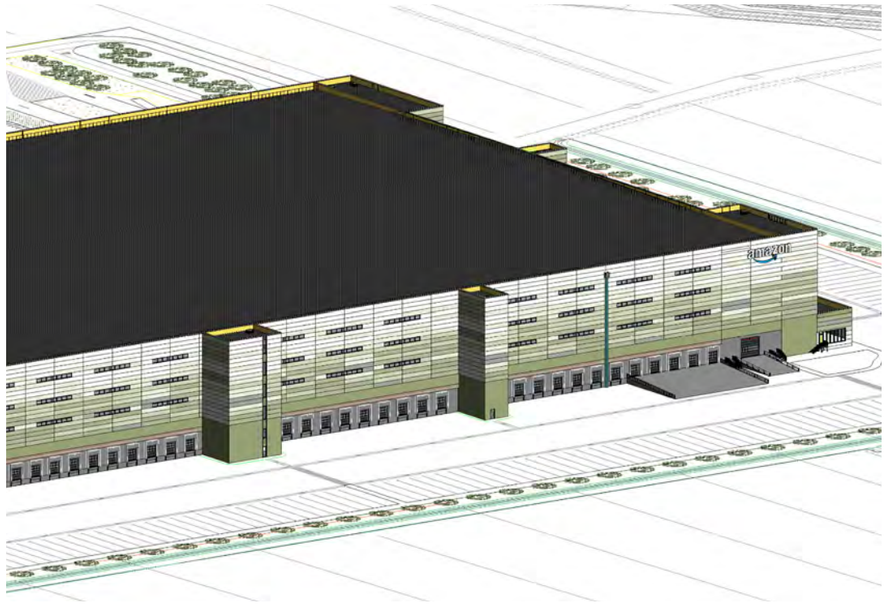
Activities performed
Developed and detailed structural design

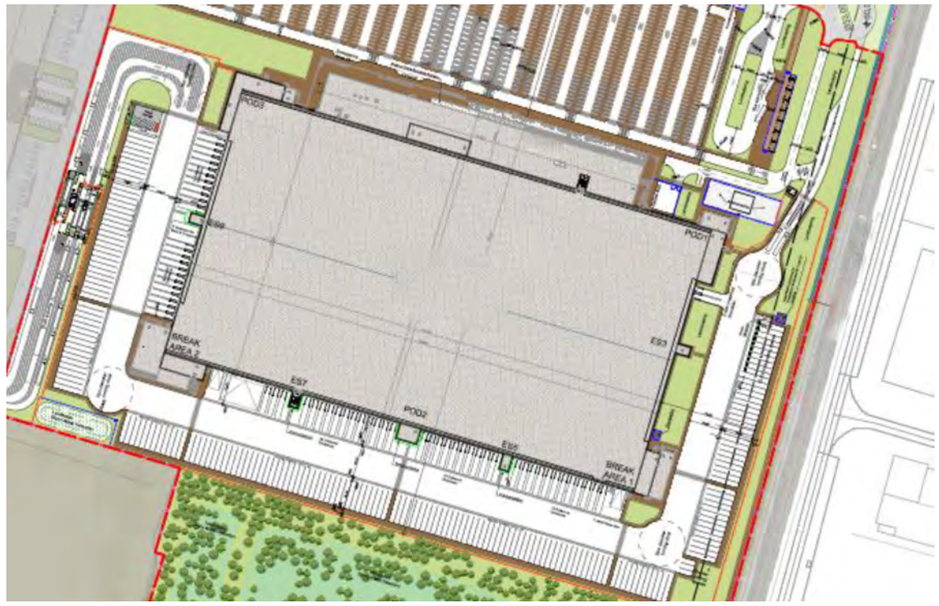
Project cost
€ 100.000.000,00 (est.)

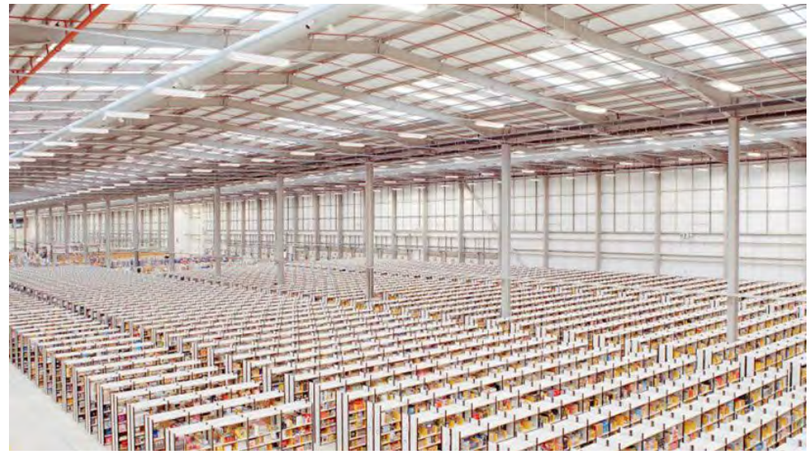
Size
- SL: 60.000 sqm

Lead engineers
- Ing. Gianluca Pittelli
- Ing. Raimondo Salaris

Relevant aspects
- Ability to be flexible to any ongoing design changes
- Flexibility and promptness in analyzing any options or design alternatives
- Close collaboration with the Jacobs team to identify the design process that best fits the final Client's wishes







Warehouse Novara

Structural redevelopment

Location
Agognate, Novara

Year
- 2022 - ongoing

Final Client
Amazon

Client
Jacobs Italia Spa

Area
Logistics

Activities performed
Structural consultancy for seismic improvement

Project cost
€ 100.000.000,00 (est.)

Size
- 50.000 sqm

Lead engineers
- Ing. Valter Carni
- Ing. Bruno Finzi

Relevant aspects
- Careful analysis of existing structures and assessments of possible structural improvements

Warehouse Mantua

New fulfillment center

Location
Mantua

Year
- 2022 - ongoing

Final Client
Amazon

Client
Jacobs Italia Spa

Area
Logistics

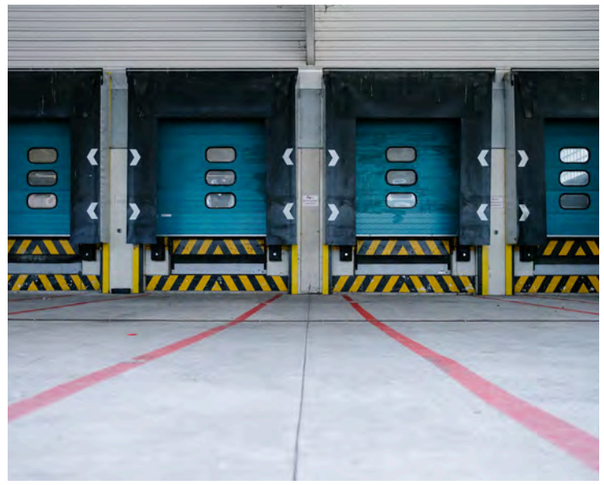
Activities performed
- Design for building permit
- Developed and detailed structural design
- Assistance to construction supervision “DL”

Project cost
€ 100.000.000,00 (est.)

Size
- 80.000 sqm

Lead engineers
- Ing. Bruno Finzi
- Ing. Gianluca Pittelli

Relevant aspects
- Close collaboration with the Jacobs team to identify the design process that best meets the final Client’s wishes
- Need to adhere to the standardized guidelines of the final Client and flexibility in making any changes in the design phase



PC logistics hub

Moving ideas

Location
Piacenza

Title
Design of the foundation works of the warehouse called TP5 with the function of a logistics hub

Year
- Start date: May 2020
- End date: March 2021

Client
Generali Real Estate SGR SpA – Fondo Segantini

Area
Logistics

Activities performed
In-progress and final structural certification

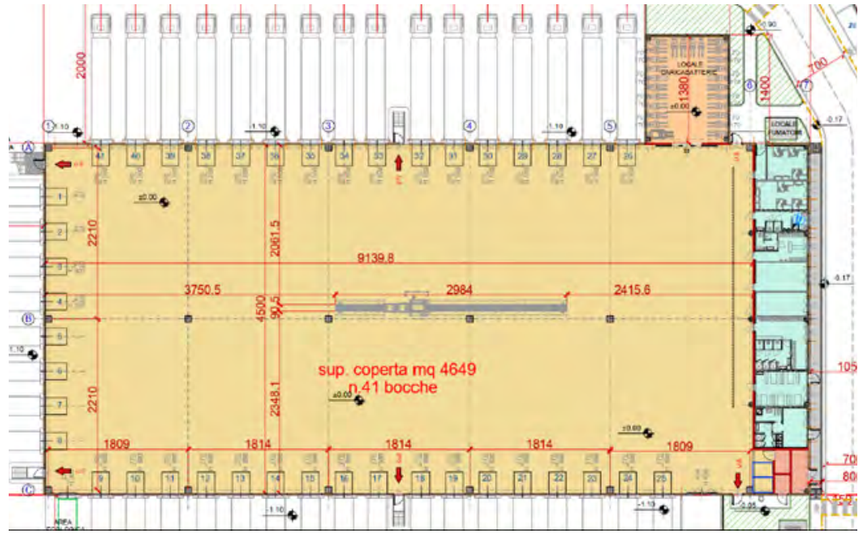
Project cost
€ 4.000.000,00

Structure cost
€ 568.330,00

Size
- 4.600 sqm
- Height 16.1 m

Lead engineers
- Ing. Bruno Finzi: Final certifier
- Ing. Luca Rossini: Assistant

Description
The TP5 warehouse, arranged on a floor above ground, consists of a main body used for logistics and offices and two ancillary buildings, the battery charger room and the smoking room (un-connected and external). The main body is made in reinforced concrete and prestressed reinforced concrete. The maximum height, referring to the height of the external square, is 16.10 metres. The roof of the shed is made with prefabricated beams in the internal area, surmounted by wing tiles in support of an insulated roofing sheet. The roof slab of the office area is made of prefabricated tiles resting on prefabricated L-shaped beams.



PC logistics hub

C1 and C2 warehouses

Location
Piacenza

Title
Construction at the Piacenza logistics hub in the T-P1 macro-area of the buildings called C1, C2 and guardianship

Year
- Start date: July 2021
- End date: January 2022

Client
Generali Real Estate SGR SpA – Fondo Segantini

Area
Logistics

Activities performed
In-progress and final structural certification

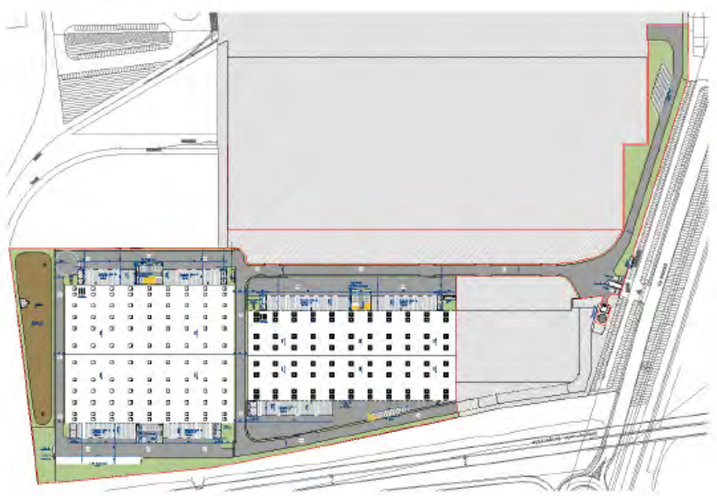
Project cost
n/a

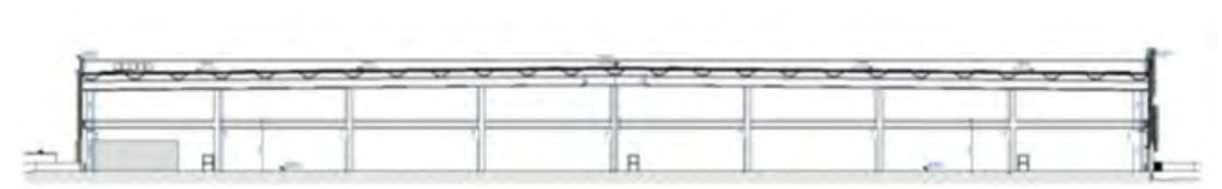
Structure cost
€ 7.700.000,00

Size
- 46.000 sqm
- Maximum height 19.7 m

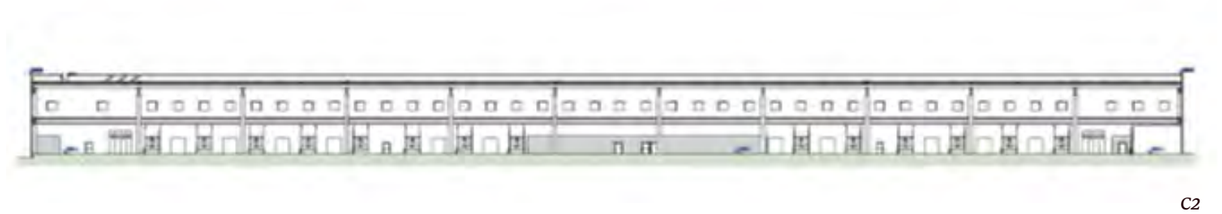
Lead engineers
- Ing. Bruno Finzi: Final certifier
- Ing. Luca Rossini: Assistant
- Ing. Alex Zilio: Junior engineer

Description
Both sheds consist of a single-storey building used for logistics, with the same structural characteristics. The “C1” has a total planimetric dimension of 176.70x145.10 m, while the “C2” measures 94.80x218.30 m. The roof beams are in prestressed reinforced concrete “Calice 75P” type and support the roof of the structure at the top.
All prefabricated reinforced concrete pillars of the sheds have a prevailing size of 70x70 cm. The buildings have a mezzanine in metal carpentry used as a warehouse.





C1



C2

Microsoft data center

MIL 01 and MIL 02

Location
Settala (MI)

Title
Construction of a new office / tertiary complex as part of the "M3 Commercial Park" transformation implementation plan

Year
- Start date **MIL01**: march 2021
- End date **MIL01**: january 2022
- Start date **MIL02**: april 2021
- End date **MIL02**: september 2022

Client
Microsoft srl

Area
Logistics / Tertiary

Activities performed
In-progress and final structural certification

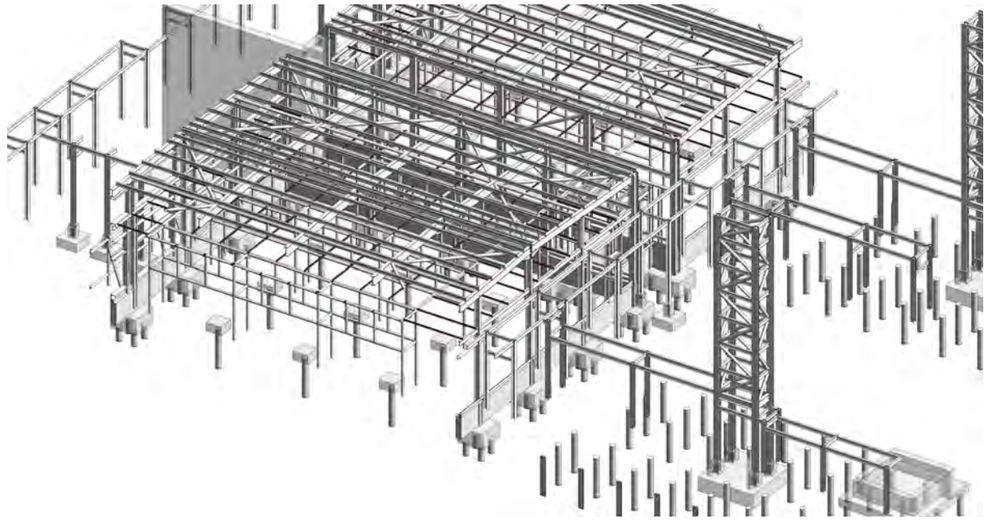
Project cost
n/a

Structure cost
€ 11.318.747,00

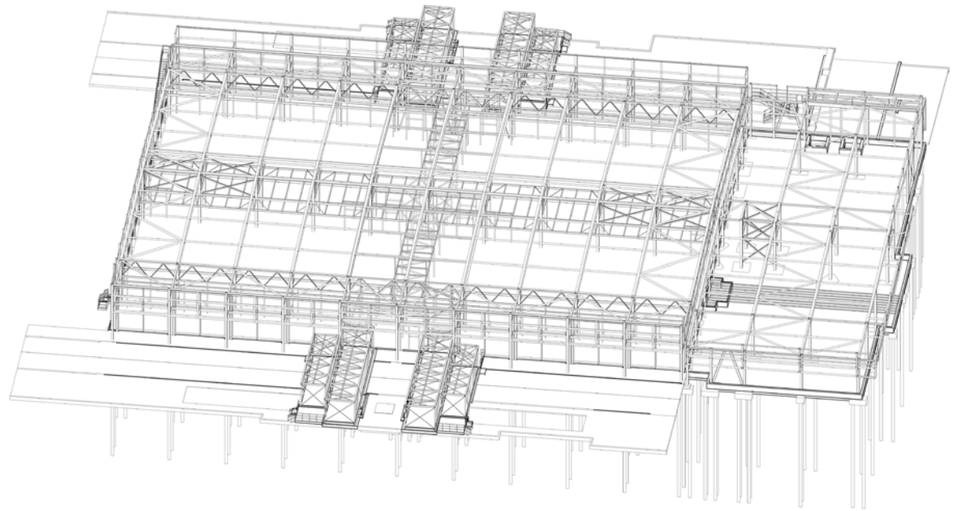
Size
- 8.400 sqm (MIL01: 2.400 sqm - MIL02: 6.000 sqm)

Lead engineers
- Ing. Bruno Finzi: Final certifier
- Ing. Luca Rossini: Assistant
- Ing. Alex Zilio: Junior engineer

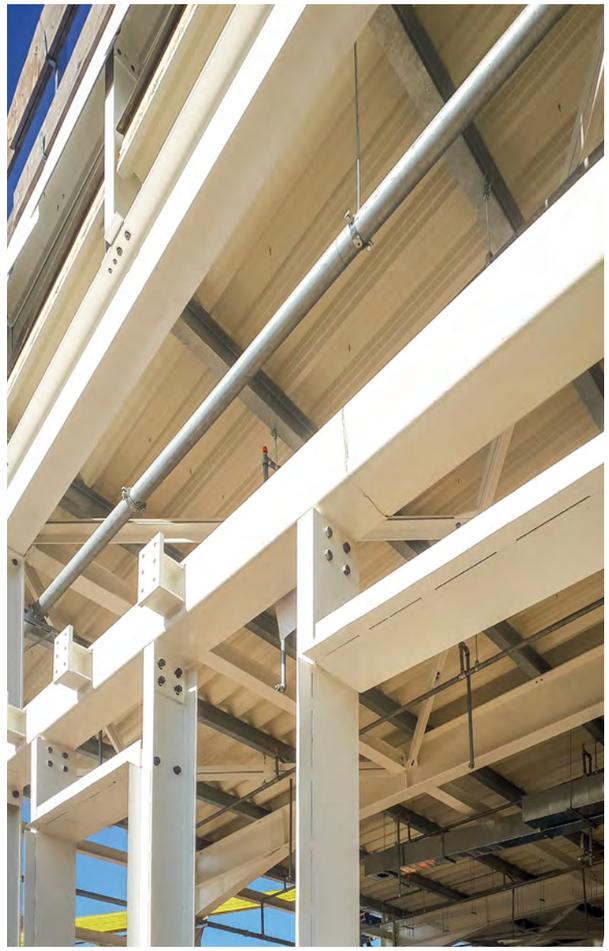
Description
Microsoft requested the construction of a series of Rapid Deployment Data Centers (RDDs) around Europe. The one to be built in Italy represents the second project of this type and includes a series of modular buildings that house 6 data warehouses (COLO). The same mechanical and electrical systems are made up of modular elements which also house the administrative part and the part called "BOH".



MIL01



MIL02



CEAS

Portfolio

of main clients

CEAS

ADVISOR TO BUILD THE FUTURE

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