



Associate - Principal Protective Design Structural Engineer Opportunity

About Karagozian and Case Australia

Karagozian & Case (K&C) is an internationally recognised multidisciplinary science and engineering consulting firm founded in 1945. K&C is a leader in the explosive effects and protective design field. Our mission is focused on solving complex and challenging problems for the defence, space, energy, security, construction and manufacturing industries using state of the art testing, analysis and design methodologies developed over our 75 year history. With our head office located in Glendale, USA, our Australian office, in Sydney, NSW is looking to expand in order support the delivery of numerous high profile transport infrastructure, commercial, government and defence projects.

K&C's rapidly growing practice areas include:

- protective design engineering
- threat and vulnerability assessments
- modelling, simulation, and analysis
- applied research and testing
- product and software development

Career Opportunity

K&C Australia is seeking a high performing Associate – Principal Structural Engineer with an interest and experience in designing, assessing, and analysing structures and façades for accidental and/or intentional explosive and impact events. Reporting to the Managing Director, the role will be tailored to your experience and capability and include responsibility for the delivery, quality, profitability, and management of work and people, and provide technical leadership to professional and technical staff on complex, large scale projects to provide high standard outcomes for our clients.

The interested candidate should demonstrate technical experience in the following areas:

- structural engineering design including structural dynamics
- façade engineering design
- security and/or risk management
- finite element analysis (LS-DYNA or similar) and/or computational mechanics
- hostile vehicle mitigation and vehicle dynamics assessments
- research and development
- project delivery and interdisciplinary coordination
- technical writing

This position will support the delivery of numerous large scale complex infrastructure and protective engineering design projects, with regular client liaison, business development, and provision of mentoring and career development for team members being key components of this role. Explicit experience in blast engineering design is not a pre-requisite but a valued plus. Applicants without demonstrated blast engineering experience must have strong fundamental knowledge of first principles of engineering mechanics and structural dynamics and demonstrated experience with the delivery of high profile transport infrastructure, commercial, government and defence projects.

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Candidate Requirements

- Bachelor of Civil/Structural Engineering.
- Master of Science or Engineering preferred.
- 10+ years of experience in structural engineering.
- 5+ years of project management experience, delivering major projects with demonstrated multi-disciplinary coordination.
- Achieved RSES, CPEng, or pursuing these professional qualifications.
- Proven experience managing people and mentoring junior members of staff.
- Strong understanding of structural dynamics and first principles.
- Ability to design in steel, concrete and masonry from concept to detailed design.
- Strong understanding of façade engineering.
- Understanding of the principles of hostile vehicle mitigation and vehicle dynamics assessment.
- Familiarity with protective design guidelines.
- Experience in risk management and security.
- Excellent organisational and project management skills.
- Strong written/verbal communication skills.
- Proven experience in technical report writing and delivering technical presentations, with the ability to communicate and engage with non-technical audiences.
- Demonstrated experience in complex large scale infrastructure projects through all phases of design including Tender phase through to Construction.
- Highly motivated, proactive, and willing to take on new challenges.
- Ability to develop and maintain successful client relationships.
- Demonstrates effective quality management strategies to maintain an ongoing standard of excellence.
- Experience in AutoCad, Revit, Sketchup preferred.
- Proficient with technology and quickly adapts to new programs and software.
- Australian Citizenship preferred (*not explicitly required - international applicants with demonstrated experience in protective design and strong technical capability welcomed to apply*).
- If Australian, eligible for Defence security clearance.