

Luca Cantarini

Civil Structural Engineer

Director and co-founder of LetsDesigns Ltd



Profile

I am the Director and Cofounder of LetsDesigns Ltd base in Farncombe.

I am an Italian Engineer and following the Bachelor and Mater Degree in Building Engineering I started my career in Italy as self-employee working mainly on building that were damaged by Seismic events (Aquila 2008, Emilia Romagna 2012, and Marche 2016).

In 2014 I passed the government exam and licensed as Italian Chartered Engineer.

In 2017 I have moved to UK where I started my experience as employee in a Structural Consultant Company.

In 2021 I became Chartered Engineer CEng MICE (Member of the Institution of Civil Engineer).

In 2023 I have started with my wife LetsDesigns Ltd we are working on project in UK and Italy.

The experience I have gain in Italy and in UK increase my knowledge and competencies.

I am proficient with the British Standard and EUROCODE for Building construction and also Italian Standards.

I am a good team player, ambitious and a hard worker who is focused on getting jobs done well and on time with excellent managing skills.

Key experience

- Experience in the full project life cycle, from design development to construction.
- Site-based experience in masonry, steel concrete and timber construction
- Seismic Design and Assessment
- Reinforced Concrete Design (BS EN1992-1-1:2004)
- Digital Construction & Reinforced concrete Detailing (BS 8666:2005)
- Steel construction Design (BS EN 1993-EC3)
- Italian Structural Standards (NTC 2018)
- Finite Element Analysis
- Programme Management
- Building services engineering (Electrical systems, Lighting and Daylighting)

Profession

Civil Structural Engineer

Nationality / Languages

Italian / Italian, English

Qualifications

BEng, Building Engineering

MEng, Building Engineering

Professional associations

Chartered Engineer CEng MICE



Italian Chartered Engineer (A1669)



Director – LetsDesigns Ltd (Jan 2023 – current)

❖ **LetsDesigns** is a project born after 10 years of work experience with the aim of creating an innovative Engineering Design Studio which, through the use of the latest digital and IT technologies, can offer design and consultancy services beyond the geographic location of the project or customer. The core competencies of the office are:

- **Lighting:** Lighting design for residences, offices, shops, streets and more. In compliance with the regulations (UNI-EN-12464-1) and national and international guidelines “The Lighting Design Handbook” by Zumtobel Group and the “Lighting Guide” collection by CIBSE (Chartered Institution of Building Services Engineers).
- **Energy:** Energy is an important subject nowadays but also a complex topic that updates continuously. LetsDesigns is investing on a daily basis to keep up to date with the team and being able to provide a consultancy service that is as complete and professional as possible, which also includes the design of systems (photovoltaic, thermal, electrical...).
- **Technology:** The word Technology was strongly desired within the logo because it represents a fundamental point of the studio’s core business. In fact, technology can be seen applied to the profession and the project.
- **Structures:** Design of Concrete, Steel, Masonry and Wood Structures. In compliance with Italian or United Kingdom regulations (DM 17 January 2018, Circular 21 January 2019, n.7 CSLL.PP, Eurocodes)

Experience as Self-Employed AND Designs Ltd (Dec 2017 – Jan 2022)

❖ **Rayford House – Residential Building**

- **Structural design engineer** Luca was responsible for the structural analysis and designs of the new 5 storey extension. I designed foundations and superstructure. Luca coordinated with the architect all the reviews occurred during the design stages. Luca coordinated and planned two CAD technicians to produce and deliver Structural drawings and Bending schedules. Produced and delivered Specification and Risk Assessment. Luca reviewed and commented all the documents from sub-contractors regarding structural elements for example: steel manufacture drawings with connections details.

❖ **Gable house – Refurbishment and extension**

- **Structural design engineer** Luca was responsible for the structural design of the refurbishment with extension of a 300mq detached house. Luca designed all the structural requirements for the internal alterations and for the new extension. Luca coordinated with the architect the design in order to adapt the required structure with the existing structure/ finishes. Luca planned and carried out a site visit to investigate the roof structure. Produced

and delivered Specification and Risk Assessment. Finally, Luca collaborated with architect and client on a structural revision the client requested to reduce the overall cost of the project

❖ **Park House, Onslow Square SW7 3NJ**

- **Structural design engineer** Luca was responsible for the design of the connections of a very large house. Luca coordinated with the contractor and the engineer who designed the structure the design in order to simplify the installation and reduce problem on site. Luca delivered more than 200 different connections numbered and detailed with all the requirement info with mark-up plans in which Luca has indicated each location.

❖ **UFC Gym Mezzanine floor**

- **Structural design engineer** Luca was responsible for the structural analysis and design of a very large mezzanine floor to be installed on an existing construction. Luca designed the new foundations in order to not interfere with the existing one. I coordinated with CAD technicians the drawings with particular attention of the details between new elements and existing one. Produced and delivered Specification and Risk Assessment.

Experience as Self-Employed in Italy (Sept 2013 to March 2017)

❖ **New Ancona IRCA**

- **Design engineer working as a contractor per ACALE S.r.l.:** Luca was responsible for the design of the friction pendulum isolation system; Due to the importance of this project Luca had several meetings with experts (University professors and engineers from different manufactory companies) to improve my knowledge. I produced a FEM model of the entire and run Time history analysis using a group of seven real accelerograms spectrum-compatible. Luca developed two solutions in order to accomplish all of the requirements without exceeding the contractor budget.

❖ **Il Duomo**

- ❖ **Design engineer working as a contractor per ACALE S.r.l.:** Luca was responsible for the structural design of the seven-story reinforced concrete block of flats. Luca designed the foundations and the superstructure. Luca coordinated with the architect, mechanical engineer to optimize the sizes and the locations of columns, beams and shear walls. Luca coordinated and planned two CAD technicians to produce and deliver Structural drawings and Bending schedules. Finally, Luca delivered all the documentation to the Local Authority in accordance with Italian standard - Norme Tecniche delle Costruzioni - NTC2008 (Updated in 2018).

❖ **Priest's residence**

Design engineer as a contractor per Montelupone Council: Luca was responsible to provide the structural calculation for securing the south elevation of the Priest's residence that was damaged during the Marche earthquake in 2016. Luca produced and delivered all the documentation during the design and constructions stages (structural calculation, tender documentations, final account) in accordance with Italian Public Work Contract Regulation; Luca regularly inspected the site and I coordinated with the contractors all the required works..

❖ **Aggregato Vecchio Campo dei Fiori**

Design engineer working as a contractor per ACALE S.r.l.: Luca was responsible to provide the structural calculation, lead and control site investigations for a complex of single houses in a historical centre of a small village near L'Aquila that was damage as damaged by L'Aquila earthquake at 2009. Luca conducted the site investigation producing a complete report. Furthermore, using the information gained on the site investigations Luca designed all the remedial works and produced all the documentations required by the Italian standard - Norme Tecniche delle Costruzioni - NTC2008 (Updated in 2018).

Education/ Licenses & certifications:

- ❖ Member of **Ordine degli Ingegneri Macerata (2022)** – Macerata
- ❖ Member of **UK Chartered Engineer CEng MICE (2021)** - London
- ❖ Passed the government exam and licensed **Italian Chartered Engineer (2014)** - Ancona (Italy)
- ❖ **MEng - Master's degree: Building Engineering (2013)** - 1st (108/110) - UNIVPM - Ancona (Italy)
- ❖ **BEng - Bachelor's degree: Building Engineering (2011)** - 2:1 (106/110) - UNIVPM - Ancona (Italy)