Valentina Caporaletti

Structural Engineer

Self-Employed and co-founder of LetsDesigns

LET DESIGNS Lighting Energetica Tecnologie Strutture
WWW.LETSDESIGNS.COM

Profile

Valentina is a structural engineer who started to work as Self-Employed after almost

2 years' experience as Assistant Civil Engineer in Atkins providing technical support as structural engineer to the one of the largest engineering consultancy firm in UK.

Valentina had training and background in Building Structural Engineering.

Key experience

- Structural engineer
- Site design coordinator
- Civil Structural engineering
- Stakeholders coordination
- Liaising with contractors to arrange and coordinate site visits.
- Producing Risk Assessment and Method Statement
- Technical support as Aftersales coordinator
- Coordination of small size team
- Problem solving
- Client engagement
- Architectural and retail lighting design

Profession

Structural Engineer

Nationality / Languages

Italian / Italian, English

Qualifications

BEng - Building Engineering

Meng - Building Engineering

Professional associations

-Bachelor's degree in "Ingegneria Edile e del Rucupero" (Score 97/110)

(Universita Politecnica delle Marche)

-Master Degree in "Ingegneria Edile" with honours – Università Politecnica delle Marche

Experience as self-employed in ITALY– (April 2022 – 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 in UK– (March 2021 – March 2022)

❖ ***Structural Engineer***

I worked as a Self-Employed Consultant in the UK for 12 months, mainly in collaboration with AND DESIGNS Ltd. I was responsible to performing structural design project on Residential, Commercial and Industrial buildings using different materials (Reinforced concrete, Steel, Masonry and Timber)

This role involved various tasks:

- Producing and delivering structural designs for new Residential, Commercial and Industrial buildings;
- Producing and delivering structural design for refurbishment of existing Residential, Commercial and Industrial buildings;
- Producing steel connection design to Eurocode 3 and BS5950-1 (Software used: Tekla Connection and Master Series);
- Coordination with clients and contractors during the different stages of the project: tender, preliminary and construction;
- Perform Site visit inspections and produce Site Visit report;
- Perform structural analysis using Tekla Structure and Tedds
- Producing hand mark-up sketches or AutoCAD drawings to show structural details;
- Producing bending schedule for RC concrete (BS5666);

Experience with Atkins – NNB Secondment (January 2020 – February 2021)

❖ ***Site Design Coordinator – Hinkley Point C (Power Station)***

Design coordinator for the Site Engineering Team based on site. This role involves various tasks:

- Challenge modifications in order to provide relevant design review by the appropriate stakeholders and approved by the appropriate committee (SCSC, PCB…)
- Champion the modification process/procedures and be responsible for completing the Technical Change Note (TCN) and for providing an initial technical assessment (PMR).
- Undertake clash detection and clash resolution between two or more design packages.Create a clash report with optioneering on solutions with support from the Delivery Integration Team, Project Controls, etc.
- Evaluate the environmental Impact of the technical change
- Evaluate the Nuclear categorisation.

Experience with Atkins (July 2019 – December 2019)

❖ ***Assistant Civil engineer – London City Airport – RVP Bridge***

In support of the London City Airport Development Programme, Atkins were engaged to undertake a feasibility and options study for replacing the RVP floating pontoon bridge with a single-span Mabey Delta Bridge, and the subsequent detailed design of the foundation. The main tasks associated to this role were:

- liaising with London City Airport (LCA) to evaluate all the construction constraints;
- liaising with the bridge manufacturer to coordinate abutment design and their steel bridge design;
- carrying out initial calculations to determine the additional loadings applied to the airfield deck and dockside by the RVP bridge;
- developing an options report for LCA to select the preferred solution.
- Re-designing pre-cast reinforced concrete(RC) beam that supports the RVP bridge at the airfield side.
- Designing the ramps at either side of the bridge;
- Designing a new beam supporting the bridge at the landside;
- Design of landside abutment;
- Re-design of existing beams due to new rollers and winch horizontal launching reactions (launching of the bridge from Airfield deck)

❖ ***Assistant Civil engineer – London City Airport – Temporary Noise Barrier***

In this project Atkins was appointed by LCA to produce an initial option report for the design of a temporary noise barrier. In order to produce this report, several tasks were required such as: liaising with different panels manufacturers to evaluate the type of material that we could propose in order to meet the airport requirements; liaising with the client to understand the construction constraints; producing initial calculation for the gravity concrete plinth solution. For all the options a cost estimation report had to be carried out and presented to LCA.

Experience with iGuzzini (June 2014 – June 2019)

❖ ***Lighting Engineer***

- Designing lighting solutions and providing lighting calculations and visuals for the UK leading retail companies.
- Liaising with local contractors to offer technical and design support.
- Constantly focusing on the client's objectives of Quality, Cost and Program.
- Evaluating, organising and prioritizing work within the overall project schedule.

Projects delivered:

- Starbucks, Amsterdam: This project included lighting proposal, calculations, and detailed render
- Outfit, Leeds: New lighting design concept proposed in collaboration with the Architect to provide a new lighting solution.
- Fat Face, Gatwick: Designing a new lighting concept, providing lighting calculations including emergency calculations to comply with the BS 5266-1:2016 and Gatwick Airport's specific requirements.
- Karen Millen, Regent St: Designing a new lighting concept and providing lighting calculations
- Mothercare, Plymouth: Designing a new lighting concept, providing lighting calculations and payback calculation to confirm the initial investment was repaid after the first three years.

Education/ Licenses & certifications:

❖ **MEng - Master's degree: Building Engineering (2014)** - 1st with Honours (110/110) - UNIVPM - Ancona (Italy)

❖ **BEng - Bachelor's degree: Building Engineering (2011)** - 2:1 (97/110) - UNIVPM - Ancona (Italy)