



A FLEXIBLE APPROACH TO ENGINEERING

Capability Statement | 2026

NOT JUST YOUR ENGINEER. YOUR PARTNER.

That's the idea Flex is built on. The best engineering comes from real collaboration; early conversations, shared sketches, decisions made together rather than handed down. So we built a practice designed to work that way from the first phone call to the final inspection.

Flex is a small team of engineers and drafters based in Surry Hills, Sydney. We're a young practice founded in 2023, but the experience behind it isn't.

Between us we've spent careers on the kind of work that doesn't suit a generic approach; complex sites, exposed

structure, heritage fabric, bespoke detailing — and we bring that mindset with us into every project.

We're a small but growing team, and we grow deliberately with the right people.



WHAT MATTERS TO US

APPROACHABLE & FRIENDLY

We're easy to talk to. It sounds small, but it changes how your project runs.

CRAFT AS AN ARTFORM

We believe engineering done well is beautiful, and that the drawings, details and structures that follow should be too.

LEAN AND INTELLIGENT DESIGN

We design to find the right answer, not just an answer. Less material, simpler details, and structures that get built faster — without the architect ever wondering if there's a better solution.

HONEST PRICING

We price carefully and quote honestly. The work we agree to is the work we deliver, for the fee we said it would be.

SMALL TEAM. BIG RESULTS.



SEAN WHELAN — DIRECTOR | STRUCTURAL ENGINEER

Sean founded Flex in 2023 after more than 10 years working across a wide range of structural projects in Sydney and interstate.

He's particularly drawn to the work that doesn't fit a template — heritage alterations, complex sites, architect-led residential. Believes that the relationships built around a project matter as much as the structure that forms it.



SAM RILEY — SENIOR DRAFTER

Sam brings 7 years of structural drafting experience to Flex. Treats drawings as the link between design and construction and as the craft that comes with that responsibility. Skilled across reinforced concrete, precast, PT, steel, timber, and CLT.



TIFFANY LU — STRUCTURAL ENGINEER

Master of Engineering Science (UNSW, with excellence). Combines creative thinking with precision. Loves sketching through ideas to resolve details.



TIREE NORMAN-BELL — STRUCTURAL ENGINEER

First Class Honours from the University of Auckland. Loves the intricacy of structural design and the moment a complex problem becomes a buildable solution. Brings a fresh perspective and a relaxed Kiwi demeanour.

FOUR DISCIPLINES, ONE PRACTICE

01 02 03 04

Structural Engineering

The core of what we do. Design, documentation and certification of structures — from single-storey renovations through to multi-dwelling new builds.

- Concept design and feasibility
- Detailed structural design and documentation
- Engineering certification
- Heritage and existing structures

Stormwater Engineering

Stormwater design and documentation for residential and small commercial sites. Practical drainage that works with the project, not against it.

- Site stormwater design
- On-site detention (OSD) systems
- Council and authority documentation

Remedial Engineering

Investigating and remediating defects in existing buildings. We work closely with owners corporations, strata managers and building owners to provide clear, long-term solutions.

- Defect investigation and reporting
- Scope of works and specifications
- Tender review and contract administration
- Superintendent and project management
- Forensic engineering and expert reports

Construction Engineering

Analysis and design of temporary structures to keep buildings safe and stable during construction. The engineering most people don't see, but every good build relies on.

- Temporary works design
- Propping, shoring and underpinning
- Construction sequencing and methodology
- Heavy lift and rigging studies



NO ENGINEERING BLACK BOX

From first sketches to the final inspection, you'll be part of every step

01 Listen & Understand

We start every project by getting to know you, the site, and your goals. What does success look like? What are the constraints we need to design around?

02 Sketch & Explore

Hand sketches, mark-ups, and concept work to make sure we're all on the same page before we get stuck into the detail. This is where ideas get tested early, when they're easiest to change.

03 Analyse & Design

Structural analysis and design using industry-standard software, paired with engineering judgement built up over careers. We don't settle for the first answer — we test assumptions and refine until the design is doing the most work with the least material.

04 Document & Detail

Clear, detailed, and considered drawings, modelled in Revit and CAD to fit cleanly into the architect's workflow and drawings that allow the builder to maintain momentum on site.

05 Inspect & Report

Our work isn't done when the drawings go out. We're on site, on the phone, and on hand until the project is built.

Industry-standard software

Along with standard software we use a set of in-house tools we've built and refined over time. Together they let us move quickly and think carefully.





REDUCING EMBODIED CARBON IS A GOAL ON ALL OF OUR PROJECTS.

Good engineering and good environmental outcomes aren't separate problems. They're the same problem and we approach every project with both in mind.

Lean Design

The single best way to reduce embodied carbon is to not build. The second best is to use less material. We design every structural element to work hard — at the limit of what it can safely do — rather than carrying excess capacity it doesn't need. Less material, less carbon, often less cost.

Circular & Reusable Systems

The best material is the one already on site. Where we can, we work with existing structures rather than demolishing them. For temporary works, we always prefer reusable systems over single-use structures.

Design for Durability

Structures that last longer don't need replacing. The right specifications can add decades to a building's life.

Smart Material Selection

Material choice is one of the biggest decisions on any project, and the structure plays a big role. We push for lower-carbon options, like timber over concrete where it works, without compromising on what the structure has to do.

The best time to think about embodied carbon is at the start of the project. If that's where you are, get in touch.

RESIDENTIAL NARRABEEN RESIDENCE



COMMERCIAL JILLIBY STORAGE FACILITY





flex Engineers