www.linkedin.com/in/badar-ul-ali-zeeshan-192a1437

BADAR UL ALI ZEESHAN

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Summary

In 11 years of practice, the large body of my work is about seismic-resistant Reinforced Concrete (RC) buildings. Their safe, economical, functional, and practical design was delivered as per US building codes. I have completed the design of mid-to-high-rise buildings located in Pakistan, Thailand, the Philippines, and Bangladesh. In addition, I also have experience in delivering code-compatible RC silos, Seismic evaluation/retrofit of RC buildings, RC water tanks, Masonry houses, and steel trusses. Moreover, I can verify the structural scheme of RC buildings, falling out of the domain of prescriptive approach of the building codes, through a Performance-based design approach. I have also completed two design review jobs of segmental, precast, and post-tensioned box-girder bridges.

Core Competencies

- Reinforced Concrete buildings of up to 50 stories (seismic and wind).
- Grip on US design codes such as ACI 318-2002 TO 2014, ACI 350.3-06, ACI 350-06, ACI 313-16, ACI 352R-02, UBC 97, ASCE-SEI 7-10, AISC 360, and European code for silos and tanks (EN 1991-4).
- Seismic risk assessment and seismic performance evaluation of non-prescriptive buildings through the application of a Performance-Based Design approach involving nonlinear time history analysis.
- Design for the anchorage in concrete.
- Special structures: Reinforced concrete Silos, seismic analysis of overhead water tanks.
- Steel trusses and steel moment-resisting connections.
- Monitoring compliance of construction activities with Structural drawings and guidelines.
- Proficient in the use of ETABS, SAFE, SAP2000, PERFORM 3D, STAAD PRO; I have used Revit as well.
- Proficient in the use of Autocad, EXCEL, WORD, and PowerPoint.
- Rich experience in performing detailed design calculations and design reports.
- Experience of calculating sectional strength of segmental pre-cast box girder bridges as per BS code.

Education

Politecnico Di Torino, Italy — 2010-2013

Pursued masters leading to **Ph.D**. program in **Structural Engineering**. It was funded by the Higher Education Commission of Pakistan after the award of a scholarship through a merit-based selection criterion. I quantified the damage of one to two-story masonry structures owing to the subsidence caused by multiple tunneling activities underneath their foundation with the help of nonlinear finite element analysis in DIANA (By TNO).

National University of Science and Technology, Pakistan — 2002-2006

B.E Civil engineering with **CGPA** of **3.27 out of 4**.

AIT Solutions, 58 Moo 9 Klong Nueng, Khlong Luang, Pathum Thani, 12120, Thailand.

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Experience

AIT Solutions, Pathum Thani, Thailand — AUG 2019-PRESENT

As a Senior Project Engineer, I take lead in the development of the conceptual and detailed design of structural schemes, compatible with architectural concepts and satisfy the functional requirement. Additionally, I:

- Review the structural design of tall buildings for their compliance with codes (code-based reviews).
- Perform detailed calculations for components of RC buildings.
- Play my part in Performance-based-seismic-design and design review of tall buildings.
- Formulated design reports for various projects.
- Attend meetings with clients to work out project-related issues.
- I have completed a design review of post-tensioned box-girder bridges.
- Delegate work to junior engineers, answer their queries and review their work.
- Initiate, and maintain, correspondence with the client thus fostering the relationship.
- Ensure that we have the required data to complete the job.

Arif Consulting Engineers, Islamabad, Pakistan — FEB 2014- JUNE 2018

As a Vetting/Lead Structural Engineer, I was responsible for the conceptual, preliminary, and detailed structural design of buildings. During my time in Arif Consulting Engineers, I have:

- Developed the structural framing of buildings of up to 25 stories (conceptual design).
- Delivered code compatible structural designs.
- Performed manual design calculations for structural components of RC buildings (detailed design).
- Supervised the drafting section to ensure timely and error-free delivery of drawings (quality control).
- Reviewed the design of RC buildings for their compliance with relevant codes (design review jobs).
- Prepared technical specifications and formulated design reports for various building structures.
- Mentored junior engineers and helped them with software models and design calculations.
- Conducted site visits to ensure compliance of seismic details of rebars with structural drawings.
- Liaised with architect and design reviewer to get the approval of design and structural framing plans.
- Kept myself abreast of developments related to the practice and applied them where possible. I changed the way shear walls and girder-beam connections were detailed in the office.

Arif Consulting Engineers, Islamabad, Pakistan — DEC 2008- NOV 2009

As a Structural Engineer, I was responsible for:

- Completing ETABS, STAAD Pro, or SAFE models for mid-rise RC buildings.
- Preparation of manual calculations to cross-check the results of the software model.
- Keeping an eye on the drafting section to ensure timely delivery of structural drawings.
- Preparation of design reports for one to two-story masonry buildings as well as RC buildings.

AN Associates, Rawalpindi, Pakistan — OCT 2006- NOV 2008

Junior Structural Engineer

- Finalized the layout of confining columns, structural columns, and beams of masonry residential buildings.
- Performed manual calculations to determine the size of structural members.

AIT Solutions, 58 Moo 9 Klong Nueng, Khlong Luang, Pathum Thani, 12120, Thailand.

- Liaised with the drafting section to ensure timely delivery of structural drawings.

Certifications/Memberships

- **Pakistan Engineering Council** as "**Professional Structural Engineer**"; PEC No: 25982
- **Graduate Member** with **IStructE**; Member ID: 072006129
- Attended a weeklong summer school in Germany at Bauhaus University (Weimar) on the topic of Model Simulation and Validation, 2011)
- Attended and presented a paper in the "9th International Conference on Earthquake Resistant Engineering Structures" in A Coruna, Spain in 2013.
- 1 day seminar on Performance-based seismic design and evaluation of tall buildings (2017)
- One-day seminar on Validity of Code-based design (2017).

Languages

- English- Fluent- Scored 8 band in IELTS in 2019
- Urdu and Punjabi- Native

Engineering Forum

An active member of "Structural Engineering Forum of Pakistan" https://www.sepakistan.com/
Handle: Badar (BAZ)