
SECTOR BROCHURE

Retail

BG&E is an international civil and structural engineering consultancy recognised for delivering **innovative, award-winning designs** that prioritise practicality and constructability.

With a team of more than 800 people across 16 offices — spanning Australia, New Zealand, South East Asia, the United Kingdom, and the Middle East — we deliver the highest standard of service across our disciplines.

Clients consistently return to us for our responsiveness and proven ability to provide tailored solutions on complex and challenging projects. This is reflected through industry recognition, client commendations, and numerous awards.

In 2025, BG&E joined forces with SYSTRA, a global leader in public transport and mobility engineering. This partnership expands our technical capability, strengthens our international networks, and support long-term growth across major infrastructure markets and the complex buildings sector.

*Resorts World Oceanarium —
Sentosa, Singapore.*



The Retail Sector



*Darby Plaza —
Newcastle, NSW, Australia.*

The retail sector has undergone significant change over the past decade, driven largely by the growth of e-commerce — a trend accelerated by the pandemic, when lockdowns forced many physical stores to close and many consumers placed their first (but not last) online orders.

Today, retail spaces have evolved to focus on what digital platforms cannot offer — engaging, in-person experiences. This “experience economy” combines shopping with dining, social spaces, and leisure activities, transforming retail spaces into destinations.

Flexibility of the structure is key — enabling spaces to evolve in line with their customer base and maintain novelty through varied offerings that attract both retailers and visitors.

We work closely with creative designers, architects, and clients to deliver a successful retail environment with individual atmosphere and exceptional customer experience. We are actively involved in the master planning stage of the projects to ensure the structural framing responds to the design objectives, with the inclusion of refurbishment elements where required.

BG&E has delivered retail projects in Australia and internationally, with design experience encompassing one-off boutique stores, flagship stores, retail showrooms, shopping centres, and major retail precincts.

*Castle Towers —
Sydney, NSW, Australia.*



Key Services



Structural Engineering

BG&E is one of Australia's leading structural engineers and has delivered iconic, award-winning projects across the globe. Drawing upon our extensive expertise, we deliver our clients' visions for a project by working collaboratively with architects and stakeholders. We have a focus on providing constructable structures which we achieve by simplifying designs and embracing innovative approaches.



Civil Engineering

We deliver civil engineering services for projects of varying scales — encompassing land development, urban civil, and public domain spaces. Our expertise combines technical know-how and efficient resource utilisation to deliver sustainable, optimal outcomes.



Façades

BG&E Façade Consultants are internationally recognised for our innovative façade solutions.

We specialise in the design of aesthetically pleasing, energy efficient, and cost-effective façades — providing design, architectural detailing and engineering, thermal performance, materials science, and remediation and recladding solutions.



Materials & Durability

As leaders in our field, our Materials team is experienced in delivering cutting edge design and construction staged services, supported by strong links to academia and industry partnerships.



Construction Engineering

We design structural and civil temporary works solutions and sequencing advice to support our clients' construction methodology.



Digital

BG&E, a leader in digital engineering, has earned a reputation for excellence by consistently advancing systems and workflows.



Flooding & Hydrology

We believe that understanding flood risks is key to delivering positive outcomes.



Timber

A strategic merger with Timber Design Studio combines our engineering excellence with their unparalleled expertise in mass timber construction and materials science.



Sustainability

One of the most significant enhancements of sustainability in construction is achieved through good design.

Our Differentiators



Certainty of Delivery

Guaranteed timely delivery through early engagement, focused collaboration, and strong stakeholder relationships.



High Calibre Expertise

Industry-leading specialists committed to consistency and excellence from tender to project delivery.



Innovative Engineering

Bespoke, efficient engineering solutions with a keen eye on constructability and project-specific needs.



Sustainability Focused

Advanced practices including carbon calculation, Greenstar advice, and long-term environmental strategies.



Collaborative Approach

Expertise driven by collaboration with clients and consultants for enhanced project outcomes.



Digital Engineering Prowess

Over a decade in cutting-edge Digital Engineering - integrating BIM, GIS, and the latest technologies for optimal results.

*PAK'nSAVE —
North Island (Multiple Locations), New Zealand.*





The SYSTRA Group — a global engineering and consultancy leader with 11,000 people worldwide — is now strengthened by BG&E’s international buildings capability, complementing SYSTRA’s long-established expertise in transport and mobility infrastructure.

Building on BG&E’s reputation as a leading structural engineering practice delivering iconic, award-winning projects, the Group provides building solutions across complex and commercial developments, healthcare, education, data centres, adaptive reuse, and transport-related facilities worldwide.