



ANAY P. RAIBAGKAR, P.Eng.
Senior II Engineer
Canada Operations Manager

B.E, Civil Engineering, C.O.E.P, Pune, India
M.S, Civil Engineering, University of Texas at Austin, TX, USA

Areas of Practice

Anay Raibagkar is the manager of the BakerRisk Canada office and a member of the Protective Structures Group. His work focuses on Non Linear Dynamic analyses of various types of existing buildings (steel, concrete and masonry) to determine their blast capacity for different loading scenarios. He is also experienced with designing retrofits for existing buildings to achieve the desired level of protection against blast loads.

Experience

- Led siting studies at different petrochemical plants that involved analysis of individual structural components to predict the level of overall damage to the building and recommended options for mitigation of hazards from building damage. Familiar with API RP 752, API RP 753.
- Designed enclosures used in high pressure testing (Pneumatic and Hydrostatic) for impact loads at different locations worldwide.
- Performed Dynamic Non-Linear FEA analysis to compute response of modular buildings for blast loads. He has also worked towards developing FEA models to capture Fluid-Structure interaction in blast analysis. Mr. Anay has assisted in designing a shock tube – “A custom built apparatus to simulate blast loads” by Non-Linear FEA analysis using LS-Dyna.
- As a lead software developer for the structures group, Mr. Raibagkar has championed the design and development of key programs used by the structures group
- Mr. Raibagkar has led numerous research project for the Explosion Research Cooperative (ERC)
- In addition to blast assessment, Mr. Raibagkar has experience in evaluating occupant vulnerability from fire hazards. His experience includes building assessment for thermal loads using the Fire Dynamics Simulator (FDS). Mr. Raibagkar has evaluated and designed buildings to provide protection to occupants from external thermal hazards, typically high level of radiation. Mr. Raibagkar also leads internal research projects in the area of thermal assessment of buildings.
- Worked as a Research Assistant for the Department of Civil Engineering while studying structural engineering in graduate school. His studies included effect of verification cores on the point bearing capacity of drilled shafts in Texas. As part of this research, a custom-designed testing apparatus was built to study concrete flow in the verification core at the bottom of drilled shafts.
 - Completed design of a pressure vessel, supporting structure, and the foundation.
 - Supervised the overall test program and construction of the pressure vessel, foundation and supporting steel framing structure, including material testing (concrete, soil), purchasing and creation of bill of materials.

Professional Chronology

Baker Engineering and Risk Consultants, Inc. (Senior Engineer Jan 2015 – current); (Project Consultant II Jan 2013-Dec 2014); Baker Engineering and Risk Consultants, Inc. (Project Engineer I Jan 2011- Dec 2012); Baker Engineering and Risk Consultants, Inc. (Consultant Jun 2008- Dec 2010); University of Texas at Austin (Research Assistant, Jan 2007- May 2008).

Professional Registrations / Certifications

Professional Engineer (Texas– Civil, Ontario, Alberta)