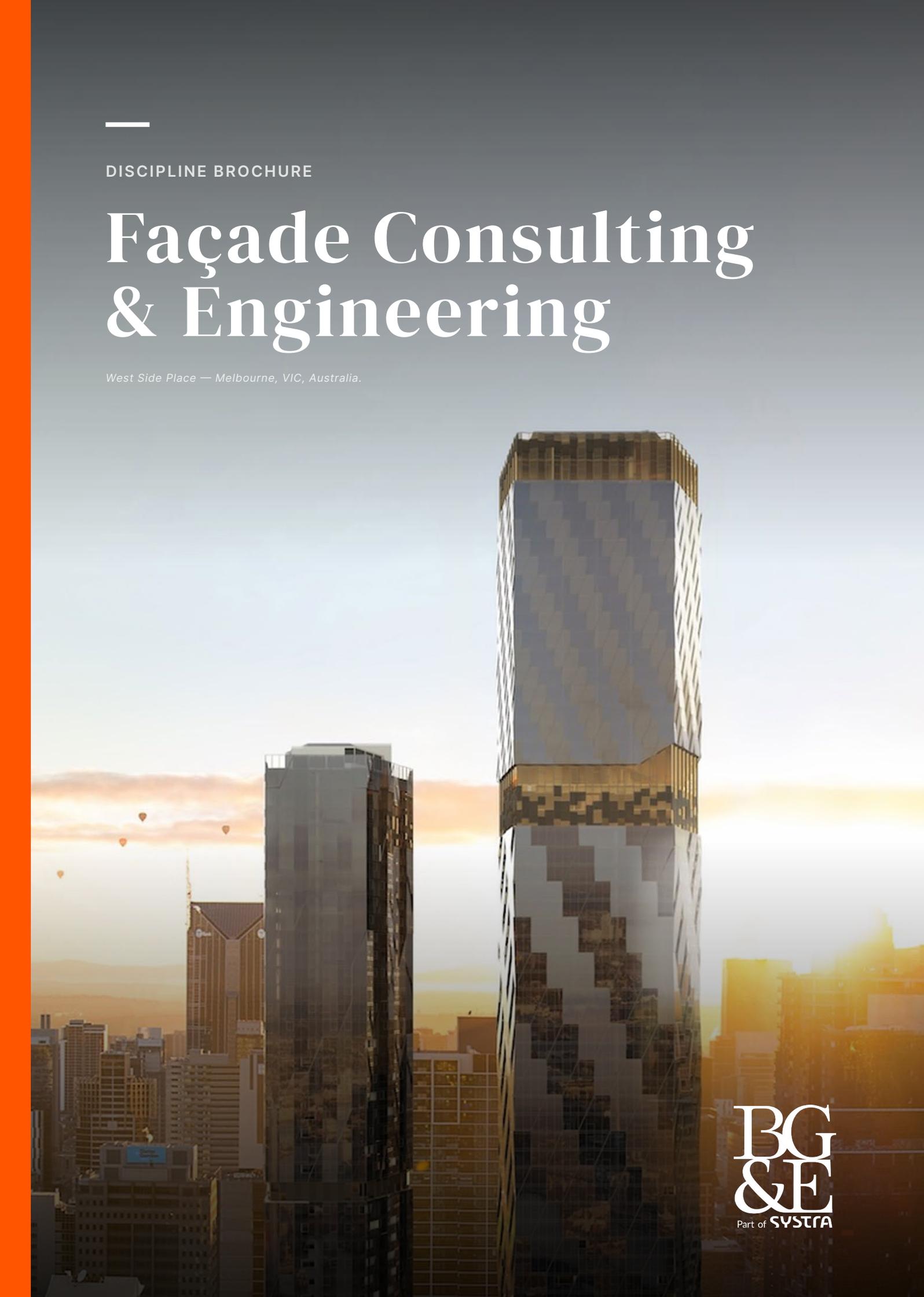

DISCIPLINE BROCHURE

Façade Consulting & Engineering

West Side Place — Melbourne, VIC, Australia.



**BG
&E**
Part of SYSTRA

—

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.



Façade Consulting & Engineering

Luminous, geometric, and robust façades pepper our urban landscapes, but growing complexity and performance demands on buildings are placing pressure on the most ambitious façade designs and engineering.

BG&E Façade Consultants have achieved worldwide recognition for providing innovative solutions that encompass façade design, architectural detailing and engineering, thermal performance, materials science, remediation, and recladding.

We appreciate that the Façades of buildings are one of the most important, and at times expensive, components of a new build — which makes their role vitally important.

Our team enables us to deliver a truly multi-disciplinary service to our clients. Our talented team includes:

- Architects.
- Structural Engineers.
- Mechanical Engineers.
- Materials Science Specialists.
- Building Physicists.
- Façade Designers.

*Fiona Stanley Hospital —
Perth, WA, Australia.*





Working as proactive members of design and construction teams, we help clients deliver beautiful buildings that provide optimal outcomes for owners, occupants, visitors, and tenants.

Our project work maintains a diversity of client groups, enabling us to understand the needs of the various members of the design and construction team — we are currently working with developers, main contractors, and as expert witnesses.

Our practice has its roots in the architectural profession, and we see our work with architects as a central part of our consultancy.

We believe that we have an active role to play in enabling the visual aspirations of a project to be met by informing the design process with our knowledge of sustainability benchmarking, precedent, costs, manufacturing techniques, buildability, and technical performance.

*Elizabeth Quay West —
Perth, WA, Australia.*



Façade Consultancy Services

BG&E Façade Consultants provide a proactive, innovative approach to design — encompassing architectural engineering and materials science skills and a comprehensive understanding of fabrication, installation and procurement issues.

It is these skills which enable our team to deliver a high-quality service to our clients and give us the capacity to deliver technically challenging projects across a diverse range of environments.

NEW BUILD

- Strategic conceptual advice.
- Concept design.
- Schematic design.
- Detailed design documentation.
- Façade tender documentation.
- Construction phase services.
- Manufacture facility inspections.
- Performance testing and inspection.
- Field water testing witnessing.



*Addax Tower —
Abu Dhabi, United Arab Emirates.*



FAÇADE ENGINEERING

- NCC compliance.
- Expert witness.
- Therm and WUFI assessments.
- Compliance certifications (e.g. Reg 126, DBP, Form 15, P1 and P2 Services (NZ)).
- Peer review, façade engineering and wind assessment.
- Glass design.
- Structural glass façade systems.
- Façade system (e.g. curtain wall, window wall, shop fronts, etc.) system design.
- Condition inspection and reports.
- AAMA501.2 site hose test witnessing (i.e. water leak testing).
- F3P1 Assessment Performance Solution Report.
- F3P1 Performance Solution Pathway Report.
- F3P1 Certification.
- Façade conservation.

SPECIAL & OTHER SERVICES

- Recladding, review, design and waterproofing assessment.
- Remedial.
- Glass failures.
- Façade attachment failures.

*205 North Quay —
Brisbane, QLD, Australia.*



*University of Melbourne, New Student Precinct —
Melbourne, VIC, Australia.*

■ OUR APPROACH

Sustainability & Innovation

BG&E Façade Consultants have a keen interest in energy efficiency and sustainability — an area in which we take a leading role in the consulting industry.

BG&E Façade Consultants understands the importance of the façade concept, façade systems, materials, and energy efficiency of the façade.

At the commencement of our engagement, a review of the brief, performance requirements, and architectural design intent is carried out to establish best practice outcomes and seamless delivery.

Our approach to delivering the project will include:

- Proactive engagement with the design team to understand the design intent and the limitations of proposed materials, based on aesthetics, constructability, cost, and design risks involved.
- Detailed understanding of total system performance including thermal performance, compatibility of materials, structural performance, and long-term durability.
- Comprehensive advice on available glass products to meet thermal performance, durability, daylight, and procurement requirements.
- Drawing on diverse backgrounds and experiences, our team is equipped to advise on matters like constructability, ensuring the procurement of a cost-effective façade that meets the design intent and is built to the highest standards.

Industry Sectors We Service

We endeavour to explore, together with the design team, the available cutting-edge technology where material limitations are pushed to the limits.



Aged Care & Retirement Living



Arts & Culture



Aviation



Commercial & Office



Data Centres & Mission Critical



Defence



Education



Government



Heritage & Refurbishment



Hospitals



Hotels & Accommodation



Industrial



Rail, Stations & Over Rail



Recladding



Residential



Retail



Sports, Stadia & Recreation



WUFI

Our Expertise

What sets BG&E Façade Consultants apart is our extensive experience and knowledge base.



Seasoned experts with **25+ years of experience** in their respective fields and regions.



Equipped to advise on matters like **constructability** — ensuring the procurement of a cost-effective façade.



Diverse team, including architects, structural and mechanical engineers, materials science specialists, building physicists and designers.



Recognition for **award-winning projects** — which underscores our commitment to excellence.



Leader in the consulting industry in the areas of energy efficiency and sustainability.



Comprehensive advice on available glass products to meet thermal performance, durability, daylight, and procurement requirements.

*Banksia Apartments —
Melbourne, VIC, Australia.*



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.