

Coates

ENGINEERING SOLUTIONS

Capability statement FY25



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Welcome to Coates
Engineering Solutions



Specialists in temporary works



Temporary works are a vital part of all construction projects but are often overlooked and poorly understood within the industry.

Coates Engineering Solutions specialise exclusively in temporary works, so you can rely on us to design, install and certify a safe and effective temporary solution to enable your permanent works to be completed on time and on budget.



Scan QR code to watch
our brand in action

Coates: An industry leader

Coates Engineering Solutions is part of Coates, Australia's leading equipment hire and solutions company, which provides end-to-end solutions across four key areas:

- Equipment Hire
- Engineering Solutions
- Industrial Solutions
- Power & HVAC



Proudly Australian-owned

SGH | Industrial Services, Media, Energy and Investments



BORALTM

ALLIGHT

SGH | Energy



A photograph of two men in a construction setting. The man on the left is wearing a white hard hat, sunglasses, and an orange high-visibility vest over a blue and white checkered shirt. The man on the right is wearing a white hard hat with the 'Coates' logo, sunglasses, an orange long-sleeved shirt with 'Coates' and 'Stephen' on it, and blue work pants. He is pointing upwards with his right arm. The background shows large orange construction equipment. An orange rectangular box is overlaid on the left side of the image, containing the text 'About us'.

About us

Expertise you can rely on

There's a huge difference between hiring equipment versus getting a fully engineered solution. From your initial enquiry to completion of the job, we'll work with your team to deliver a practical solution.

Highly experienced team

Coates Engineering Solutions' multidisciplinary team provide complete project support, from initial feasibility to de-installation.

- Civil, Structural, Chemical and Geotechnical engineers qualified with MIEAust, CPEng, NER and state-specific design and engineering regulatory requirements
- In-house Chartered engineers to provide certification of temporary works design and installation
- Supported by temporary works engineers, solutions specialists, project managers and installation experts
- Close collaboration with consulting engineers and permanent works teams

Safety and compliance

Care deeply is a core value at Coates and we strive to ensure all stakeholders go to work and return home safely to their families and communities.

- All products and engineering services are compliant with relevant Australian Standards, Codes and Regulations (including NSW Design & Building Practitioners Act)
- Supporting documentation is provided to streamline compliance (such as technical drawings, product specifications and SWMS)
- Coates' HSEQ system is third-party certified at five key sites and compliant with top-tier and government standards

Lunch & Learn sessions

We host bespoke Lunch & Learn sessions to allow your team to engage early in the project life cycle and to feel confident using or specifying our temporary works products and services.

- Free session (from 30 mins to 2 hours) tailored to your requirements
- Delivered by our experts online, at your workplace or at a Coates office
- Suitable for Continuing Professional Development (CPD) record logs









Book now



Why choose Coates Engineering Solutions?

Here are just some of the reasons why construction firms and consulting engineers trust us to deliver their temporary works, project after project.

	Industry-leading equipment	Coates has one of Australia's largest ranges of structural support and water management equipment, including proprietary systems and wireless monitoring via telemetry.
	Power of one provider	We go beyond dry hire to provide a complete engineered solution and the peace of mind that comes with having one supplier manage your project from start to finish.
	Technical know-how	Temporary works failures can have serious consequences. Our engineers will design, calculate and specify the safest solution, with in-house Chartered engineers to certify design and installation.
	Service & support	We specialise in temporary works so you don't have to. Our team brings in-depth industry experience, engineering expertise and proven project management capabilities to guide and support you.
	Safety & compliance	All products and engineering services are compliant with relevant Australian Standards, Codes and Regulations, with supporting documentation such as SWMS to streamline compliance.
	R&D innovation	We know you want temporary works products that will save you time and money. Our engineers are working with universities to develop world-leading shoring and propping products.



"The value in working with Coates actually became quite clear during the early brainstorming phase. We spoke regularly with their temporary works design engineer up to the design manager, so it felt like a whole of team approach."

Alan Kok, Project Manager, Moits



Embedded across Australia

Alongside Coates' national branch network, we have seven specialist hubs for Engineering Solutions across the country, and Engineers, Project Managers and Installation teams servicing each state.



Innovation & thought-leadership

By combining our industry expertise and deep understanding of your business with the research capabilities of leading universities, we're bringing new products to market to give you the edge.

Monash University

As part of Coates' multi-year, million-dollar R&D collaboration with Monash University, our engineers are working with PhD students from the Civil Engineering department to develop lighter, yet stronger temporary works products. Quadshore is the first of three projects to be completed.

Designing safer solutions

Our engineers are always striving to improve workplace safety, compliance and, ultimately, profitability on your site by designing new and improved products. Recent innovations include the Coates Rescue Davit Kit, EasyGuard Handrail, KeepSafe Handrail and KeepSafe Ladder Access Platform and Walkway.

Temporary Works Forum

Coates Engineering Solutions hosts this annual series across the country for principal contractors, sub-contractors and consulting engineering firms. The forums provide the opportunity for industry stakeholders and academics to identify challenges in temporary works engineering and discuss the best practices and disruptive innovations that will help us tackle them together.

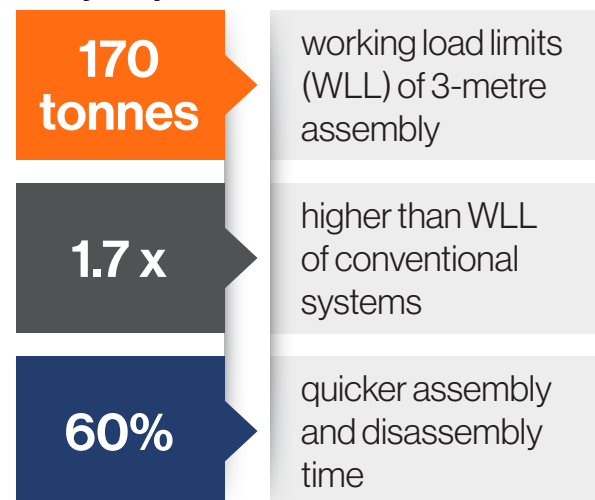
Engineers Australia

Engineers Australia is the trusted voice of the engineering profession and many of our team have the sought-after Chartered engineer credential overseen by the association. We've also partnered with Engineers Australia to showcase our capabilities to their members and provide subject matter expertise for the association's webinars and blogs.

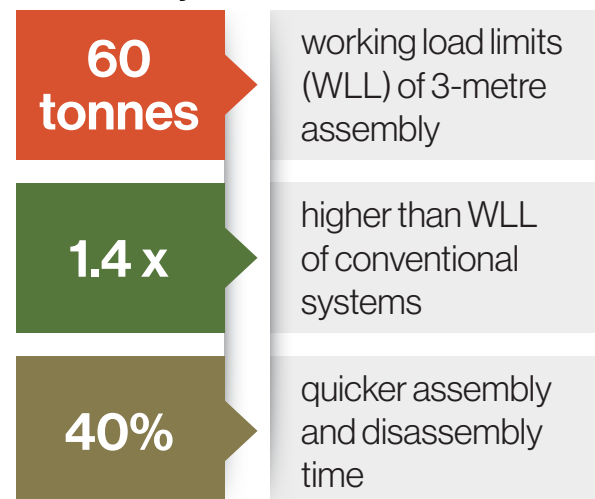
Quadshore™

Quadshore uses lightweight, high-strength steel elements and patented boltless connectivity. The modular system is faster and easier to install, requiring less transport and labour and lighter handling equipment, resulting in time and cost savings, increased safety and a lower carbon footprint.

Heavy-duty Quadshore 150



Medium-duty Quadshore 50





Our core
capabilities

Design & Installation

Well-designed temporary works pave the way for your permanent works to be built safely and efficiently. We provide an end-to-end service, including technical design, installation, certification, monitoring and project management.

Project management

Our project managers will plan, coordinate and control your job from kick-off to completion. They'll ensure all stakeholders are aligned on project scope, timings and costs, and work with our designers and installers to mitigate risk and reduce costs at every stage.

Technical design

In-house engineers will analyse, calculate, design and specify the best solution for your site in close collaboration with consulting engineers and permanent works teams. Need pre-tender support? Engaging our design team early can influence the viability of a project and save valuable time on construction schedules.

Installation

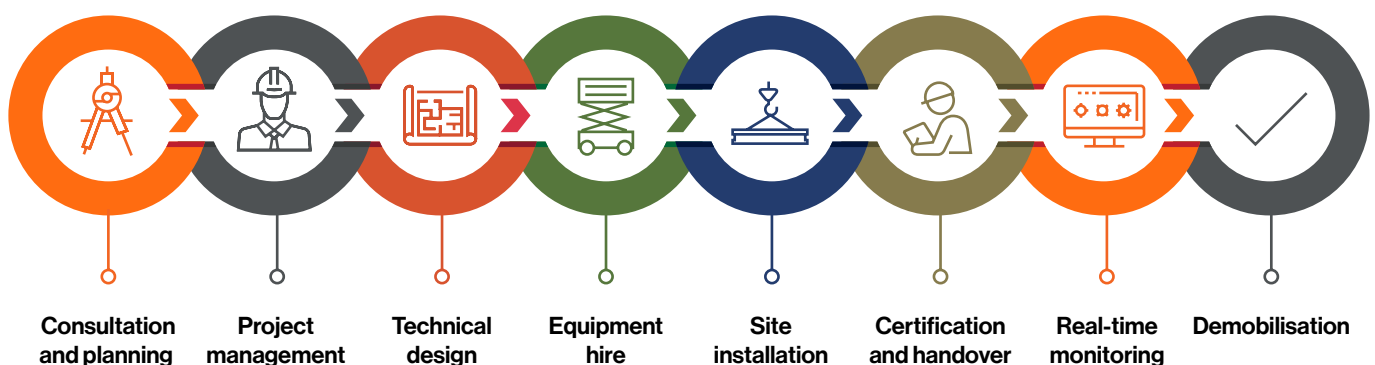
Our expert installation and rigging teams can manage jobs of any size across the country. Coates design and installation teams work closely together to minimise costs, such as specifying modular propping and shoring systems to reduce fabrication, on-site assembly and labour costs.

Certification

Designs are peer-reviewed and checked with other engineers, and a Chartered engineer is always responsible for certifying the final design and installation. We can also organise third-party certification or provide your engineering consultant with documentation for independent verification.

Monitoring

Depending on your project requirements, we can provide on-site monitoring and maintenance via our installation supervisors, field technicians and qualified engineers. Remote wireless monitoring is also available on selected equipment to provide you with real-time information about load, movement, temperature, noise and more.



Customer enquiry

Project completion



Structural Support

Shoring an excavation or propping a load during construction can be complex and risky. Coates Engineering Solutions provides end-to-end structural support solutions so you can avoid the hassle of managing multiple suppliers.

Structural Propping

Coates has Australia's largest range of structural propping solutions. Our proprietary modular systems – Universal Prop and Quadshore – offer optimum versatility and are pre-certified and easily connected together on site, saving you time and money.

Applications

- Crane travel paths
- Back propping
- Facade retention
- Heritage buildings
- Bridge support
- Retaining walls
- Hybrid solutions
- Power pole support
- Brick wall needling

Range includes:

Exclusive to Coates

- Universal SYS15, 30, 60 & 100
- Quadshore™ 50 & 150

- Trishore props
- Titan super props
- Mini tri props
- Acrow props
- Tilt props

Key benefits:

- Modular systems for hybrid solutions and better cost-efficiencies
- Faster and safer handling and installation, requiring less labour
- Remote wireless monitoring* for real-time visibility and peace of mind
- Design and installation certification to verify safety, quality and effectiveness
- More sustainable than single-use bespoke structural steel systems

*Available on selected equipment



Structural Support

Hydraulic Shoring

If you're planning large or deep excavation works in urban areas, we recommend a hydraulic bracing system combined with hydraulic cross-struts. Our modular systems can work around existing utilities and obstructions, and be used with trench sheeting, sheet piles or structural props for ultimate versatility.

Applications

- Basement excavation
- Pump stations
- Gross pollutant traps
- Tank farms
- Cofferdams
- Pipe trenches
- Cut and dives

Range includes:

Exclusive to Coates

- Mega Brace – heavy-duty hydraulic bracing system
- HW500 – super heavy-duty hydraulic bracing system
- MP50 – medium-duty hydraulic strut
- MP150 – heavy-duty hydraulic strut
- MP250 – super heavy-duty hydraulic strut
- MP375 – super heavy-duty hydraulic strut

Key benefits:

- Faster and safer handling and installation, requiring less labour
- Cost-effective internal bracing option when ground anchors can't be used
- 24/7 remote wireless monitoring for visibility and peace of mind
- Design and installation certification to verify safety, quality and effectiveness
- More sustainable than single-use bespoke structural steel systems



Structural Support

Sheet Piling

Using trench sheets or sheet piles, we can provide a braced or unbraced shoring solution to suit shallow trenches or deeper excavations. Suitable for both water and soil retention, sheet piles can be combined with our hydraulic bracing and structural propping systems.

Applications

- Basement excavation
- Pump stations
- Gross pollutant traps
- Tank farms
- Cofferdams
- Pipe trenches
- Cut and dives

Range includes:

- Steel sheet piles
- Trench sheets
- Excavator Mounted Vibrator (EMV) machines with fully adjustable goosenecks to suit most larger excavators
- Accessories such as pushing caps, sheet handlers and sheet extractors

Key benefits:

- Speed of installation and low maintenance
- Suits a range of different soil types
- Can allow for bulk excavation below adjacent higher ground water levels
- Bespoke and hybrid solutions (can be combined with hydraulic bracing systems)
- Design and installation certification to verify safety, quality and effectiveness



Structural Support

Slide Rail

Slide Rail is a dig-and-push trench shoring system. The modular components are ideal for a wide variety of excavation shapes and sizes.

Applications:

- Pumps stations
- Gross pollutant traps
- Pipe trenches
- Culverts
- Launch and receive pits

Range includes:

- Single Slide Rail
- Double Slide Rail
- 90° corner posts for fully enclosed pit excavations
- Extensive range of panels:
 - Length: 2.0m, 3.0m, 4.0m, 4.0m HD, 6.0m & 7.4m
 - Height (single): 2.4m - 3.8m
 - Height (double): 2.4m - 9.0m

Key benefits:

- Allows longer, wider and deeper excavations
- Unrivalled pressure rating = excavations up to 9m deep
- Largest under-strut clearance of any product on the market
- Modular system
- Cost-effective alternative to tight sheeting methods
- Safe, above-ground installation and removal
- Design and installation certification



Structural Support

Standard Shoring

Coates has a huge range of standard shoring products, from lightweight trench shoring boxes to heavy-duty shields to suit a range of hire requirements.

Applications:

- Pumps stations
- Gross pollutant traps
- Pipe trenches
- Culverts
- Launch and receive pits

Range includes:

- Aluminium and steel shoring shields
- Hydraulic vertical shoring (Vertishores)
- Lightweight, heavy-duty and high clear shoring boxes
- Manhole boxes
- Safety handrails, ingress/egress solutions and rescue davit kits

Key benefits:

- Modular, flexible systems for quick and easy installation and removal
- Safe, above-ground installation and removal from outside the excavation
- Cost-effective alternative to tight sheeting methods
- Design and installation certification to verify safety, quality and effectiveness

Structural Support

Synchronous Hydraulic Jacking

Need to jack large and heavy structures with pinpoint precision? Our synchronous hydraulic jacking systems control and synchronise lifting or lowering at multiple points to maintain structural integrity and achieve an optimal lift speed, resulting in minimal downtime and maximum safety.

Applications:

- Bridge lifting
- Industrial roof lifting
- Drag line bearing replacement

Sync system features:

- 12-port system
- PLC controlled
- Tolerances +/- 1mm
- Tolerance alarms
- Automatic centre of gravity lift adjustment
- Remote operation up to 30m from jacking points

Key benefits:

- Safest method of lifting and lowering heavy assets
- Easy-to-use hydraulic system provides precise control
- Controlled by single operator without the need for manual monitoring
- User-friendly software and recordable data log of all movements
- Project site support to minimise risk while maintaining productivity



Water Management

Groundwater or surface water can play havoc with your construction schedule. We'll help you avoid costly delays with a plug-and-play or tailored water management solution to move, store or treat water on your site.



Pumps & Fluid Management

When you need to move water on a construction site, tunnelling project or remote mine site, our experienced Solutions Specialists will advise you on the right technique and pump for the job. Plug in and pump yourself or opt for an end-to-end solution including installation and monitoring.

Bespoke commercial dewatering

Our team of Geotechnical, Chemical, Environmental and Process engineers, technicians and licensed drillers can design, supply and install a variety of dewatering systems, including sump pumping, wellpoint, deep wells, bypass and dredging.

Automated bypass systems

For the temporary bypass of sewage, Coates has a full range of pumps, test plugs, float switches, hoses and fittings capable of handling extreme flow rates.

Range includes:

- Diesel and electric pumps
- Hydraulic and electric submersible pumps
- Mine spec high head pumps
- Silenced canopy pumps
- Diaphragm pumps
- Slurry pumps
- Telematics and SMS alarms

Key benefits:

- Certification by Geotechnical, Chemical and Environmental engineers
- Remote monitoring, 24/7 support for critical works and emergency response teams
- Various installation methodologies to suit challenging sites
- Support to obtain site dewatering licenses
- Meet site-specific environmental obligations and requirements

Water Treatment

If contaminated water is present on your site, our Chemical engineers will design a compact, cost-effective and reliable system to treat and manage it according to national and state regulations. Our experienced operations team will then deliver, install, commission, routine inspect, decommission and remove the equipment.



Applications:

- Suspended solids removal
- Dewatering in acid sulphate soils
- Heavy metals removal
- Hydrocarbon removal
- PFAS removal
- VOC removal
- pH adjustment

Range includes:

- Sediment tanks
- Siltstoppers
- pH dosing units
- Chemically enhanced primary treatment (CEPT) systems
- Media filtration systems
- Safe chemical storage
- Water volume and discharge quality, as well as groundwater level monitoring

Key benefits:

- Certification by Geotechnical, Chemical and Environmental engineers
- Efficient, safe and cost-effective displacement of water
- Meet site-specific environmental obligations and requirements
- On site, on-call or 24/7 remote monitoring via telemetry to save time, money and stress



An aerial photograph of a large, circular industrial facility, possibly a water treatment plant or a large-scale construction site. The facility is surrounded by a wide, reddish-brown dirt road. Inside the circular area, there are several large, orange and white cranes or lifting devices arranged in a semi-circle. In the center of the facility, there are various pieces of equipment, including a large orange crane and several smaller vehicles. The surrounding landscape is arid and covered with sparse, low-lying vegetation. The text "Case studies" is overlaid on the left side of the image in a white, sans-serif font.

Case studies

Partnering for success

No matter how complex the project or site, Coates Engineering Solutions provides temporary works solutions for hundreds of customers across Australia every year. Here's a snapshot of four challenging projects.

Dewatering & water treatment



Fulton Hogan

Leslie Harrison Dam upgrade

Challenges:

- High-risk engineering project with deep excavations
- Extracting groundwater to keep site safe and dry – dewatering critical to project's success
- Treating groundwater to meet strict environmental standards

Solutions:

- Complete dewatering and treatment solution – design, install, certify, commission, operate and support
- 200 x dewatering wells with 7 x high-capacity pumps attached
- Equipment hire – pumps, water treatment (chemical dosing, filtration units, etc)

Impact:

"It all worked well – we're very happy with the result."

Alan Black, Fulton Hogan

Shoring & bracing



Moits

Liverpool Civic Place development

Challenges:

- Approval for ground anchors not reached with neighbouring properties
- Supporting five-level basement structure without bracing against adjacent properties
- Removing temporary support structures through the slab openings after construction

Solutions:

- Designed and installed internal hydraulic basement retention system with two levels of raking struts
- 11 x MP150 struts at unprecedented lengths (18m-long upper struts and 13m-long lower)
- Remote monitoring of loads via telemetry sensors

Impact:

"Giving up wasn't an option for Coates. Instead, they worked hard until we had the solution that we needed."

Alan Kok, Moits

Propping & sync jacking



Richard Crookes Constructions
Heritage building refurbishment

Challenges:

- Heritage constraints meant timber floors had to be retained and lowered between 1,150mm - 2,750mm
- Flexible timber (rather than reinforced concrete or structural steel) allowed for more differential movement
- Coordinating removal of temporary support structures with installation of permanent steel columns

Solutions:

- Designed, supplied, installed and certified a propping and synchronous hydraulic jacking system
- Adapted design and used combination of props (Universal System, tilt, titan) to speed up process
- Remote monitoring of loads via telemetry sensors

Impact:

"Using the hydraulic method with Coates was about 45% cheaper and 50% faster."

Patrick Barry, Richard Crookes Constructions

Shoring & dewatering



BMD Constructions
Spirit of Tasmania terminal precinct

Challenges:

- Excavating 5 x collection pits to install Gross Pollutant Traps (GPT)
- Largest excavation was 17m (L) x 5m (W) x 5.45m (D)
- Waterside location increased risk of pit flooding & collapse
- Keeping pits dry during installation of concrete base slabs

Solutions:

For excavations closer to water:

- Sheet piling internally braced by walers, Mega Brace hydraulic rams & SYS100 struts
- Well-point dewatering

For excavations further from water:

- Slide rail shoring
- Localised pumps

Impact:

"It was a really positive experience working with Coates." Laurence Leeming, BMD



Scan to read more case studies or visit coates.com.au/customer-stories



Sustainability

Coates

A partner for positive change

Towards sustainability

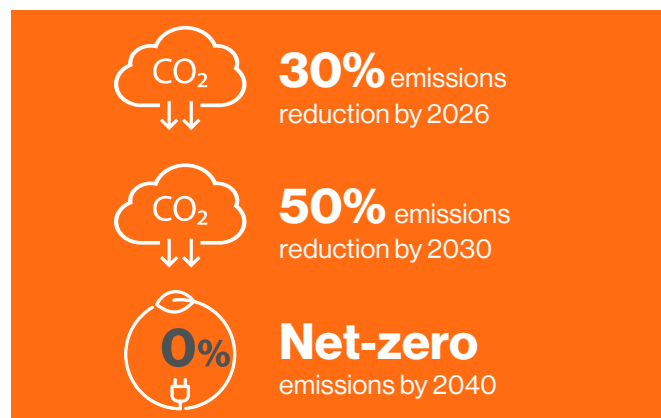
We know you want a partner who shares your values. That's why we've committed to net-zero targets and established a sustainability framework to help drive positive change for our stakeholders and wider society.

Our Sustainability framework includes five key pillars:

- Eco-efficiency
- Greener Choices
- Our People
- Our Communities
- Resilience

This is underpinned by the circular economy concept, which aims to extend product lifecycles through practices like reuse, maintenance, refurbishment and recycling, while minimising waste. Hiring equipment instead of buying it aligns with circular principles and is cost-effective, resource-efficient and environmentally friendly.

There are challenges ahead, but by working together, we can turn shared vision into meaningful action.



Providing Greener Choices

As you look for ways to improve the sustainability of your projects and organisation, we're responding by providing a range of more sustainable equipment and solutions to help you reach your green goals.

Our Greener Choices range includes battery electric, hybrid, solar, low pollutant engines and biofuel blend compatible equipment across categories including Access, Materials Handling, Lighting, Site Accommodation, General Hire Tools, Traffic Management and Solutions.

Supporting our communities

Coates is extremely proud of the role we play across Australia, supporting not only our customers, but also providing a helping hand when communities need us. Here's how we make a difference:

- **Local communities:** Each year, Coates supports local communities with access to equipment and services for sporting activities and events.
- **Emergency services:** For over a decade, we've worked with the NSW Rural Fire Service (RFS) to deliver critical temporary infrastructure and project support for communities in distress.
- **Coates Foundation:** Launched in 2021, the Foundation allows our business and our people to meaningfully contribute to positive social impact. Since 2021, we've contributed \$1.6 million to our selected charity partners. Meanwhile, in FY24, our employees contributed more than 2000 volunteer hours, up from 600 hours in FY23.

Supporting reconciliation

As an Australian-owned business, we're proud to be on the path to reconciliation and are committed to working with your organisation to help close the gap.

Having completed our 'Reflect' Reconciliation Action Plan (RAP) in 2021 and largely fulfilled our 'Innovate' RAP commitments in 2024, we're turning good intentions into measurable actions. Key reconciliation achievements include:

- ✓ Established formal partnerships with Indigenous chambers of commerce NSWICC, Noongar, Kinaway and GABC
- ✓ Created partnerships with Aboriginal and Torres Strait Islander businesses, which often supports the growth and expansion of their capabilities.
- ✓ **500% increase** in Aboriginal and Torres Strait Islander employee participation rate since our first RAP
- ✓ Provided all employees with an opportunity to engage in Cultural Awareness training
- ✓ Donated equipment and services to Aboriginal and Torres Strait Islander businesses and communities

Targets for Aboriginal and Torres Strait Islander representation

- 10% of apprentices by 2025
- 2.5% of employees by 2025
- 5% annual spend for two procurement categories by 2025



Partnering with the Clontarf Foundation

Our partnership with Clontarf helps support 150 academies across Australia, with more than 11,500 students enrolled. In 2024, Coates renewed the three-year partnership for another three years.

Key highlights of the partnership to date include:

- ✓ Employment of 15 Clontarf graduates at Coates
- ✓ Over 1,000 Clontarf students have participated in work site visits or work experience with Coates nationwide
- ✓ Coates staff have participated in more than 200 activities per year on average, including carnivals, morning trainings, employment forums and awards nights.

Championing diversity and inclusion

Coates is committed to promoting and encouraging female participation in the construction industry, aiming for 25% representation of women in leadership roles by 2025. Key milestones achieved over the past four years include:

- ✓ Winner of the Crystal Vision Awards at NSW National Association of Women in Construction (NAWIC) Awards for Excellence 2023
- ✓ Elevated female representation across all roles, including 78 leadership positions. As at May 2024, 23.1% of roles and 23.7% of leadership roles are filled by women – well ahead of the industry average
- ✓ Empowered 85 women through four cohorts of our Leadership, Excellence and Performance (LEAP) program
- ✓ Improved policy and procedures around parental leave
- ✓ Launched women's development and networking workshops
- ✓ Enhanced hiring practices to promote inclusivity.

Click to read more about our
Sustainability commitments or visit
coates.com.au/sustainability



Coates

ENGINEERING SOLUTIONS



Contact us

For more information, contact our temporary works experts today.

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 [**coates.com.au/engineering-solutions**](https://coates.com.au/engineering-solutions)

